TEACHING STRATEGIES UTILIZED IN SELECTED INCLUSIVE PRIMARY SCHOOLS IN NAIROBI EAST DISTRICT KENYA

A Thesis Presented to the College of Higher Degrees and Research Kampala International University Kampala, Uganda

In partial Fulfillment of the Requirements for the Degree Master of Education in Special Needs Education

By:

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DECLARATION A

"This thesis is the researcher's original work and has not been presented for a Degree or any other academic award in any University or Institution of Learning".

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Name and Signature of Candidate

201912012 Date

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DECLARATION B

"I confirm that the work reported in this thesis was carried out by the candidate under my supervision".

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Name and Signature of Supervisor

Dr. WILBERFORCE TINDYEBWA

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Date

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DEDICATION

The researcher dedicates this research study to her Husband Henry Onkundi and the children, Geoffrey, Kelvin, Oscar, Bilha and Ruth. They have been proud of my determination during my research work.

ACKNOWLEDGEMENT

The researcher owes his deepest gratitude to the Almighty God for blessing her with good health and courage throughout the study. She is thankful to Dr. Novembrieta R. Sumil DVC, CHDR for her guidance on how to conduct the research and guidance in selecting research title. The researcher would further like to extend her deepest gratitude to the Supervisor Dr. Wilberforce Tindyebwa who guided her through her thesis work. His comments and constructive suggestions gave the researcher a lot of lessons. The researcher acknowledges the panelists for their constructive guidance during the Viva voce. Further the researcher extends thanks to the friends and relatives for their assistance during the time of conducting the research.

Finally, researcher thanks the school administrators and the teachers who participated in the study.

ACRONYMS AND ABBREVIATIONS

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KIE- Kenya institute of Education

- K.C.P.E -Kenya certificate of primary Education
- SMASSE- strengthening of mathematics science subjects

F.PE- Free primary Education

SPSS- Statistical package for social science

ABSTRACT

This research was carried out in order to determine teaching strategies utilized in selected inclusive primary school in Nairobi East District, Kenya. The study sought to determine the demographic characteristics of the respondents such as gender, professional qualifications, number of years of teaching experience in the primary school and number of subjects taught in one academic year. It also sought to establish the various teaching strategies utilized by the re respondents, the extent of the teaching strategies utilized by the respondents and the significant difference between male and female teachers in terms of extent of teaching strategies utilized. One hundred and sixty one respondents were involved in the study, the sampling was done using the universals sampling from six primary schools in the district. Data was collected using self administered questionnaire. Data was collected using methods such as interviewing, questionnaires, reliability and validity, procedure for data collection and lastly data analysis and presentation results were coded in SPPS for better analysis. The study findings established that majority of the respondents were males at 59.4% of which the majority had certificate as the highest academic qualification comprising 49.7% while majority had teaching experience of between 3-4 years at 42.9%. The study also established that there are various teaching strategies utilized in inclusive primary schools which included the following; active learning ranked as the most commonly used strategy, followed by lecture method. Other teaching methods used include: case method, demonstration method, discussion method, collaborating method. Learning by teaching explanation method, cooperative method, interactive technology and distance learning in that order. The study also established that there was a relationship between gender and methods of teaching as well as teaching experience and methods of teaching however both were insignificant. The study recommended that a number of subjects taught in one academic year should range between 3 to 4.

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CHAPTER ONE

THE PROBLEM AND ITS SCOPE

Back ground of the Study

Education is a basic human right and has been recognized as such since the 1948 adoption of the Universal Declaration on Human Rights. Since then, numerous human rights treaties have reaffirmed this right and have supported entitlement to free primary education. Most schools in Kenya are now interested on adopting teaching strategies that can enable learners to perform effectively in all a subjects. Schools in Kenya are experiencing poor performance of learners as a result of poor teaching strategies that do not allow effective learning of learners (Adey, P.S, & Shayer, M.1993)

Differentiation can only occur when teachers clearly understand individual readiness (strengths and needs), interests, and learning preferences. Getting to know students as individual learners is not one of the first steps to differentiation, but a continual pitter-patter throughout the process. Educators of gifted and talented students have long advocated for the need to "know where students are at" in their learning via strategies like pre-assessment, multi-method identification procedures, curriculum compacting, diagnostic-prescriptive teaching, and interest inventories- the list goes on to differentiate means to individualize and that can only occur when we as teachers have a clear and complete picture of each student, including those of exceptional ability Arias, & Walker (2004) stat that pre-assessment are the "trigger that activates the differentiated curriculum."

