

**A STUDY ON LARGE CLASS TEACHING STRATEGIES ADOPTED IN SELECTED
SECONDARY SCHOOLS OF KAMPALA DISTRICT.**

BY

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DECLARATION

I ROBERT SSEKUJUMWA, declare that this is a true reflection of my original work and has never been presented in any other University for any academic award.

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Date:

Signature:

APPROVAL

This dissertation has been submitted for the award of Master of Education of Makerere University under my supervision as a University supervisor.

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SUPERVISOR

Signature:

Date:

DEDICATION

This work is dedicated to my dear mother Catherine Luwaza.

ACKNOWLEDGMENT

During my endeavors to prepare and finalise this dissertation, many personalities rendered a hand here and there. I am indeed grateful to them all. To be particular, the following need to be mentioned.

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ABSTRACT

The study was conducted to study large class teaching strategies secondary school teachers use to facilitate effective teaching and learning. The rationale of this study was to investigate what teachers do in their classrooms that promotes effective teaching and learning.

The study was carried out in Kampala District using self-administered questionnaires, observation and interview guide. It was guided by research questions and objectives rotating around teachers' conception of effective teaching and learning; teaching strategies adopted by teachers and students' perception of the strategies adopted by their teachers.

A case-study design was considered more appropriate in attaining the objectives of the study. The results of the study were analysed and presented according to the themes in the literature. Findings revealed that despite the differences in conception, majority of the teachers and head teachers could ably conceptualize effective teaching and learning hence being able to conceptualize effective teaching and learning in large classes.

Additionally, many teachers knew the challenges associated with ensuring effective teaching and learning in large classes and how to go about them.

It was concluded that if the issue of large classes is to be properly addressed and facilitate effective teaching and learning, there is need for all stakeholders to come out strongly and affect immediate, medium and long-term solutions.

It is recommended that school administrators should ensure that all teachers are in position to describe effective teaching and learning as a way of conceptualizing effective teaching and learning in large classes.

All stakeholders in schools with large classes should come out strongly and provide adequate instructional materials, provide more classrooms and motivate teachers.

Administrators should ensure that teachers use student-centred learning methods like project work, group work, give regular assignments/tests/examinations and ensure that they are marked in time and given back to students for revision.

CHAPTER ONE

INTRODUCTION

Background to the study

It is a worldwide perception that education is a key factor in the development of any society. It is taken to be a backbone for social and economic prosperity since it brings countless benefits to society like good nutrition, good health, quality goods and services. On the contrary, it should be noted that education like any other sectors is faced with numerous hardships that require urgent attention. It is evident that in most schools today, students' population has more than doubled over the last decade. This might be attributed to a conviction that no country can prosper without education in this era. It can also be attributed to the United Nations' declaration of providing basic education for all (Dakar 2000) by the year 2015.

Gimuguni (2000) contends that this increase in students' numbers has been attributed to high social demand for higher education leading to lucrative jobs, which in turn puts pressure on secondary schools. It is not surprising therefore, that as students' numbers increase, schools face a problem of large classes giving way to numerous setbacks that are likely to affect the teaching and learning process if not properly handled.

There is no universal definition of a large class. For example, Literature highlights large classes as varying from between 25 – 30 pupils in the United Kingdom, to more than 35 pupils in the United States and 60 or more learners in developing countries (O'Sullivan, 2006).

Bailey et al (1996) observed that large classes are a 'hard reality' in developing countries like Pakistan, Sri Lanka, India, Indonesia and Nigeria where teachers everyday face classes which are sometimes composed of 100 or 200 students. In most cases the classrooms are overcrowded with limited space for free movement of the teacher and students.

The situation is even worse for a country like Uganda. At Independence time, it inherited a secondary school curriculum that had been specially designed to cater for a selected small elite group mainly sons and daughters of Kings and prominent chiefs. To date, this anomaly has not been fully addressed in terms of infrastructure and human resource. Parents and guardians have unreservedly continued to send their children to secondary schools since there are no viable wage employment opportunities for Primary seven leavers. This, combined with the turbulent political situation Uganda has gone through, has left the education sector in an awful state.

Uganda as a partner of Education for All (EFA) coalition, embraced universal Primary Education in 1997. This policy at first targeted four children per family but now all school age going children in the country are compelled to join. Following the introduction of Universal Primary Education (UPE) in Uganda, enrolment in Primary schools rose from 2.7 million pupils in 1996 to 5.3 million in 1997 to 7.1 million in 2005 (MOE & Sports, 2003:42). These numbers have continued to grow. These increased numbers in Primary schools have created a situation whereby a lot of pressure has

been exerted on the existing facilities at Post-Primary education level especially secondary schools.

For instance in the year 2002, the total number of students who wrote their P.L.E and sought to join Post-Primary Schools was 401,555. The available Post-Primary schools and institutions were only able to absorb 50% of these PLE leavers. The situation was compounded in 2004 when about 900,000 UPE candidates sought admission opportunities in Post-Primary Institutions.

We cannot ignore the fact that the introduction of UPE came along with tangible benefits. Nakabugo (2005) admitted that it cannot be refuted that the introduction of UPE led to an increase in the national literacy levels. The national literacy level rose from 65% in 1999/2000 to 70% in 2002/03 and it has continued to grow. The increase in the number of children in schools has also meant that Uganda is on the path of achieving the Universal Primary Education Millennium Development Goal (MDG) in as far as access is concerned. The issue of large classes was critically highlighted in the Education sector Review (2005) alongside low completion rates, high repetition and drop-out rates, low survival rates, poor teachers' and head teachers' attendance in school, large numbers of under and over age enrollees and low learning achievement.

Going by the 2006 re-election manifesto, the president of Uganda committed himself to introducing Universal Secondary Education (USE) effective January 2007 progressively covering all classes up to S.4. According to the Ministry of Education and Sports May

2007 Press release, by February 2007 a total of 155,176 students had been admitted under the USE programme and these were accommodated in 1149 schools country wide. This alone made some secondary schools admit students beyond their capacities. For instance, Senkaaba (in the New Vision) noted that according to the MOEs report, 101 private secondary schools and 456 government schools had more than 120 students in a class per stream. He cited Nkoma SS in Mbale Municipality which had 725 students and Soroti SSS which had 716 students in a class almost 6 times the prescribed number.

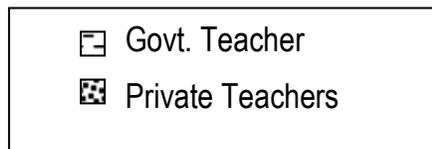
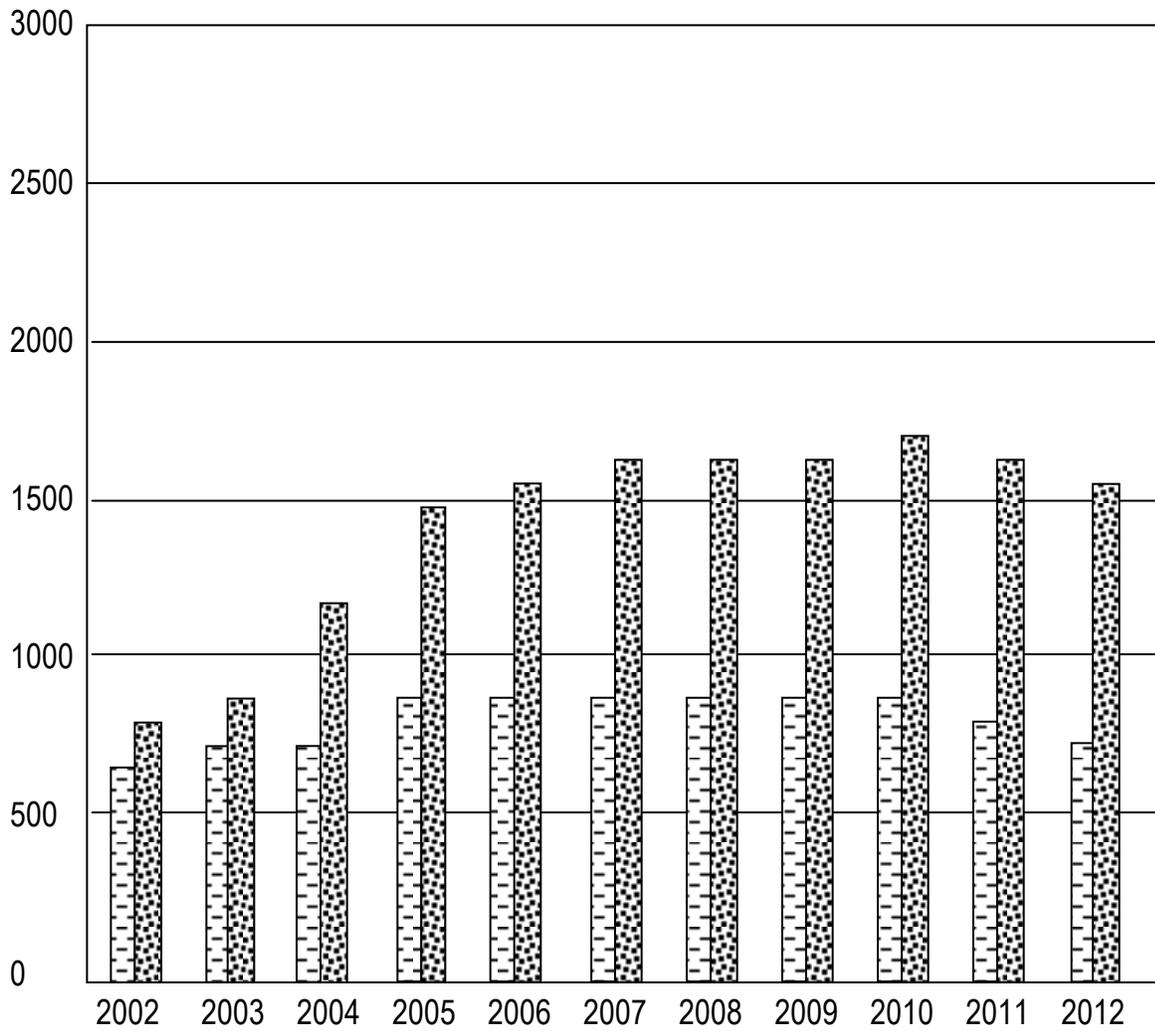
To support this scenario, Buchan (2002) held that deployment in Secondary schools in Uganda was uneven. He pointed out that class sizes were often very large (50 to over 100 students) and that the MOES had failed to come up with a clear policy on the teaching load.

Bray (1996) holds that in most low income countries, governments are unable to meet all the needs of their schools due to the poor income. So schools are either starved of basic resources or parents and community members are requested to contribute funds for improving the state of schools. Making parents and community members lend a hand in improving the state of our schools is a welcome gesture, but the government needs to show commitment to fulfilling its obligations. One may rightly recall that MOES' budget is always trimmed in the name of enriching budgets for other departments like defence. This is translated into inadequate provision of instructional materials to schools hence hindering effective teaching and learning.

A number of proposals with varying degrees have fallen short of targets. According to the Education Strategic Investment Plan [ESIP] (1998), the Government of Uganda had committed itself to providing at least one seed secondary school in each sub-county where there was none or where the need was great. However, according to the MOES' report on PPET (2002) out of 936 sub-counties, over 450 did not have secondary schools of any kind. Bitamazire (in the press) noted that 41 seed secondary schools were being constructed in sub-counties without any form of secondary school. This is all geared towards decongesting some schools, but still the problem persists. The Ministry also suggested double shifts but very few schools, if any, have adopted this. Benrel (2002) contends that the MOES' norm for class size is 45 for S.1 to S.4. The Post-Primary Education and Training (PPET) report on increased access, equity and efficiency had it that the proposed student-teacher ratio (STR) was 30:1 yet on the ground, the number of students is big compared to teachers available.

The figure below shows the demand for newly trained secondary school teachers

Total of New Teachers Needed



Source:

Draft policy framework for MOES

Pg 24 (2005)

It is evident that about 2300 new teachers are required in government aided schools per annum as a result of expansion, attrition and an increasing student-teacher ratio. Increased student numbers lead to expansion of class sizes and this has a direct constraining effect on the ability of the teachers to manage the flow of classroom dialogue especially when no corresponding staff recruitment is carried out. The MOES lifted the ban on recruiting teachers in Secondary schools, however, some teachers who were deployed up-country have refused to take up their jobs wishing to be posted in urban areas. The married ones have also followed suit, reasoning that they can't be that distant from their families.

Namutebi (in the New Vision) in contention with the same reported that the USE programme was short of 3700 teachers. At the inception of the programme, the sector had a shortfall of 7,750 teachers. She went on to observe that 4000 teachers had been recruited. However, quoting, Namirembe, the Minister of Education and Sports, noted that this was far from the total number of required teachers and that the implementation of the programme had been hampered by the refusal of some teachers to report to schools in rural areas.

Additionally, the United Nations Development programme (UNDP) report (2000) revealed that text books and other teaching materials in Secondary schools have not kept pace with the increase in the number of students. This was supported by Balfour et al (1995) when he stated that the huge shortage of text books is a major factor contributing to the poor quality education in many secondary schools in Uganda. It was

estimated that the student book ratio was 6:1. In government-aided schools visited by the evaluators, this ratio ranged from 4:1 to 16:1. It went on to highlight that most secondary schools visited tried to maintain a basic collection of text books for core subjects. The situation in most private schools was said to be far worse.

Coombs (1985) notes a high and positive correlation between teaching materials and students' achievements. He reasons that the quality of education and learning depends on conditions under which teachers and students operate. He looked at factors like adequate supply of equipment, text books and other instructional materials. So, if most secondary schools experience this problem of shortage of text books, then teachers' ability to deliver effectively becomes questionable. That means students will heavily rely on teachers' own knowledge without consulting text books where related information can be extracted.

Going by this scenario, the problem of large classes is featuring prominently in most secondary schools in Uganda particularly in urban and socio-economically well off areas. This was echoed by the draft policy of PPET (2002) which held that participation at secondary level is usually skewed in favour of those from high income households and those residing in or near areas of high population density.

Tripod (2005:3) enumerated some of the short comings of large classes:

- Students become faces instead of people.
- It is harder to give individual advice and guidance to students.

- Monitoring of attendance can be difficult, thus encouraging students to cut lessons.
- Coping with large numbers of assignments and examination scripts is a source of difficulty.
- The quality of feed back to students can be much reduced in large classes.

For quite sometime, comprehensive research has been made to bring in focus reasons why smaller classes may lead to improved students' outcomes than large classes.

Most outstanding is the student-teacher achievement ratio (STAR) in USA that experimented the effects of class size on 7,000 pupils in 79 schools (Nye et al, 2001).

Though the methodology and interpretations of the findings of this project have been often contested, its major findings, that small classes of around 15 pupils can lead to increased gains in performance in the first years of school, have been upheld.

(Robinson, 1990)

It should however be noted that in most developing countries, the reduction in class necessary to bring about these changes is not economically viable. Sustaining such small classes would call for rapid expansion of all facilities, employing more teachers, a thing that would require more funds. Judging from the financial constraints facing most developing countries, Uganda inclusive, it seems the problem of large classes will surface for some time.

As teachers, we need to come up with counter-measures within our reach so as to facilitate effective teaching and learning in these large classes.

It is a common belief that class size is not the sole underlying factor to be considered while looking at effective teaching and learning. Other factors like scholastic materials, nature of learners, teachers' qualifications, school administration, etc, also count. The

concern is how teachers in the different set-ups promote effective teaching and learning in large classes.

Statement of the Problem

There has been an increase in students' numbers in most secondary schools in Uganda. This has been partly attributed to the spill-over of the Universal Primary Education (UPE) bulge. Most alarming is the fact that there seems to be an unproportional increase in the teaching force, classrooms, instructional materials and provision of refresher courses to enable teachers cope with large classes. So, there is need to investigate the strategies that teachers in different contexts have developed to mediate teaching in their large classes. In a situation where teachers have been left to get solutions for themselves, teachers have decided to dictate notes/sums/numbers, move with the few students with instructional materials like text books, neglected students' contributions, questions and assignments. There is need to document good practices that have been developed by individual teachers in different contexts. Such a study will permit the identification of effective low cost strategies that could be disseminated to the wider circles.

Purpose of the Study

This study aimed at exploring how teachers handling large classes have adapted their classroom practices to promote effective teaching and learning in their classrooms. The focus was on what the teachers do in their classrooms that promotes effective teaching and learning.

Objectives

The study was guided by the following objectives:

- (i) Finding out teachers' conception of effective teaching and learning
- (ii) Establishing the teaching strategies teachers handling large classes have adopted to promote effective teaching and learning
- (iii) Finding out how learners in large classes perceive the teaching strategies utilized by their teachers

Research Questions

The study was guided by the following questions:

- (i) What is the teachers' conception of effective teaching and learning in large classes?
- (ii) What teaching strategies have teachers handling large classes adopted to promote effective teaching and learning?
- (iii) How do learners in large classes perceive the teaching strategies utilized by their teachers?

Scope of the Study

The study was conducted in 20 selected government and private secondary schools in Kampala District - Uganda. The focus was senior one and two because these are the classes where the UPE bulge is concentrated and they can easily be accessed since they still have time before being examined by UNEB.

The content scope of this study was concerned with teachers' conception of effective teaching and learning; classroom practices adopted by teachers handling large classes to promote effective teaching and how learners in large classes perceive the classroom practices utilized by their teachers.

Significance of the Study

It is hoped that the results of this study will be useful to a number of parties as indicated below:

- (i) Help teachers adopt better classroom management strategies that will enable them manage increased student numbers in the classrooms.
- (ii) Help teachers acquire better assessment strategies that will assist them to assess large numbers of students.
- (iii) Help teachers attain teaching and learning strategies that will bring about effective learning in large classes.
- (iv) Add to the existing literature on large classes.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

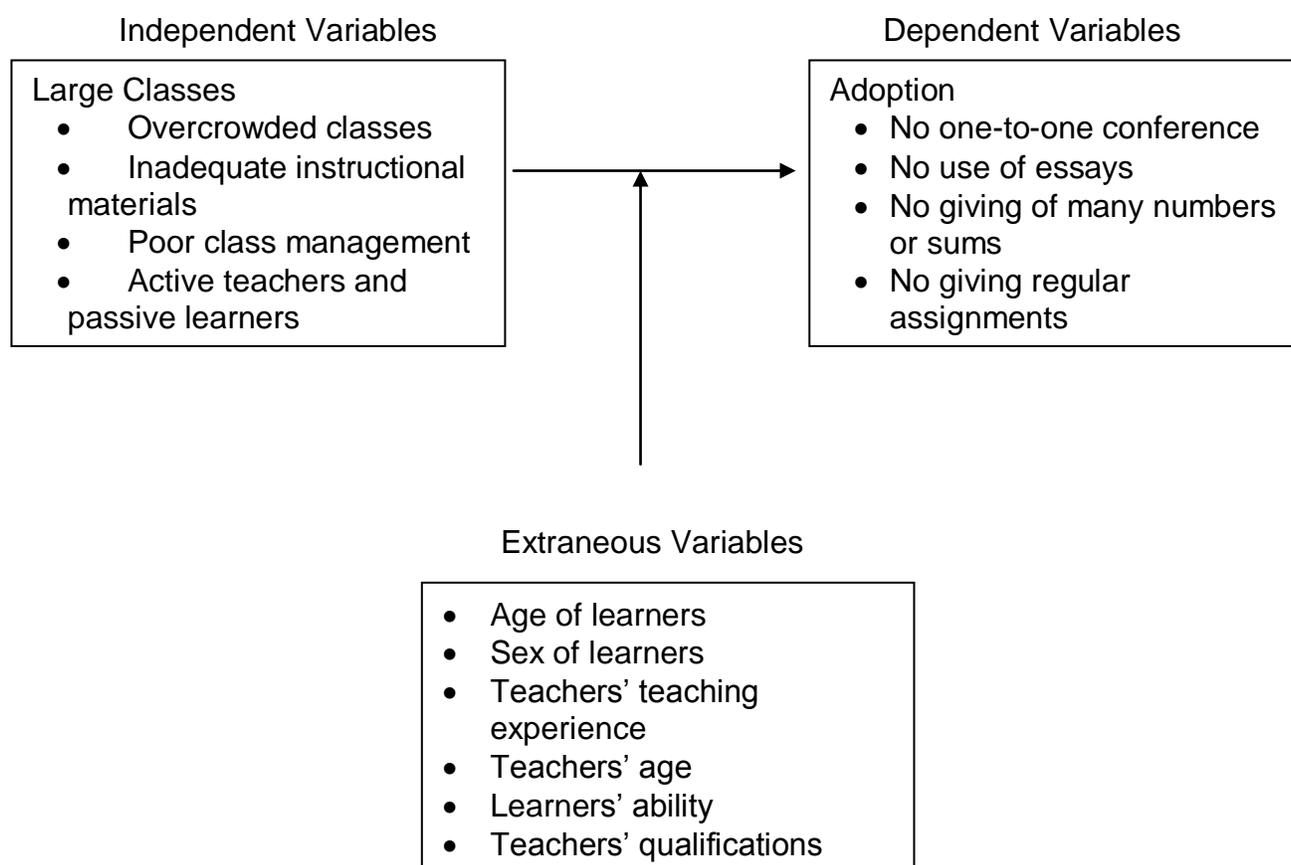
This chapter gives a theoretical review, conceptual frame work and literature review.

Theoretical Review

The researcher intends to use Vygotsky's theory of learning which is held in high esteem in the social constructive thinking. It tackles what makes knowledge, what one needs to know and how one comes to know. It brings out aspects that have a major impact on the way we teach and on ways students learn. It holds that every learner constructs his/her ideas as opposed to receiving them as complete and correct from a teacher or authoritative source. It emphasizes the improvement of the existing classroom methods so as to facilitate learning through interaction with others, internalizing knowledge and acquisition of first hand personal experience as students build a satisfactory and coherent picture of the world. With such an approach, the teacher ceases being a key player. He/she only comes in to throw some light here and there in case of misconceptions. He/she doesn't give outright answers but only provokes students to think deeper and reason out things rightly. So, the emphasis is on how students build their own understanding especially when it comes to strategies employed by their teachers as they labour to grasp new concepts in large classes.

Conceptual Framework

The study on investigating large class teaching strategies in selected Secondary schools of Kampala was guided by concepts found in the children's statute 1996. It spells out the needs and rights of any child, among which are: the right to basic education, special care and training. The researcher relates the statute to students' right to education regardless of the size of the class. The conceptual frame work was developed by the researcher and it lays out the relationship the study is trying to address.



If large classes are not properly handled by employing student-centred learning methods, availing adequate instructional materials and enough classroom space,

effective teaching and learning cannot be attained. Teachers cannot provide a touch to each student, give essay-type of questions and regular assignments to students.

Literature Review

An attempt was made to review as much literature as possible that relates to the topic of study. This literature has been categorized as follows: teacher's conception of effective teaching and learning; teaching strategies visa-vis effective teaching in large classes, and learners' perception of teaching strategies adopted by teachers in large classes.

Teachers' Conceptions of Effective Teaching and Learning

The Webster dictionary (1986) defines conception as the process of forming an idea or a plan. Webster dictionary (1986) goes on to define effectiveness as an ability to accomplish a purpose. And Lambert (1998) defines learning as a natural process guided by individual learner's goals arising from the activity itself and interactions with others stemming from the activity in which learners try to make sense of their experience of constructing knowledge, meaning and understanding.

Nacino-Brown et-al (1990) defines teaching as an attempt to help someone acquire, or change some skill, attitude, knowledge, idea or appreciation. So effective teaching is the teachers' ability to skillfully pass on knowledge to students and providing relevant tasks that ensure successful realization of the lesson objectives.

Ogunniyi (1986) notes that, the teacher as the main executor of the educational programmes should be well trained, possess relevant professional qualifications, be enthusiastic and well acquainted with the educational programmes.

Kebirumbi (2000) on her part reasons that, in order for a teacher to be effective in bringing about intended learning outcomes, he/she should have command of the theoretical knowledge about learning and human behaviour, display attitudes that foster learning and human relationships, have command of knowledge of the subject matter to be taught and be in control of technical teaching skills that facilitate students' effective learning.

This same view is held by the National Commission on Education (1995) which observed that a teacher should be an expert equipped with knowledge, various classroom methods and techniques that can be skillfully utilized and above all have an understanding of appropriate organizational and management styles.

Perrot (1982) sums it up when he highlights indicators of effective classroom teaching as characterized by warmth and understanding; being organized, stimulating and imaginative, asking about students' feelings, rewarding, welcoming, and clarifying when presenting instructional content by way of applying different instructional materials and procedures, not sidelining, but availing opportunity to all students to learn instructional content.

Though Kebirumbi (2000), Perrot (1982), and the National Commission on Education (1995) labored to identify attributes of a good teacher that can facilitate effective

teaching and learning, they left out the aspect of physical facilities like classroom space and instructional materials which can also greatly contribute to effective teaching and learning in large classes.

Well, one can rightly assert that the quality of education and more so, the teaching and learning achievements of students heavily depend on the competence, personality and dedication of the teacher. However, it should be noted that this greatly depends on the conditions under which the teacher operates.