The best way subjects can be taught has been a vigorous debate for decades. A great number of different studies on teaching strategy have been conducted and documented. The ultimate goal of all these studies is to improve on teaching, learning for all students and to narrow the gap of achievement. This is because improved outcomes for students in a subject will consequently improve their career opportunities. Geary and Hamson (2009) expressed that the special emphasis on achievement in a subject reflects the fact that competencies in these areas have important economic

consequences for individuals for society in general. For the individual, strong science related competencies improve the likelihood of employment, result in higher wages once employed and improve the on-the –job productivity (Education Insight, 2008).

The elements of an effective lesson have been implemented in classrooms for many years. Schools, teachers, curriculums and variety of instructional programs in Kenya are all being elevated by their effectiveness. The specific measures for an effective teaching include; daily review of previous knowledge, presentation of new concepts(s), guided practices, constructive feedback, independent practice and students engaged in learning. Schools and administrators have been fervently promoting these measures and evaluating all the subject teachers based on the implementation of these elements in their daily lessons (KIE, 2009). All these elements are useful and practical but a lot has to be done to improve students' comprehension in subjects particularly in Kenya where many jobs require some level of technical sophistication and where students have been performing poorly in subjects like sciences in Kenya Certificate of primary Education (KCPE), (Education Insight, 2008).

The quality of instruction in schools is the single most important factor affecting the quality of learning that takes place, the achievement of standards, the delivery of curriculum, and the assessment of student progress. The subject teachers are the fulcrum that determines whether success or failure is registered in subject examinations. The teacher should employ a strategy that supports and improves teaching and learning of subjects. This is due to the fact that a subject curriculum in Kenya have been designed with a clearer map of learning competencies developed with continuity but increasing degrees of complexity(Momanyi,2009).

Many subject teachers in Kenya over rely on text books and are more concerned to cover the text than to uncover the ideas. Their focus is on the text rather than on the learner with the result that textbooks become the curriculum. This has greatly affected comprehension and achievement in subjects such as mathematics due to the tendency of textbooks to emphasize given rules and procedures hence defeating the possibilities of discovery, independent thought, intellectual curiosity and also treat the a subject sketchily. The students with shallow interest are hence provided with insufficient knowledge of a subject and stimulate little enthusiasm to pursue it further. The topics in textbooks are presented without integration of mathematical knowledge, resulting in acquisition of isolated facts for memorization by rote learning. The message they convey is that every piece of a subject learnt is to be put to immediate use in the solution of a large number of exercises and problems similar to those expected in the final examination (SMASSE 2006).

There is need for necessary action to develop positive attitudes among students and to improve their comprehension in a subject. In Japan, Minato and Kamadha (1996) have called for an urgent need to create awareness among teachers about the relationship between achievements and attitudes. They argue that increased awareness could enable teachers to improve students' learning. This is because students' attitudes towards a subject and their achievement in a subject are reciprocal. Several studies have been conducted elsewhere on attitudes towards a subjects and achievement. However, much has not been done in developing countries on the impact of teaching models on the comprehension of students in a subject in inclusive primary schools.

Statement of the problem

The existing issues in the teaching strategies in Kenya's primary schools are as follows:

- The continuous ever use of text books by many subject teachers which have made most students to consider a subject lessons as barren and boring. The subject taught is considered abstract and learning is seen in terms of memorizing facts, procedures and formula ready for reproduction during examination time. Teaching method is basically chalk and talk (Education insight, 2009).
- 2. The present status in Kenya where a teacher dominates the classroom teaching, asks questions and seeks for correct responses is not suitable for meaningful

learning since it encourages passive learning rather than active learning (KIE, 2009).