As students' numbers continue to shoot up, secondary school teachers in Uganda and Kampala District in particular, face problems related to reduced individual contacts with students making them unable to attract students' attention, let alone solving individual students' problems which in the end negatively affect the teaching and learning process. The World Bank report (2001) supported this position when it stated that many African countries fail to provide an environment for effective learning since students are taught in over-crowded classes in which teachers will never move around to reach out to individual students.

On his part, Sesan (1992) notes that where as it is easy to have the whole class silently reading or writing an exercise, it is next to impossible to have the whole class speaking. Even when they are listening, assessing their individual listening ability can be very difficult. Confronted with such, teachers will make sure that they do away with situations that will make them unable to manage the class. They will greatly avoid

scenarios that give chance to learners to practice the knowledge and skills they have got.

However, Sesan(1992) highlights the difficulties teachers handling large classes go through as being inability to have the whole class silently reading, writing or speaking. However, he never talks about interventions that can be put in place to facilitate effective teaching and learning in these large classes.

Jackson (1964) emphasizes that pressure of student numbers constrains the ability of the teacher to effectively execute his/her duties. When the number is too high, the teacher is forced to delegate some of his/her duties either to students or colleagues. At times, he/she can even abandon them completely.

Judging from the above, it is evident that succeeding or failing in teaching depends largely on the teacher's potential to create and maintain order in the class. Classes with large numbers of students at times prove to be difficult to control and discipline as they create a hostile environment if not ably handled. The teacher's ability to move around the classroom somewhat reduces its size and also encourages individual students to contribute freely. Since students' learning needs are diverse, there is need to create ample time to address each student's concerns.

Oliveira (1993) held that increased student enrolment demands adequate instructional materials and that lack of the same renders teaching and learning ineffective. This same view was echoed by Nkuuhe (1995) when she observed that students learn skills, concepts and ideas better when they try them out in practice. Instructional materials

increase the quality of learning, decrease the time taken for learners to attain desired goals and promote good reading habits. The learner is capable of studying at his/her own pace. He/she is accountable for his/her own performance. The teacher only plays the role of guiding learners. So, if instructional materials are utilized properly, they do attract and hold learners' attention.

Oliviera also points out the issue of inadequate provision of instructional materials as a hindrance to effective teaching and learning in large classes, but does not provide any ways how adequate instructional materials can be accessed by teachers.

Kajubi (1989) also maintained that provision of instructional materials, particularly text books was the most effective way of improving quality and scholastic achievement. Since there is a high and positive correlation between teaching materials and students' achievement, increased students' enrolment requires enough instructional materials since they have an attention grabbing quality. No matter how big the class might be, instructional materials keep students captivated and task oriented.

Kajubi (1989) is objective when he asserts that there is a positive correlation between teaching materials and students' achievements. He goes on to point out that increased students' enrolment require enough instructional materials but misses out on how these instructional materials can be easily accessed by teachers.

On the contrary, Izizinga (2000) study reveals that teachers of Literature are not creative in their teaching. They teach everything according to the set texts either word to word or else through notes. They often use published notes for the purpose. These notes fail to take the students' level of understanding into account and do not constitute

any meaningful communication about the real literature themes. Such an approach can never facilitate effective learning.

Part of the problem is that we are so ill prepared for the task of accompanying our lessons with instructional materials in every way. Far too often, we lack the individual and institutional will, lapses in the flow of the class while locating instructional materials for those teachers who labour to avail them can result in loss of students' attention. Instructional materials needed for a given lesson should be made available prior to the lesson so that students may access them with as little disruption as possible.

Bailey (1996) contends that it is a common occurrence in most secondary schools in developing countries to find physically congested classrooms with an active teacher and passive learners. A teacher only keeps an eye to students within his/her surveillance zone leaving the back of the class outside his/her attention zone unattended to. This seems to affect the behavior of students in different locations and in one way or the other is most likely to affect effective teaching and result in learning negatively. Though Bailey is not particular, such a scenario seems to be evident in Uganda.

Bailey appreciates the problem of congested classes and teachers' inability to fully manage these classes but does not tackle the measures that can be put in place to enable teachers create a conducive learning environment and also be able to manage their classes well.

Furthermore, Izizinga (2003) had an input on this and submitted that students should be given a chance to dig up their own material and make their own notes. By this they

develop better arguments and perceptions. Through utilization of a student-centred approach, the teacher should guide students discover their strength and weaknesses in order to lead them from being passive and teacher dependent to being more self-aware, confident and independent.

Izizinga(2003) was supported by Buzindadde (2000) who holds that students' learning needs are diverse. This implies that attending to students effectively involves a teacher satisfying each and every one of them as they present their needs to him/her as either individual students or groups of them. She goes on to suggest that for a teacher to be effective in teaching, he/she must assist students to learn how to think about something that can only be achieved when there is much interaction between the teacher and the students.

The deductions are that for any teacher to be effective while teaching, he/she must assist students to learn how to think. However, this calls for much interaction between the teacher and the students, which can only be attained by motivating students so that they can mix up freely with the teacher on issues of academic and understanding. The teacher's work would not be done if students cannot pick interest in what they do, hence teachers should do it with zeal. In real terms, what it takes to attain effective teaching and learning in large classes is the one problem baffling many secondary schools in Kampala today hence the need to find out how teachers conceive effective teaching and learning.

Teaching Strategies *vis-a-vis* Effective Teaching and Learning in Large Classes

It is evident that the past years have witnessed tremendous increase in students' numbers in most secondary schools in Uganda. These increased numbers have come along with untold teaching challenges, and most importantly adopting suitable teaching strategies in our undertakings to facilitate effective teaching and learning.

Johnson et al(1998) observes that small classes are more effective not simply because they are smaller, but because they often offer a conducive environment for learning to take place. He also observes that simply reducing the number of students in a class does not alone improve the quality of instruction and neither does increase in class size lead to poor education. In other words, there is a body of knowledge arguing that it is not the class size that has the greatest influence on teaching and learning. What matters most is the quality of the teacher; his/her approach to teaching and specifically the capacity to create a culture for organizing large classes in such a manner that effective learning can be successfully be mediated.

It was reasonable for Johnson to point out that small classes are more effective not because they are small but because they offer a conducive environment. He goes on to reason that simply reducing the size is no solution and neither does the increase in class size lead to poor education. However, he does not provide room for generating ways and means how effective teaching and learning can be promoted in large classes. When teachers are confronted with large classes, identifying appropriate teaching strategies tend to be severely limited by such things like, inadequacy of instructional

materials and space. This calls for the replacement of traditional teacher-centred methods with those that make a teacher a facilitator and guide for students. Izizinga (2003) notes that because teachers are not innovative enough, they continue to use the very methods by which they were taught. A practice that encourages dependence on a single type of materials/text. This leaves no allowance for the eventual and probable change to another series of texts and methods thus producing passive and uncreative learners in a dynamic world.

To redress this, Sebunga (2003) opted for group work discussion which helps learners to gain both communicative competence as well as confidence in answering questions put to them. Shy learners are motivated to emulate friends in a discussion group and to contribute to the discussion, thereby discovering and developing their own potentials. Learners develop tolerance for other peoples' points of contention for they have to listen attentively. There are also fertile grounds for the development of originality of thoughts and independence of ideas.

Kasambira (1993) also notes that the personality of the teacher contributes greatly to the creation of a conducive-learning atmosphere regardless of the class size. He argues that the teacher should work hard in order to win students' respect. Teachers need to be approachable while handling large classes. There is also need to study and learn individual students. This helps teachers to learn something about as many students as possible. Consequently, one personalizes the class.

In this view it is appropriate to vary methods and techniques while teaching large classes because this encourages discussion, interaction and involvement. This goes a long way in breaking the monopoly of the teacher. Whichever strategy one uses, it is appropriate that one devotes some of the time calling out on individual or a group of students to present their findings or views. This greatly helps teachers capture the attention of students at the back so that they get to know that they cannot hide while there.

Adrian (1993) observes that with large class sizes, the ability of the teacher to give regular assignments is constrained. It is burdensome to administer examinations and tests and as such the evaluation of students tend to be either completely ignored or poorly handled. This means that the teacher's ability to identify students' abilities and weaknesses is curtailed.

This same view is held by Billington (1997) who holds that since the inception of large classes, there has been a dramatic increase in workloads. These work loads are clearly apparent in the assessment where the amount of time and effort required to evaluate the performance of large classes can be arduous and often overwhelming. This has meant that high levels of class assessment are difficult if not virtually impossible to maintain due to the inability to match resources to the associated marking loads.

For instance, Billington (1997) points out the difficulties teachers face while trying to assess learners in large classes but never provided any measures that can be put in place to ensure that teachers can ably assess students on regular basis.

Likewise, Leonard et-al (1986) has an input on the importance attached to assignments when he observes that homework or assignments are useful devices to the teacher in monitoring the progress of his/her students and the teacher himself/herself. Regular evaluation provides useful information that could be used by both the teacher and his/her students to seal loopholes in their endeavors to promote effective teaching and learning.

I concur with this submission on ground that, students in large classes are often reluctant to communicate difficulties that come into play as they study. Homework/Assignments/Tests turn out to be useful devices in monitoring the progress of students. By this, teachers get to know students' perception of concepts and this serves as a basis for making some adjustments in the teaching. However, some teachers tend to be worked by numbers and miss out on objectively assessing learners. It is the wish of all educationists that the progress of students in large classes should be regularly monitored in a way similar to that of students in relatively small classes. Students in large classes should be exposed to assignments and tests and at the end of the exercise be given a feed back.

However, Penn (1995) observes that many teachers settle for the lecture method when faced with large classes. To them, this is the line of least resistance. While some present their lectures in an exciting way, others present theirs in a rather dull manner. Penn was supported by Munene (1997) when he pointed out that teachers use more of lecture methods that encourage students to think about their own learning and to

participate in what they learn. Such traditional approaches to teaching view learners as imitators and the teacher as authority. Teachers rush so as to complete the syllabi before examinations. Such an approach places more emphasis on content coverage than on effective learning which in the end frustrates the learning process.

Indeed, Munene may have been right in his own way when he criticized teachers who use traditional approaches like lecturing while teaching without giving chance to students to contribute during the flow of the lesson. However, he never provided any student-centred learning methods that can be utilized by teachers handling large classes to bring about effective teaching and learning in large classes.

As a remedy to this, Gillespie (1997) suggests that a teacher in the process of instruction to students should encourage discussion, interaction and involvement. The teacher should avoid lecturing through out the entire period of the lesson. He/she should actively involve students during at least a small part of every class meeting.

This was echoed by Ajuoga (2000) when she observed that in modern teaching, a teacher is losing the role of a dominant authority figure that controls how to teach and what is taught. The teacher has to find a variety of teaching methods that will meet the challenges of his/her class. There is need to give students opportunity to think out problems in their own way rather than aiding them to learn all the time. It therefore comes out clearly that teachers have to adopt viable teaching methods and techniques to the number of students in the class one is handling. Once this is adopted, effective teaching and learning will be realized.

Learners' Perception of Teaching and Learning Strategies Adopted by Teachers in Large Classes

Webster Dictionary (1986) defines perception as an idea, belief or an image you have as a result of how you see or understand it.

Nacino-Brown-et-al (1990) asserts that students are the best judges of the personal characteristics of teachers. This study indicates that in the opinion of students, the most highly ranked personal characteristics are sympathy and kindness, helpfulness, patience, a pleasant personal appearance and manner, emotional stability and self control.

The personality of the teacher has a big role to play when it comes to shaping the classroom atmosphere regardless of the class size. There is need for a teacher to show real enthusiasm for the subject. The moment students realize the love and importance you attach to the material being disseminated, they are more likely to develop an interest themselves thus facilitating effective teaching and learning.

The Inner London Education Authority (ILEA) report (1988) asserted that teachers' expectations about students' intellectual capabilities can have a lasting effect on students' own expectations of themselves. They also influence the kind of intellectual challenge that teachers offer students which in turn affects the students' level of achievement. This implies that teachers' attitude determines the teaching approach and in the end the outcomes of the teaching process. So, teachers need to tap learners'

potential, capabilities or strong points, as they work on their weak points other than rebuking them for any mistake or number failed.

Furthermore, the report continues to say that in all classrooms, there exists a variety of differences among learners. Each of these learners will perform well or poorly depending on the teachers' attitudes towards their gender, race, class or marked aptitudes. There is need for teachers to capture the attention of all learners if effective teaching is to be attained. He/she has to appear neutral, not to be inclined to a particular section of the class, address each and every student's concern objectively hence making learning enjoyable.

Haylock (1995) concurs with such a position when he analyzed findings on Adults attitudes towards Mathematics which revealed that many adults in relation to Mathematics tasks, admitted to the feelings of anxiety, helplessness, fear, dislike and guilt. He continues to allege that feelings of frustration and anxiety are identified by many adults as originating from unsympathetic attitudes of teachers. Although Haylock concentrated much on Mathematics, such a scenario applies to all subjects. Students tend to resent teachers who appear unapproachable and militant. They sit on their problems only to explode when it is examination time. There is need for teachers to be all embracing if we are to capture full attention of our learners.

According to Rathmell (1994) the positive attitude that students develop, for instance, towards Mathematics and learning are the most important outcomes of a classroom that

focuses on thinking and reasoning. It is believed that once students are encouraged to think out problems by themselves rather than telling them what to do, meaningful teaching can be promoted. We need to adopt approaches that can aid students enjoy their learning experiences hence facilitating effective learning.

Much as Rathmell (1994) appreciated the issue of encouraging students to think out problems by themselves rather than telling them what to do, he ran short of words when it came to giving such approaches that can help students enjoy their learning and contributing freely during the flow of the lesson.

This same position is held by Leonard (1986) when he pointed out that the teacher's job is to get students engaged in activities that will result in the desired learning. This process is an essential ingredient in both instruction and discipline. It produces the urge for learning in students especially those in large classes and makes them enjoy their lessons. This calls for teachers being in total control of their classes. Once teachers are in control, students are liberated because such a situation allows them develop their best traits, skills and abilities. It also provides them with psychological security in the classroom and an effective learning environment.

Mager (1968) in her findings argues that the success of a particular subject is based on a learning motivation theory which emphasizes that when a student is learning Mathematics, he/she should do so in presence of factors that will promote positive interest rather than negative interest. When students come to associate learning Mathematics with unpleasant conditions such as feelings of anger, fear, inability or

inadequacy brought about by the classroom atmosphere, then such feelings may become associated with all aspects of learning Mathematics. Though Mager dwelt much on Mathematics, such a scenario may also apply to all other subjects. Therefore, there is need for teachers to come up with appropriate learning activities especially when faced with large classes that encourage students to explore and exercise their reasoning abilities. Such activities must reach into new, perhaps strange, territory helping students build and sort out their ideas without telling them what is right or what to think about. This alone may highly motivate students to learn and consequently promote positive attitudes towards what they learn.

Mager (1968) also highlighted the need for teachers to create conducive environment for students such that they can learn in presence of factors that will promote positive interest rather than negative interest, but never mentions any of these factors.

On its part, the National Commission on Education (NCE) report (1995) revealed that,

“Students’ positive attitudes towards school and education were associated with positive ethos. Schools that students held to be with positive ethos were those that had good teaching practices such as frequent praise, high expectations and regular marking of assigned work. It is a common belief that if students are to be committed to learning, they need to be valued at school and also come to realize that what they learn is to benefit them in future. They need to realize the need to attach importance to what they learn.” (P 197)

The above quotation alludes to the view that commitment to learning may in a way be controlled by one’s attitude towards what is being learnt. On the part of the teacher, there is need to present subject material in a way that will cause lasting interest to

students. This calls for using vivid examples students will easily grasp, vary techniques while presenting materials, followed by some questions and guided discussions. There is need for teachers to desist from sticking to the same teaching methods and materials lesson to lesson. Given the large class sizes being handled, students cease to have anything to look forward to, thus switching off.

The NCE report (1995) went on to observe that students that fall behind in their learning or begin to find that lessons are either too difficult or insufficiently challenging soon become bored and disillusioned. Therefore, there is need for teachers to keep encouraging and motivating students such that they can develop interest themselves. If we happen to provide a conducive-learning environment to students and also give them adequate support during our teaching, chances are that their attitudes towards the subject and learning as a whole will be positive.

NCE (1995) also pointed out that, students who follow behind in their learning become bored and disillusioned. It indicated the need for teachers to keep encouraging and motivating students but never gave any ways how these students can be motivated and come to appreciate the teaching approaches being utilized by their teachers.

Nolasco et al (1990) held that poor instruction leave the students confused and uncertain in large classes, the problem is magnified because once the students have embarked on a task, it is difficult to rectify any misunderstandings. If the teacher tries to talk when students are working, most of them will not listen. If the teacher stops everyone just as they are getting involved, it will cause frustration. If the teacher tries to

repair the misunderstanding, group by group, the last groups will be totally lost and confused by the time the teacher reaches them.

Therefore, there is need for teachers to teach while creating an environment that allows students to learn without any hindrance. All our teaching strategies need to be geared towards eliminating disorder and disruptions during the flow of the lesson if effective teaching and learning is to be realized.

As Sidney (1990) put it, “everyone who remembers his own educational experience remembers teachers not methods and techniques. The teacher is the King pin of the educational situation, he/she makes or breaks programmes.” (P12) What seems to be evident here is that students’ attitudes towards learning any subject have a very important role to play and should be a concern to teachers when preparing for teaching. Suitable teaching approaches should be at the forefront as we endeavour to prepare our lessons.

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

This chapter mainly concentrated on the methods that were used to collect data on investigating large class teaching strategies adopted by teachers in secondary schools to bring about a clear picture of the study. Research methods are particular ways in which data is gathered within the overall strategy of research. Methodology describes the research design, the target and sample population including sample selection, research instruments, validity and reliability of research instruments, data collection techniques and methods of data analysis that were used.

Research Design

The researcher used a case study design to generate new ways of facilitating good teaching and learning in selected large classrooms. The case study design was selected because it gives intensive, descriptive and holistic analysis of a single entity in order to gain an insight into larger classes.

Sample Selection

The study was designed to focus on government aided and private secondary schools in Kampala district. A cross section of 20 schools that have S.1 and S.2 streams with over 50 students were surveyed. Kampala district was selected for it has a number of schools with varying characteristics. For instance, it has students from various

economic, social and academic background, private and government aided schools, high and low performing schools, day and boarding, urban schools, schools with different class sizes, teachers with different qualifications, etc.

Purposive sampling was used to select the schools and categories of respondents to be included in the sample. It was preferred for the study because it selected typical and useful cases that enabled the researcher get information relating to how teachers in different contexts mediate effective learning in large classes thus saving money and time.

The target population was head teachers, teachers and students from selected schools. Head teachers were purposively selected basing on their role and experience in the management. This is so because they head these institutions and supervise all the teaching/ learning process in their respective schools.

Teachers as key informants were purposively selected from among those handling Mathematics and English in senior one and two on recommendation from the respective Heads of Department. They provided first hand information on how they mediate learning in large classes.

Students were randomly selected from S.1 and 2 classes where the study was carried out. They were used to generate views pertaining the way they perceived teaching strategies adopted by their teachers.

The researcher focused on S1 and 2 in the selected schools, particularly focusing on teachers of English language and Mathematics. The subjects were preferred because they embrace the main purpose of basic education which aims at attaining numeracy and literacy. They also appear daily on the timetable and are compulsory hence being taught in all schools. The decision to focus on senior one and two was based on the view that these are some of the classes where the UPE graduates are found and are not examined by UNEB.

Sample Size

The researcher had a sample size comprising 20 selected secondary schools in Kampala district. These schools were grouped into subsets that had similar characteristics in order to ensure an equitable representation of the schools in the sample. This sampling method was used to reduce data bias and promote effective and reliable data collection.

The target population comprised head teachers, teachers and students. A total of 562 participants who included 20 Head teachers, 142 teachers and 400 students took part in the study. Since the population was varied and large, the sample size turned out to be large enough to enhance representativeness and eventual generalization of the research findings.

Selection of Respondents

Number of Participants

School Code	Head Teachers	Teachers	Students
A	1	7	20
B	1	6	20
C	1	8	20
D	1	7	20
E	1	8	20
F	1	6	20
G	1	7	20
H	1	7	20
I	1	8	20
J	1	8	20
K	1	7	20
L	1	6	20
M	1	8	20
N	1	7	20
O	1	7	20
P	1	7	20
Q	1	6	20
R	1	8	20
S	1	7	20
T	1	7	20
Total	20	142	400

Instruments of Data Collection

In order to gather the necessary information, questionnaires, interviews and observation guides were used. The selection was guided by the nature of the data that was to be collected and the objectives of the study. The researcher was mainly concerned with views, opinions, perceptions, conceptions, feelings and attitudes. Such information could best be collected through the use of the named instruments here below:

Questionnaires

Questionnaires were designed to elicit information from the respondents. Questionnaire one was for teachers and two was for students. They were designed in such a way that they captured information related to the objectives of the study. There were both close and open ended questions. With close-ended, respondents had alternatives from which to select appropriate answers thus checking vague responses. With open-ended questions, respondents provided own opinions that enabled the researcher get extra information from the respondents.

Questionnaires were chosen because a large amount of data was collected from respondents in a short time and it proved to be cheap to administer. Also data collected using questionnaires was easy to analyze more so when it came to the use of a computer.

Interview Guide

Patton (1990) holds that an interview guide is a list of questions or issues that are to be explored in the course of the interview. Unstructured interview guides were used to

obtain information from both head teachers and teachers that could not be directly observed or was difficult to put down in writing on part of respondents. They were preferred because they had control over the line of questioning and were also used to record information as it occurred.

The instruments for data collection were carefully designed so as to enhance unsupervised completion. All interviews were conducted basing on interview guides and were conducted in English; Uganda's official language. During the flow of interviews with head teachers and teachers, information was recorded in the researcher's field note book.

Observation Guide

A checklist was used to collect information through observation. The researcher made important visits to classrooms to get spot on information regarding the way teachers handle large classes. He also visited libraries.

This instrument was considered vital because it enabled the researcher get first-hand experience, record information as it occurred and also notice unusual aspects. It greatly enriched the afore-mentioned instruments.

Validity of Instruments

Bryman (2004) holds that validity refers to whether you are observing, identifying or measuring what you say you are. He goes on to identify components of validity as external validity which is the degree on which findings of the study can be generalized

and internal validity which means that there is a good match between the researcher's observation and the theoretical ideas they develop.

The validity of the instruments was determined by two raters who were experts in the field of study. The raters evaluated the content of the instruments and determined whether they covered all items of the study under investigation. The content validity index of the questionnaire(s) items were then computed using this formula:

$$\text{CVI} = \frac{\text{Number of items rated relevant}}{\text{Total number of items in the questionnaire}}$$

If the CVI is between 0.5 – 0.99, it means that the validity of instruments is high, hence questions being good.

$$\text{CVI} = \frac{\text{Agreed items by both judges as suitable}}{\text{Total number of items being judged}}$$

Questionnaire 1

	Very relevant/ Relevant items	Not relevant / Not very relevant	Total
Rater 1	12	4	16
Rater 2	14	2	16
Total	26	6	32

$$\text{CVI} = \frac{26}{32} = 0.8125$$

The CVI was 0.8125, which was considerably greater than 0.5 the recommended validity for an instrument.

Questionnaire II

	Very relevant/ Relevant items	Not relevant / Not very relevant	Total
Rater 1	8	4	12
Rater 2	10	2	12
Total	18	6	24

$$\text{CVI} = \frac{18}{24} = 0.75$$

The CVI was 0.75, which was considerably greater than 0.5 the recommended validity for an instrument. Going by the raters' advice alongside consultations made with the

supervisor, necessary adjustments were made and this made questions to be more clear, specific and relevant. They were also reshaped and they attained the logical sequence based on the study.

Reliability of Instruments

According to Bryman (2004), reliability refers to the consistence of research findings whereby the objective of reliability is to be sure that if later investigations are carried out, following the same procedure and when they are conducted all over again, similar findings and conclusions are attained.

Having established the validity of the instruments, a pretest was carried out using 20 respondents whose responses were then subjected to a Cronbah Alpha coefficient reliability test using this formula:

$$\alpha = \frac{K}{K - 1} \left(\frac{1 - \sum sd_i^2}{SD_t^2} \right)$$

Where α = Reliability

K = Number of items in the questionnaire

SD_t^2 = variance of the entire questionnaire

$\sum sd_i^2$ = Sum of variance of individual items in the questionnaire.

The researcher identified 20 individuals on which he determined the study prior to the major study. After this study, results were analyzed using the statistical package of social scientists that produced an Alpha Coefficient of 0.632 which is 63%. This made it

possible for the researcher to use the questionnaires because it was a sufficient coefficient. This method was applied for it is straight forward and appropriate, Likert Scale instruments (Siegel)

Ethical Considerations

The issue of ethics while carrying out research was given due consideration since knowledge sought should never be realized at the expense of human dignity.

Holyle et-al (2002) holds that, ethics works to protect the respondents' privacy and working relationships with key respondents. It also works and improves on the credibility of the study. So, during and after the study, ethical issues were greatly considered to ensure that the respondents' dignity was secure. The researchers sought permission from the relevant authorities, explained to the respondents the purpose of the study and assured them that all information released was to be treated confidentially and that their identities would not be revealed.

Procedure

The researcher obtained a letter of introduction from the Dean, School of Education, Makerere University to the targeted schools. Thereafter, the researcher administered questionnaires to students and selected teachers. The researcher went on to make appointments for interviewing head teachers and teachers. He also observed lessons. The researcher personally conducted interviews, made observations and administered questionnaires to the respondents to ensure maximum confidentiality.

Data Analysis:

On collecting the data, it was presented and analysed by use of descriptive statistics because the focus was on opinions, ideas, conceptions, and perceptions of head teachers, teachers and students on the class strategies adopted to mediate learning in large classes in Kampala district.

Data collected was edited, coded with frequencies under representative categories, tabulated and quantitatively analysed by use of percentages. Precisely, descriptive methods were employed when it came to analyzing qualitative data. The results were presented in form of tables in relation to themes of the major variables using ideas, views, opinions, conception, and perceptions of the respondents.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

Introduction

This study on investigating large class-teaching strategies adopted in selected Secondary Schools was carried out in Kampala District. Therefore, the presentation in this chapter was done in line with research questions of the study and finally classified into four major themes:

- i) Background characteristics of respondents
- ii) Teachers' conceptions of effective teaching and learning
- iii) Teaching strategies adopted by teachers handling large classes
- iv) Students' perceptions of the teaching strategies adopted by their teachers

Background Characteristics

However, during data classification and analysis, students were classified according to various clusters namely: their sex, age, and learning abilities. These variables are thought to have a big impact on the teaching and learning process in large classes.

Table 1: Learners' Sex

Sex	Frequency	Percent
Male	243	61
Female	157	39
Total	400	100

The above analysis in table 1 implies that there were more male students; 243 (61) than females who were 157 (39). The researcher discovered that in most secondary schools the enrolment and retention of male students was higher than that of females. This is probably why even the male respondents were more than female respondents. Much as the government is promoting the issue of educating the girl child, on the ground it is the reverse. There are more boys joining secondary as compared to girls, an indication that there is a big percentage of girls that drop out of school on sitting Primary Leaving Examination (P.L.E).

With regard to the age of the students who participated in the study, the study findings indicated that most of the students were 15 years of age 150 (38%), a clear manifestation that these respondents were mature enough to give well founded responses.

Table 2: Learners' Age

	Frequency	Percent
14 years	100	25.0
15 years	150	37.5
16 years	90	22.5
17 years	35	8.75
18 years	25	6.25
Total	400	100.00

Probably in many developing countries, majority of students reach senior secondary school at the age of 14 and 15 years as indicated in table 2. The age of 14 and 15 years are the standard age at which children join secondary schools.

It is also imperative to note that most of the student respondents were ranked with middle ability in classroom learning 237 (59.5%) and slightly less than half ranked with upper ability 133 (33.25 %) as indicated in table 3.

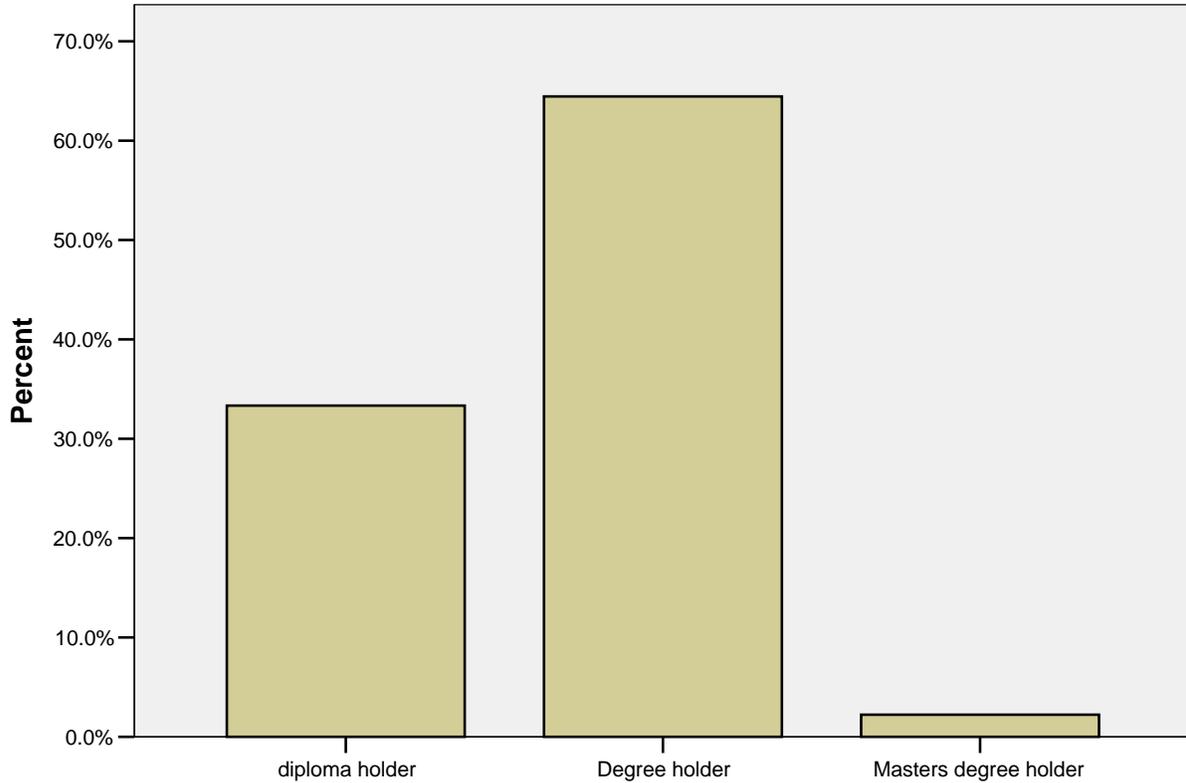
Table 3: Learners' Ability

	Frequency	Percent
Upper ability	133	33.25
Middle ability	237	59.25
Lower ability	30	7.50
Total	400	100.0

The interpretation got is that the results obtained in this study were highly reliable since they came from the intellectual cream of these secondary schools selected for the study.

Only 42 teachers were selected for the study and their qualification levels were computed and findings indicated that many teachers teaching secondary schools of Kampala district are degree holders 65% (see Fig 2). During the study, it was observed that degree holders freely passed on the subject matter to learners and could ably handle all situations in different settings.

Fig 2:Graph showing teachers' qualification levels



The age of teachers chosen to participate in the study was computed and it was noted that there were distinct variations. However, it was observed that many teachers were between the age of 26 and 31 years of age 16 (40%). Variations in age also vary with their experience in the profession where those with seniority in age have seniority in experience and those who are young in age have low experience.

Table 4: Teachers' Age Bracket

Age bracket	Frequency	Percent
20-25 years	32	22.53
26-31 years	75	52.82
32-36 years	20	14.09
37-42 years	15	10.56
Total	142	100.0

Table 4 shows that majority of teacher respondents were between 26 and 31 years (52.82%). It is during this time that teachers seem to enjoy their profession. This is the time they are also utilizing their energies to profit from the profession before they could quit for other calls.

The sex of the teacher respondents was also computed and table 5 below shows the results.

Table 5: Sex of Teacher Respondents

Sex	Frequency	Percent
Male	66	46.47
Female	76	53.53
Total	142	100.0

According to table 5 above, more female teachers participated in the study 76 (53.53%) than male teachers 66 (46.47%). This was so because by Ugandan standards, there are more female teachers handling English language than their male counterparts. Also

there are some courageous and enterprising female teachers who venture into teaching Mathematics.

With regard to teaching experience, the results were analyzed and indicated in table 6.

Table 6: Teaching Experience

	Frequency	Percent
1-5 years	57	40.14
6-10 years	60	42.25
11-15 years	25	17.61
Total	142	100

According to the Table above, most teachers' experience in teaching ranged between 6 – 10 years 60 (42.25%) a reflection that the researcher dealt with people who were well versed with methods and techniques of dealing with classroom challenges.

Research Question One: Teachers' conceptions of effective teaching and learning in large classes

In order to manage large classes, it is important to understand what teachers regard as effective teaching and learning in large classes because it is the teachers who experience the challenge and thereby can better give a well-informed picture. So research question one was handled and results that were obtained are presented in Table 7.

Table 7: Teachers' Conceptions of Effective Teaching and Learning in Large Classes

Responses	Head teachers		Teachers	
	Frequency	Percent	Freq	Percent
Can ably describe effective teaching and learning	19	95.0	127	89.44
Cannot precisely describe effective teaching and learning	01	5.0	15	10.56
Total	20	100.0	142	100.0

Going by Table 7, findings give a strong testimony that majority of both teachers and head teachers ably described effective teaching and learning in large classes. Results obtained indicated that 19 (95%) of the head teachers and 127 (89.44%) of the teachers ably described effective teaching and learning.

However, from the results gathered through the in-depth interviews, it was further noted that teachers had varying conceptions of effective teaching and learning. Some teachers had a notion that effective teaching and learning is all about being thorough in one's teaching and ensuring that students get right the sums, questions or problems related to the newly acquired materials. To these teachers, the moment one ably disseminates new material to students and majority of them get the

sums/questions/problems right, then that is a justification of effective teaching and learning.

Again, there was this group of teachers who thought that teaching is said to be effective when the set lesson objectives have been realized. So, to be effective in teaching is to work towards the attainment of the intended lesson objectives. The moment objectives are realized, then effective teaching is said to have taken place. This group of teachers had a conviction that their interpretation of effective teaching was to ensure that students are guided well on teachers' expectations through the set lesson objectives. However, another group of teachers thought contrary. It noted that effective teaching is all about keeping learners on task calling upon all of them to focus their attention on the material being disseminated and above all, reacting positively to the set tasks.

Another group of teachers said that effective teaching is about being prompt in class for one's lesson and never to encroach on the time of the next teacher. For these teachers, their view of effective teaching is to go to class in time regardless of whether the lesson was impressive or not. Another group of teachers attributed effective teaching to the ability to prepare good schemes of work and a lesson plan. Thus, each teacher had a different interpretation of effective teaching.

The fact that majority of the school administrators and teachers could ably conceptualize effective teaching and learning, despite differences in conception, there is a ray of hope that they might as well conceptualize effective teaching and learning in

large classes in terms of elaborating the associated problems. Further interviews of the different teachers and Head teachers indicated that many of them knew the problems associated with ensuring effective teaching and learning in large classes. These teachers indicated that large classes are usually strained by the lack and inadequacy of resources like instructional materials as reported by 100 teachers (70.43%). More so, teachers singled out the problem of teachers being unable to reach out to each and every student to ensure total understanding of the concepts and subject matter. They also mentioned that discipline in large classes is hard to ensure since they lack the capacity to supervise each and every student.

Judging from the fore mentioned, it comes out clearly that a majority of teachers and headteachers could ably describe effective teaching and learning which is a clear indication that despite the differences in conception, they might as well conceptualise effective teaching and learning in large classes.

Research Question Two: Teaching strategies adopted by teachers handling large classes to promote effective teaching and learning

This research question was set purposely to find out the teaching strategies adopted by teachers in Kampala district handling large classes as they laboured to promote effective teaching and learning. Findings revealed that a sizeable number of teachers tried to adopt strategies to handle large classes though amidst countless challenges ranging from inadequate instructional materials, overcrowded classes and lack of support from the relevant authorities especially the MOES.

One of the issues that were investigated related to adequacy of instructional materials, how they were acquired and how teachers go about the issue of inadequate instructional materials in case it surfaces .Findings are presented in Table 8.

Table 8: Teachers' views on adequacy of Instructional Materials.

Materials	Abundant	Adequate	Inadequate	Not available
Text Books	10 (7.6%)	22 (15.5%)	110 (77.5%)	
Teachers' Guides	9 (6.3%)	130 (91.5%)	3 (2.1%)	
Mathematical Instruments	3 (2.1%)	15(10.6%)	124 (87.3%)	
Manila papers	8 (5.6%)	17 (12%)	117 (82.4%)	
Radios	6 (4.3%)	127 (89.4%)	9 (6.3%)	
Televisions	7 (5.0%)	8 (5.6%)	127 (89.4%)	
Novels	10 (7.0%)	9 (6.3%)	123 (87%)	

Source: Teachers' questionnaire.

It is evident from Table 8 that majority of teachers indicated that most instructional materials were inadequate for instance, 110 (77.5%) teachers observed that textbooks were inadequate and 124 (87.3%) teachers observed that mathematical instruments were inadequate.

It should be noted that availability of adequate text books is a big factor in coping with large classes because the teaching of mathematics and English requires that both teachers and students move together. Teachers can easily follow up on weak students and also students can follow teachers as they practice on their own. But for 110 (77.5%) teachers to hold that text books are inadequate exacerbates the problem.

Asked about how schools acquired these instructional materials, the teachers revealed the following:

Table 9: How Schools Acquired Instructional Materials.

	Frequency	Percentage
School purchases	27	19.01
PTA Contribution	76	53.52
Donation	20	14.08
Individual Students bought	15	10.56
MOES distributed	4	2.83
Total	142	100.0

Source: Teachers' Questionnaire

According to Table 9, most schools, 76 (53.52), acquired instructional materials through PTA contribution . This means that parents are the biggest financial providers in most secondary schools. It is also surprising to note that the Ministry of Education and Sports contributes the least, 4 (2.83%), in terms of instructional materials. One wonders whether other stakeholders will contribute generously if the government, the supreme service provider, has a capacity below average.

One Head teacher had this to say:

“Going by the school budget, text books account for 2% of the total expenditure, however the MOES contributes less than a half of this amount.

Given that these text books are not affordable for majority of the schools, students are left to fend for themselves”.

Teachers were also asked how they go about the problem of inadequate instructional materials, this was their submission;

“We have an internal policy whereby all new students have to contribute at least one text book in a given core subject.” They noted that this arrangement has enabled schools realize a sizeable number of text books which has greatly reduced the problem of shortage of text books. Others observed that, administration uses part of the capitation grant to purchase instructional materials. Departmental heads submit their requisitions, votes are cast basing on priority, purchases effected and proper storage emphasized. Through this arrangement, Instructional materials have accumulated over years.

They also noted that they always encourage students to share the few instructional materials like textbooks such that at least every student gets a chance to follow the teaching. Sharing textbooks was one of the most frequently used coping mechanism in large classes as evidenced by 124 (87.32%) teachers.

In some schools, old students make regular donations to their schools. Such donations can be in form of finances, or physical instructional materials. Teachers pointed out that this gesture has enabled them realize many textbooks hence boosting and reviving some of the dilapidated libraries.

Teachers were also asked to give their opinions on the distribution of classroom space.

Results obtained are presented in Table 10.

Table 10: Teachers' Opinions on Distribution of Classrooms Space.

Responses	Frequency	Percentage
Very adequate	6	4.2%
Adequate	22	15.5%
Fairly Adequate	27	19.0%
Not Adequate	87	61.3%
Total	142	100%

Source: Teachers' Questionnaire.

Going by Table 10, findings revealed that majority of teachers, 87 (61.3%), held that classroom space was inadequate. However, it should be noted that a reasonable number of teachers, 22(15.5%), indicated that classroom space was adequate. But this does not dispel the view that in most schools, classrooms space was inadequate. Through observation, the researcher saw teachers trying to reach out for students especially at the back of the classrooms by extending their area of operation as they walked to the back of the class rooms but with difficulties.

A good number of teachers were seen trying to keep a reasonable number of students on task by calling upon them to pay attention, asking them questions in between the lessons and allocating them turns randomly at different locations in the classrooms.

It was also noted that several rows of dual desks with very limited space between the rows were seen. Worse still, some rows were joined together to create extra space for more additional desks. Coupled with such, most teachers were seen conducting their lessons from the center of the front of the classrooms. Their reasoning was that from such a location, they had easy access to the chalkboard which in most cases was the only meaningful resource in the classrooms, save for a few text books.

In some schools where the researcher had a chance of entering classes before the commencement of lessons, despite the limited space, students were seen taking up their seats without any problem. When teachers were asked, they reasoned that at the beginning of the year, they assign students seats according to their height. This arrangement greatly checked time wastage as students moved around the class trying to secure seats, as it was the case in some schools.

Asked to give more strategies they use to solve the problem of limited classroom space, teachers had this to say:

Some teachers pointed out that parents came in strongly and gave a hand to the effect that some classrooms have been put in place. To back this up , one head teacher had this to say,

“Due to the pressure we had on our infrastructure, we were forced to start using our unfinished storeyed building. Though not yet complete, it somewhat solved the problem of shortage of classrooms.”

Other head teachers were in a real fix. This is what one had to say,

“We are limited by space and we can’t do much about it. We can’t buy more land because we are financially handicapped and we cannot relocate. We have control measures in place for we were compelled to limit the numbers as much as possible and for now we have some breathing space”.

In some schools, they made best use of tree shades. Students are encouraged to carry chairs and lessons are conducted under trees. However, such classes are usually interrupted by bad weather especially when it comes to rainy seasons.

In their own ways, other schools made best use of their main and dining halls. Lessons that call for open discussions are normally conducted from main halls. However, such arrangements are backed by microphones such that discussions can be heard well by the audience.

Table 11: Teachers’ Responses as to whether they Consider Students’ Activities

Responses as to whether teachers consider students’ activities.	Frequency	Percentage
Yes	96	67.6
No	46	32.4
Total	142	100.0

Source: Teachers’ Questionnaire.

From Table 11, it is reflected that more than half of the teachers, 96 (67.6%), observed that they had consideration for students' activities. A good percentage of teachers revealed that they use group work while handling large classes. They noted that in case they were to use group work, they always considered the number of groups, their size and which student should join which group. They also hinted at the point that clear explanations are made about teachers' expectations like bringing it to students' attention that each member of the group at any moment will be picked on to make some presentations. They observed that it is a common trend in large classes for students to dodge work, but when they come to realize that at any one time they might be called upon, they become more serious for they would not want to be embarrassed. Teachers concurred that this arrangement had paid off very well in a way that students who succeeded in a task owned the knowledge, and those who tried and failed, turned out to be receptive to discovering what they did not know. This is in line with Vygostky's theory which advocates for a situation where learners have to look for new ideas/knowledge by themselves other than receiving it from teachers all the time.

Another issue that came out strongly was effective monitoring of students' activities and ensuring that there is order in the class. Teachers observed that as they sit down to plan any class activities, their first concern is always to eliminate or avoid civil disorder and sorting out any misunderstandings about what is to be done. They noted that things to do with giving out instructional materials, handing in finished work and going out of the classroom require careful thinking and preparation.

They also pointed out that, they always make due consideration for time allocated for each activity in a given lesson. They noted that while teaching, they always come up with the main points that they would wish the student to grasp and recall. They give them ample time for consolidation and then support them with a reasonable number of points or sums for ease and clarity. All this has to be budgeted for.

Others hinted on the issue of sacrificing one's own time to help students with learning difficulties. Special work is prepared for all those students attending remedial classes especially after the normal classroom routines. They stressed that such students need to be given time to improve for students differ year to year other than teaching the entire large class as a whole.

Another section of teachers opted for multiple-choice questions in their undertakings to bring about effective teaching and learning in large classes. They reasoned that multiple-choice questions are amenable to speedy marking and are well suited for large classes. Students were seen exchanging their scripts in a random way and marking each other. Teachers maintained that this arrangement enabled them to provide a feedback to students in time on how well or badly they have done. It has also helped them know the level of success or failure of the class on the topics covered by the tests or examinations.

In the same direction, teachers contended that heads of departments normally make deadlines for marking students' exams / tests and for submitting reports. However they

were quick to say that sufficient time is always granted for these exercises to be perfectly done. Those who fail to hit the deadlines are held accountable and those who hit the deadline are given incentives.

Teachers also emphasized the issue of regularly going through a problem solution. They noted that they occasionally assign tasks to students and give them between 25 seconds and 4 minutes to come up with solutions. What makes them use this approach, is that, faced with this problem of large classes, it helps them capture the attention of their students. Almost every student will yearn to try out a problem.

Others revealed that for them they set research, practical and investigative questions lasting a week or more. This exposes students to different levels of challenging questions that they always have to work through at a pace dictated by how well they understand the tasks set. They pointed out that this arrangement enabled them cover reasonable amount of work that they prepared. Still, this approach clearly brings out Vygotsky's theory of letting learners interact with others, make own research, internalize knowledge and also get first-hand personal experiences as they make investigations on their own, basing on tasks assigned.

In a number of schools in Kampala district, many students were admitted by the authorities but never gave priority to such issues like constructing more classrooms , providing adequate scholastic materials and recruiting more teachers to cater for these ever increasing numbers. However, there are some schools that put their best foot

forward and ventured into coming up with strategies to counter this problem. So this study tried to examine strategies teachers use to cope with large classes so as to promote effective teaching and learning.

Rising from the above, it is evident that teachers have come up with different teaching strategies aimed at countering problems associated with large classes as they labour to bring about effective teaching and learning. What is lacking is the will of all stake holders especially MOES to support teachers' initiatives.

Research Question Three: Learners' perceptions of the teaching strategies utilized by their teachers in large classes

Regarding this research question, the study found out that if effective teaching and learning is to be realized, it was important to get students' views on strategies utilized by their teachers as they laboured to handle large classes.

One of the issues that were handled was adequacy of classroom space and instructional materials and above all, students' views on how teachers try to address the challenge in case they are inadequate. Results obtained were summarized in Table 12.

Table 12: Students' Opinions Regarding Classroom Space and Student Numbers

	Frequency	Percent
Very adequate	140	35.0
Adequate	26	6.5
Fairly adequate	86	21.5
Not adequate	148	37.0
Total	400	100.0

Findings from majority of the students 148(37%) revealed that classroom space was inadequate, and could not enable them learn well. At the same time, those who indicated that classroom space was very adequate, 140 (35.0%) was also quite a reasonable number. So, much as some individuals have it that classroom space is not enough, a reasonable number of students holds it that it is enough and this has not deterred them from learning effectively. They do appreciate measures put in place by their teachers to make them fit in classes and also teaching them effectively.

Students who were not comfortable with teachers' initiatives to fit them in rooms had their side of the story. Many pointed out that they were so squeezed up in the rooms to the effect that they could not freely reach out for their belongings. They observed that it is worse when it comes to going out for break and lunch. Students fight for the limited space between the desks as they find their way out.

Students were also asked to give their views on the issue of sharing instructional materials and findings are presented in Table 13.

Table 13: Students' Views on Sharing Instructional Materials

	Frequency	Percent
No response	8	2.0
Yes	292	73.0
No	100	25.0
Total	400	100.0

Source: Students' Questionnaire.

Sharing of the inadequate instructional materials has been widely accepted in many schools 292 (73%), as noted by the students (See Table 13). Sharing of textbooks, for example, is one of the most frequently used coping mechanisms in large classes 124(87.32%), as indicated by the teachers and many find it to be a better coping strategy because not all schools can afford to provide instructional materials to each and every student.

However, students pointed out that sharing is associated with numerous problems emanating from large classes. Some students are too slow, others read aloud and this alone affects both the pace at which students read and concentration of the class. The teachers may fail to effectively carry on the teaching because he/she has to share the few available textbooks with hundreds of students in a class. Consequently, teaching and learning become difficult because the teacher cannot wholly ensure that each and every body in the class has followed the working and explanations properly as given in the text books.

Textbooks are a good supplement to the teacher's teaching and where they are not adequately provided, effective teaching can hardly be attained. Students, especially those in higher classes would like to carry out independent reading and research as means towards better understanding of the class session. Much as many schools may not have the capacity to provide enough textbooks and other learning gadgets, the inability still affects learning because not all students will access the few textbooks available even if sharing is encouraged. Such problems arise especially in USE schools

where schools cannot afford buying more textbooks because of operating on very poor budgets. The government policy provides that no student or parent should meet the costs of education because education is free and universal. Still, this tends to affect learning.

Be it in schools with enough facilities due to the high revenue generated from student enrolments, still things seem to be a little tight. The sharing of textbooks is still the order of the day in economically better off schools just as it is in economically poor schools. Not all schools, however wealthy and affluent they are, can afford to provide all the needed instructional materials. Some students and teachers also contemplated that in many private secondary schools, many proprietors especially those that are not professional teachers, are after amassing wealth and are mindless about quality assurance in schools. This partly accounts for why instructional materials are inadequate making it inevitable to share the few available.

Experience has shown that it is quite difficult to handle challenging subjects like Mathematics and English especially in large classes. Students were therefore asked to give their opinions regarding how they feel when learning those subjects. The results are presented in Table 14.

Table 14: Students' Feelings when Learning Math/English

	Frequency	Percent
No response	6	1.5
It is fun	180	45.0
It is boring	214	53.5
Total	400	100.0

It was discovered that most of the students hinted that learning of Mathematics and English was boring 214 (53.5%) (see Table 14). Through observation, some students in given schools who were seated at the back of the class would extremely engage in talking and would not concentrate at all the moment they failed to understand what was being taught. No wonder, one student commented that Mathematics is his worst subject. This is what he revealed:

“I hate the subject just like I hate the teacher handling it .He is so arrogant to the extent that when you ask him a question or for a detailed explanation, he only bores you with stories to do with the two degrees he has and the wealth he has accumulated.”

The fact that some classes lack enough instructional materials also exacerbates the problem because students tend to think that what is being taught is strange to them. This is partly why teaching challenging subjects like Mathematics and English may turn out to be a problem in large classes. The numbers overwhelm the capacity of the teacher to provide each and every student with learning aids like reference books, mathematical instruments and mathematical tables so as to improve the teaching

process. However, this does not mean to say that all students hate these subjects. A reasonable number of students, 180 (45.0%), held that it was fun for them to learn the two subjects. In other words, they enjoyed every other moment while learning any of these subjects.

One student stated that;

“She is my favourite teacher of English. She is simple and articulate, that is why we can’t dodge any of her lessons. She ensures that she listens to all students’ views and eventually gives a personal judgment in a calm and jolly way”

Providing a chance to each and every student to ask questions and also make contributions during the lesson can support the proper management of teaching and learning in large classes. So, students were asked to give views on whether teachers give them chance to ask questions. Responses are presented in Table 15.

Table 15: Student's Views on whether Teachers Give them Chance to Ask Questions

	Frequency	Percent
Yes	208	52.0
No	192	48.0
Total	400	100.0

Findings from the student respondents in Table 15 indicate that almost majority of teachers are trying to supplement their teaching with student centered learning. From what was gathered, many students, 208(52.0%), agreed that teachers give students

chance to ask questions and contribute during the flow of the lesson. This enables most students to do self-discovery and revision. This strategy is good for large classes where effective learning may seem impossible. Interestingly, encouraging students to ask questions is one sure way of encouraging hard work. Interviews from teachers supported this view. One teacher observed that;

“One of the ways in which we encourage students to study effectively is to engage them in independent study. Through self-study, students learn more than being spoon-fed. They carry out critical research, which enables them to understand better what the teacher teaches.”

This is exactly what Vygotsky advocates for. Students need to be encouraged to come up with their own ideas, internalize them and once this is facilitated, students retain the acquired knowledge.

Asked why some students perform poorly in class, students said that many of such students do not want to contribute anything in class. All they do is to engage in talks and even if teachers give them chance to answer questions, let alone giving their views , they will never respond positively. However, it should be noted that a reasonable number of students, 192 (48.0%), pointed out that teachers do not want to give chance to students to ask questions which is why some students may perform poorly in tests and examinations.

One student reported;

“Even if you put up your hand, that teacher will never give you a chance to air out your views. He doesn't want to be challenged for he believes he is the

custodian of knowledge. He only gives chance to a selected few leaving our concerns unattended to.”

Students were also asked to give their views on the marking and returning of class assignments. Results obtained are presented in Table 16.

Table 16: Marking and Returning Class Assignments

	Frequency	Percent
No	177	44.25
Yes	223	55.75
Total	400	100.0

From Table 16, students indicated that in large classes, teachers try by all means to give exercises and mark them as an effort to cope with learning in such environments. This is reflected by 223 (55.75%) students’ responses. It was also noted that students from schools that usually excel in national examinations are the ones who mostly said that however large the class might be, teachers mark and return their exercises for every student to follow up his/her progress. Therefore, coping with large numbers requires both regularized marking of students’ assignments and returning them for revision.

The researcher had also to ask students to give views on the best learning strategy. Finding the best learning strategy for students is among the most significant approaches for ensuring effective teaching and learning in large classes. Teachers can hardly

ensure that students have grasped what is learnt unless they expose these students to the best learning scenarios. One of the head teachers in response to the best learning strategy for students stated that;

“The teaching-learning environment is a comprehensive exercise that requires varied experiences that aid the students to learn effectively. Different students would prefer to learn in different ways. Some learn individually as a self-discovery method while others learn in groups or under the guidance of the teacher.”

The above observation of the headteacher implies the need for teachers to create time for learners to learn on their own basing on the learning methods of their preference. Students were also asked to give their opinions on the best learning strategy and findings are presented in Table 17.

Table 17: Students’ Opinions on the Best Learning Strategy

Items	Most important	Important	Fairly important	Moderately important	Less important	Least important
Personal work	40 (10%)	163 (40.75%)*	36 (9%)	22 (5.5%)	19 (4.75%)	16(4%)
Working with friends	115(28.75%)*	75(18.75%)	48(12%)*	31(7.75%)	21 (5.25%)	17(4.25%)
Teacher lecturing	51(12.75%)	84(21%)*	54(13.5%)	16(4%)	28(7%)	77(19.25%)*
Research on something	52(13%)	81(20.25%)*	47(11.75%)	40(10%)	53(13.25%)	33(8.25%)

* An asterisk indicates the most important ratings of best learning strategy

Evaluating students' opinions on various learning strategies according to Table 17, some students prefer personal work as the best learning strategy. Findings from most students indicate that working alone was highly ranked to be important in the learning process, 163(40.75%), because it generates individual discovery and creativity and also working with friends was ranked to be the most important learning strategy by 115 (28.75%) students. Personal learning opens to self-discovery, which is why some students rank it among important strategies for teaching and learning in large classes. However, working with friends is also considered as the most important strategy for effective learning, which opens up students' capacities to excel in studies more effectively because it encourages sharing of opinions and discussions. One director of studies contemplated similarly that, "group learning encourages dialogue and discussions in learning which is good for students with varying learning abilities".

It is therefore evident that students had varying views relating to teaching strategies employed by their teachers. It is good to note that a good percentage appreciated measures and approaches put in place by teachers to bring about effective teaching and learning in large classes. The few who had issues on these measures can easily come on board if all stakeholders happen to come out strongly and address them.

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter summarizes the findings, shows the conclusions drawn and recommendations made for policy practice.

Discussions

The discussion has been done in relation to research questions of the study. It focuses on the most salient findings and inferences made based on reviewed literature and observations in school.

Teachers' conceptions of effective teaching and learning in large classes

The first objective was to find out what teachers conceived as effective teaching in large classes.

Findings revealed that majority of both teachers and head teachers could ably describe effective teaching and learning in large classes. However, it should be noted that teachers had varying conceptions of effective teaching and learning.

Some teachers were of the view that effective teaching is about being thorough in one's ability to deliver subject content to enable students understand the newly acquired

materials. These teachers had a belief that the moment you get your subject matter at the finger tips as derived from the approved course books, and you pass it on to students freely by employing various teaching methods and techniques, and students happen to grasp the material, then effective teaching and learning has taken place.

This view is similar to that of Naccino Brown (1990) who argues that effective teaching is an attempt to help someone acquire or change his/her skills, attitude and knowledge through tactful passing on of knowledge to students.

Many teachers also reasoned and believed that to be effective in teaching is to work towards the attainment of the intended lesson objectives. This section of teachers based on the reasoning that during their training, they were taught to generate measurable objectives, which are at the same time attainable. So, in their teaching they strive to ensure that the set objectives are realized and the moment they are realized, then effective teaching and learning has taken place. This is in agreement with Nkuhe(1995) and Kajubi(1989) who contend that lesson objectives reflect the major goals of the teaching and learning process. The objectives are a further reflection of whether teachers guided well the students and that the teachers' expectations are emphasized.

Another group attributed effective teaching to the teachers' ability to keep students on task by focusing their attention on material being disseminated and responding positively to the set tasks. For these ones, their reasoning was that they set tasks for

students based on lesson objectives. They ensure that they give different examples related to the material being passed on such that when students are given tasks, they keep to them without making any noise or complaints – a manifestation that effective teaching and learning has taken place. This is in contention with Lambert et al (1998) who reasons that learning is a natural process guided by learners' goals, arising from the activity itself and interactions with others stemming from the activity in which learners try to make sense of their experience by constructing knowledge, meaning and understanding.

Some teachers had a notion that effective teaching and learning is about being thorough in one's teaching and ensuring that students get right the sums, questions or problems related to the newly acquired materials. Their thinking is supported by Kebirumbi (2000) who notes that in order for a teacher to be effective in bringing about intended learning outcomes, should have command of the theoretical knowledge about learning, human behaviour, display attitudes that foster learning and human relationships, have command of knowledge of the subject matter to be taught and be in control of technical teaching skills that facilitate students' effective learning.

However, this group of teachers noted that effective teaching is all about keeping learners on task calling upon all of them to focus their attention on the material being disseminated and above all, reacting positively to the set tasks. This was just contrary to what Sesan (1992) put across when he asserted that whereas it is easy to have the whole class silently reading or writing an exercise, it is next to impossible to have the whole class speaking. Even when they are listening, assessing their individual listening ability can be very difficult.

As such, there is a strong testimony that many teachers and head teachers could ably describe effective teaching and learning, despite differences in conception. This meant that they might as well conceptualize effective teaching and learning in large classes in terms of elaborating the associated problems.

Research Questions Two: Teaching strategies adopted by teachers in handling large classes to promote effective teaching and learning

The second objective dealt with teachers' coping strategies to promote effective teaching and learning in large classes.

It was observed that many secondary schools had large class sizes ranging from 50 to 110 students. These classes were overcrowded, congested and some teachers found them difficult to handle.

When it came to the issue of inadequate instructional materials, especially text books, teachers pointed out that they always encouraged students to share the ones available such that at least every student gets chance to follow the lesson. It was noted that sharing of textbooks was one of the most frequently used coping mechanisms in large classes as evidenced by 124 (87.32%) respondents.

In some schools, teachers acquired instructional materials through PTA contribution and it stood at 76 (53.52%). In effect, parents turned out to be the biggest facilitators.

Another fraction of teachers observed that on their part they advise new parents to buy some text books as requirement for entry into school. Though acquiring instructional materials like text books is associated with many problems, they are a good supplement to the success of the lesson and where they are not adequately provided, effective teaching and learning can hardly be attained. This is consistent with what Oliveira (1993) held when he said that increased students enrolment demands adequate instructional materials and that lack of the same renders teaching and learning ineffective. It is the wish of every student to make independent reading and research as a means towards better understanding of the class session. So, providing more text books and other scholastic materials is a significant strategy for it reduces the fighting for the few text books and also makes individualized learning and self discovery managed better.

Other teachers revealed that they set research, practical and investigative questions lasting a week. This exposes students to different levels of challenging questions that they have to work through at a pace dictated by how well they understand the tasks set. This strategy makes learning enjoyable on the part of the learners and also make teachers able to cover substantial amount of work schemed for a specific time. This is in line with Izizinga (2003) who held that students should be given a chance to dig up their own materials and make their own findings for by this, they develop better arguments and perceptions.

In the same direction, teachers of Mathematics and English encouraged students to set their own targets as individuals. It can be at the beginning of the term, week or lesson depending on the teachers' objectives. They noted that, at times they go through a problem–solution where they occasionally assign tasks to students and give them between 30 seconds and 4 minutes to come up with solutions.

Buzindadde(2000) greatly emphasized this when he noted that students' needs are diverse. This implies that attending to them effectively involves a teacher satisfying each and every one of them as they present their needs to him/her. At the same time teachers also revealed that they use group work while handling large classes. Indeed, they reported that in case they were to use group work, they always considered the number of groups, their size and which student should join which group. Clear explanations are made about teachers' expectations like each member making presentations to the class, a thing that makes them more attentive.

They also asserted that they set practical and investigative questions lasting a week or more. With this approach, students are exposed to different levels of challenging questions that they always have to work through at a pace dictated by how well they understand the tasks set. This arrangement has helped them cover reasonable amount of work prepared. These interventions ably answered Izizinga's (2003) concern that she raised when she noted that because teachers are not innovative enough, they continue to use the very methods by which they were taught, a practice that encourages dependence on a single type of material or text and makes no allowance for the eventual and probable change to another series of text books and methods.

Additionally, teachers pointed out that at the beginning of the year, they assign students seats according to their height. This arrangement greatly reduced time wastage as students moved around the class trying to secure seats. In the same direction, teachers carry out effective monitoring of students' activities and ensuring that there is order in the class. They ensure that they eliminate or avoid students' indiscipline and any misunderstanding about what is to be done. This is in line with what Johnson et-al (1998) articulated when he noted that small classes are more effective not simply because they are smaller but because they often offer a conducive environment for learning to take place. He observed that simply reducing the number of students in a class does not alone improve the quality of instruction, neither does the increase in class size lead to poor education.

Teachers also opted for multiple choice questions in their undertakings to foster effective teaching and learning. Their reason is that multiple choice questions are amenable to speedy marking and are well suited for large classes because at times students mark themselves. This development decisively handles Adrian's (1993) concern that in large classes the ability of the teacher to give regular assignments is constrained. It is burdensome to administer examinations and tests, hence making the evaluation of students to either be completely ignored or poorly handled. In the wake of large classes, such strategies help teachers capture students' attention, with almost every student yearning to try out a problem.

Research Question Three: Learners' perceptions of the teaching strategies utilized by their teachers in large classes

In many schools, it was discovered that sizeable number of students, 214 (53.5%) concurred that the learning of Mathematics and English was boring. This was even evidenced during the class visits to some schools that many students who were seated at the back of the classes would extremely engage in talking and would not concentrate at all. It is a common precedent that when students fail to grasp new material/concepts, they switch off for they take it that what is being taught is strange.

However when it came to making contributions during the flow of the lesson, many students, 208 (52.0%), agreed that their teachers gave them chance to ask questions and also contribute freely during the class session. They noted that when teachers introduce new concepts, they apply different techniques to ensure that maximum understanding is realized. They give chance to everyone to ask questions incase of misconceptions. They also allow students to contribute freely or give in their views relating to the material being disseminated. It so happens that allowing students make contributions during the lesson greatly supports proper management of teaching and learning in large classes.

It was also noted that many students, 223 (55.75%), observed that in their large classes, teachers endeavoured to give them exercises / tests and also marked them regularly as a way of promoting effective teaching and learning. This is just contrary to what Adrian (1993) observed when he said that because of the increased students'

numbers, the teachers' ability to give regular assignments is constrained. That it is burdensome to administer exams and tests and as such, the evaluation of students tends to be either completely ignored or poorly handled. It is not surprising to note that students from schools that normally excel in national exams were mostly the ones who observed that their teachers marked and returned their exercises/assignments for every student to follow up his/her progress. Therefore, coping with large classes requires both regularized marking of students' assignments and returning them for revision.

It was also revealed that a good percentage of students, 163 (40.75%), preferred personal work as the best learning strategy because it generates individual discovery and creativity. Students observed that when teachers allow them to engage in personal work, they do it at their own pace, consult different books with varying material, some of which is very explicit. They mentioned that when they engage in personal work, they own it and they easily recall it when it is time for tests and examinations. It was also noted that some students, 84 (21%), regarded the lecture method an important strategy because many students expect clear explanation of the subject matter from the teacher. They hold that the teacher is the fountain of knowledge and understanding. It was observed that many secondary school students could hardly conduct personal learning without the assistance of their teachers. It was found out that in schools where instructional materials like text books are inadequate, students heavily rely on the teacher's input and that is why they have to embrace the lecture method. They trust their teachers so much to the effect that whatever content the teachers lecture them about is taken to be the gospel truth.

A reasonable number of students contended that sharing instructional materials as advocated for by their teachers is associated with numerous problems. They noted that some students are too slow, yet others read aloud which affect both the pace at which students read and the concentration of the class.

They were also not comfortable with teachers' initiatives to fit them in the rooms available. They pointed out that they were so squeezed up in classrooms to the effect that they could not freely reach out for their belongings. They observed that it is worse when it comes to going out for break and lunch. Students fight for the limited space between the desks as they find their way out. Their concerns were also supported by Mager (1968) who argued that the success of a particular subject is based on a learning motivation theory which emphasizes that when a student is learning, he /she should do so in presence of factors that will promote positive interests rather than negative interests.

A good percentage of students held that it was fun for them to learn Mathematics and English. In other words, they enjoyed every other moment while learning any of these subjects. This opinion was supported by Leonard (1986) when he asserted that the teachers' job is to get students engaged in activities that will result in the desired learning. It produces the urge for learning in students especially those in large classes and makes them enjoy the lessons.

They also pointed out that some of their colleagues perform poorly because they do not want to contribute during the flow of the lessons. They also pointed out that teachers give chance to these students to air out their views, but they do not respond positively. On the contrary, some students observed that some teachers do not give them chance

to ask questions let alone giving their views, which is why some students may perform poorly in tests and examinations. These observations were supported by Rathmell (1940) who argued that the positive attitude that students develop, for instance towards Mathematics, are the most important outcomes of a classroom that focuses on thinking and reasoning. It is believed that once students are encouraged to think out problems by themselves rather than telling them what to do, meaningful teaching can be promoted.

CONCLUSIONS

The study made the following conclusions:

1. There is strong evidence that majority of teachers and head teachers can ably describe effective teaching and learning in large classes. This meant that they might as well conceptualize effective teaching and learning in large classes in terms of elaborating the associated problems.
2. Teachers handling large classes have come up with coping strategies such as making new students buy one text book in a core subject; assigning students seats at the beginning of the year, grouping students, applying multiple choice questions to enable them promote effective teaching and learning.
3. Students have varying perceptions which include appreciating measures by teachers to fit them in classes, appreciating the arrangement of making them share text books and some pointing out that learning Mathematics and English is boring due to teachers' approach in relation to teaching strategies utilized by their teachers.

Recommendations

The study made the following recommendations:

1. School administrators should ensure that all teachers are in position to describe effective teaching and learning as a way of conceptualizing effective teaching and learning in large classes.
2. All stakeholders in schools with large classes should come out strongly and provide adequate instructional materials, classrooms, motivate teachers and fully support them in their undertakings as they labour to effectively handle large classes.
3. In schools with large classes, administrators should ensure that teachers mostly use student-centred learning methods like project work, group work, etc, give regular assignments/test/examinations and above all ensure that marking is done in time and students receive their scripts for revision.

Topics for Further Study

1. There is need to conduct a qualitative research on the correlation between the availability of instructional materials and academic achievements in large classes.
2. The impact of teacher–centered learning on teaching in large classes
3. The impact of student –centered learning on teaching in large classes
4. Factors affecting teaching and learning in large classes

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APPENDIX I

QUESTIONNAIRE FOR TEACHERS

Self introduction

The researcher is a student of Makerere University undertaking research for a Masters programme. Any form of assistance rendered to him will be highly commended.

Responses generated will be treated confidentially and only meant for academic purposes.

Supply the appropriate responses in the blank space and put a tick (✓) in the corresponding box:

Section A: Background information:

A1. Academic/professional qualification.

- (a) Diploma holder
- (b) Degree holder
- (c) Masters degree holder
- (d) PHD holder
- (e) Untrained

A2 Age of the teacher

- (a) 20 – 25
- (b) 26 – 31
- (c) 32 – 36
- (d) 37 – 42

A3 Sex of the teacher

(a) Male (b) Female

A4 Teaching experience

(a) 1 – 5 years

(b) 6 – 10 years

(c) 11 – 15 years

A5 Subject taught

(a) English (b) Mathematics

Section B: Information on learning strategies adopted by teachers Vis-à-vis increased students' numbers and learning:

B1 How would you rate adequacy of instructional materials in your school.

	Abundant	Adequate	Inadequate	Not available
Text books				
Teachers' guides				
Novels				
Mathematical instruments				
Manila papers (charts)				
Radio				
Television				

B2 How did the school acquire the named instructional materials?

- (a) School purchased
- (b) PTA contribution
- (c) Donated
- (d) Individual students bought
- (e) Ministry of Education & Sports distributed

In case any of the above is inadequate or not available, what measure have you put in place such that teaching and learning is not compromised.

B3 In your view how would you rate the adequacy of course books?

- (a) Abundant
- (b) Adequate
- (c) Inadequate

B4 What would you regard your class size to be?

Small Large

B5 How adequate is classroom space going by the size of your class?

- (a) Very adequate
- (b) Adequate
- (c) Fairly adequate
- (d) Not adequate

If not adequate, what measures do you put in place to ensure that your teaching is effective?

B6 Do you have any considerations about the activities that students should be involved in going by the size of your class?

Yes No

If yes, what are they and how do you go about them?

If no, why did you opt out?

B7 Have you realized that some of your students hate Maths/English?

Yes No

If yes, how have you helped these students change this attitude?

If no, how have you been able to eliminate this in your class?

B8 Are you aware that some teachers handling Maths/English do it without any interest?

Yes No

If yes, what could be the underlying factors?

B9 In your view, how would you rate your school in terms of academic performance?

Excellent Good Quite good Poor

Why do you say so and what could be the causes?

B10 Do you normally give assignments/Examinations to your class?

Yes No

If yes, how do you ensure that work is marked in time and students get a feed back?

B11 What other teaching strategies have you adopted to facilitate effective teaching?

APPENDIX II

STUDENTS' QUESTIONNAIRE

Instructions:

1. Please do tick the response that you find appropriate.

Section A: Demographic Information on Students

A1 Learners' sex Male Female

A2 Learner's Age

A3 Learner's ability

Upper ability Middle Ability Lower ability

Section B: Class information:

B1 How adequate is classroom space compared to the number of students?

Very adequate

Adequate

Fairly adequate

Not adequate

If very adequate/adequate, how has this helped you to learn better?

If not adequate, how has this stopped you from learning well?

B2 Do you normally share instructional materials?

Yes No

If yes, how has this stopped you from learning better?

If no, how has this helped you to learn better?

B3 How do you feel when learning Mathematics/English?

(i) It is fun (ii) It is boring

If it is boring, tell me exactly what you find boring let alone the hard part.

If it is fun, tell me what makes it to be fun let alone the subject being simple.

B4 How often are you made to listen to teachers lecturing?

(a) Always

(b) Sometimes

(c) Rarely

(d) Never

B5 Are there some students in your class who perform poorly in Maths/English?

Yes No

If yes, what reason do they have for this?

If no, what makes all of you perform well?

B6 Is your class work/Assignments/Examinations marked and returned in time by teachers?

Yes No

How has this affected your learning?

B7 When do you learn best? (Rank the options according to order of importance 1, 2, 3, 4, ... 1

is the best, 4 is the least important)

(a) When I work alone

(b) When I work with friends in a group

(c) When the teacher lectures

(d) When am told to research on something

B8 What method of teaching do you like most?

(a) Lecture

(b) Self discovery

(c) Discussion

(d) Revision

(c) Others

If you had a chance of changing one thing about the way you're taught, what would it be?

APPENDIX III

HEAD TEACHERS' INTERVIEW GUIDE

1. What is your teaching experience (No. of years in the teaching profession)
2. How many years have you been the Head teacher of this school?
3. What is the Head teacher's sex?
4. What is your highest academic qualification?
5. What type of school are you heading?
6. Who owns the school?
7. What is the total number of students in your school?
8. How many teachers do you have in the school?
9. What is the average class size in your O-level?
10. Do you regard that as a big or small class?
11. How does the present average class size compare to the one you had five years ago?
(probe: has there been an increase or decrease?)
12. What factors account for the increased or decreased student population (depending on the response in item 11 above)
13. What would you regard as effective classroom teaching (probe for descriptions of effective teaching especially in the context of large classes?)
14. What would you regard as an ineffective classroom teaching?

15. How do you ensure as the Head teacher, that effective teaching takes place, even if the classes may be big?
16. How would you rate adequacy of instructional materials like textbooks and equipment in your school?
17. How did the school acquire the named instructional materials?
18. In case any of the above is inadequate or not available, what measures have you put in place such that effective teaching is not compromised?
19. What challenges does your school face in the wake of increased enrolment?
20. What institutional plans have been made/ implemented in your school to ensure that effective teaching and learning take place irrespective of the class size?

APPENDIX IV

TEACHERS' INTERVIEW GUIDE

- How did you become a teacher?
- Do you like teaching?
- What is the population of your class? (in terms of boys and girls)
- What subject(s) do you teach?
- Why did you opt for Maths/English?
- What do you like best about teaching your subject?
- Your class looks big, how do you handle it?
- There is a lot of marking in your subject, how do you go about this?
- How often are you provided with instructional facilities?
- What do you have to comment about space in the Library?
- Why do students fail Maths/English? / Why do students pass Maths/English?
- Have you attended any refresher courses in the last four years? If yes, how did this refresher course assist you in facing the large class challenges?
- Have you noticed any students who hate the way you handle your subject? If yes, why do they hate it and how have you helped them change their attitude?

APPENDIX V

OBSERVATION GUIDE (Recording what transpires in the class)

Aspects to Capture:

- What is the size of the class? (How many boys? How many girls?)
- Does the teacher look prepared for the lesson?
- What time is allocated for the subject on the timetable?
- What is the actual duration of the lesson?
- In case the duration exceeds the allocated time, what reasons are given?
- How spacious are the classrooms in relation to students' numbers?
- Does the teacher move round the class so as to promote effective teaching?
- How does the teacher encourage students to contribute in class?
- Do students freely air out their learning difficulties?
- How does the teacher respond to students with learning difficulties?
- What learning aids does the teacher utilize?
- Are the learning aids adequate? If not, how does the teacher go about it?
- What learning activities does the teacher adopt?
- Does the teacher know students by names?
- Does the teacher give any assignments to students?
- How does the teacher go about marking these assignments?
- What fraction of the class time does the teacher devote to getting students involved in the lesson?
- Does the flow of the lesson reflect any teaching approaches? If yes, what are they?
- Are the students comfortable with these teaching approaches? If so, what is the evidence?