3. According to the Minister for Education in 2009, there was a mediocre performance in mathematics and sciences in KCPE due to negative attitudes towards a subject expressed by students and teachers (SMASSE, 2009).

Purpose of the Study:

- 1. To test the hypothesis of no significant difference between male and female teachers, in terms of the extent of teaching strategies utilized by the respondents.
- 2. To validate the Benjamin Bloom Taxonomy (1994) theory on cognitive behavior related to knowing or understanding.
- 3. To bridge the gaps indentified in the literature.
- 4. To generate the new data and add to the existing body of knowledge.

Research objectives

General: The study determined teaching strategies utilized in selected inclusive primary school, Nairobi East District, Kenya.

Specific: Further, this study sought to;

- 1. Determine the demographic characteristics of respondents as to, gender, age professional qualifications, number of years teaching experience in the primary school and number of subjects taught in one academic year.
- 2. Identify the various teaching strategies utilized by the re respondents.
- 3. Determine the extent of the teaching strategies utilized by the respondents.
- 4. Establish if there is a significant difference between male and female teachers in terms of extent of teaching strategies utilized.

- 5. Establish if there is a significant relationship between extent of teaching strategies utilized and experience of the teacher
- 6. To establish if there is significant relationship between extent of the strategies used and the number of a subjects taught in a years

Research Questions

The following were be the research questions

- 1. What are the demographic characteristics of the respondents as to; gender, age, professional qualification, and number of years teaching experience in the primary school and number of a subject taught in one academic year?
- 2. What are the various teaching strategies utilized by the respondents?
- 3. To what extent are the teaching strategies utilized by the respondents?
- 4. Is there a significant difference between the male and female teachers in terms of extent of teaching strategies utilized?
- 5. Is there is a significant relationship between extent of teaching strategies utilized and experience of the teacher?
- 6. Is there a significant relationship between extent of the strategies used and the number of a subjects taught in a year?

Hypothesis

Ho1 There is no significant difference between the male and female teachers in terms of the extent of teaching strategies utilized.

Ho2 There is no significant relationship between extent of teaching strategies utilized and number of teaching experience.

Ho3 There is no significant relationship between extent of teaching strategies utilized and number of a subjects taught in one academic year.

Scope of the study

Geographical scope

The study was conducted in six selected government inclusive primary schools; Tom Mboya primary school, Ronald Ngara primary school, Ushirika primary school, Wangu primary school, Dandora primary school and James Gichuru primary school.

Content scope

The study focused on teaching strategies utilized in selected inclusive primary schools teachers' demographic characteristic as to; gender, age, teaching experience and the number of subjects taught in a year.

Theoretical scope

This study was based on Benjamin Bloom's Taxonomy (1994). Which states that cognitive behavior is related to knowing or understanding along a dimension of complexity.

Time scope

The study was carried out from August 2011 to August 2012.

Significance of the study

The study may guide the primary school teachers by establishing the best teaching methods they can embrace

The study may guide the policy makers in establishing policies that can be implemented for effective teaching strategies in school.

It may also help the Government to understand the problems encountered by schools due to poor teaching strategies.

The study added onto already existing knowledge on teaching strategies and academic performance of learners.

The study may be used by different academician and librarians.

The finding of this study may be used by future researchers.

Operational Definitions of Key Terms

For the purpose of this study, the following terms are operationally defined:

Demographic characteristics of the respondents are attributes looked for in this study in terms of gender, age, academic qualification, teaching experience and number of subjects taught in one year.

Teaching strategies refers to the types of principles and methods used for instructions.

Inclusive this is a learning setting where all children learn together regardless of their disabilities.

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CHAPTER TWO

REVIEW OF RELATED LITERATURE

Concepts, ideas and opinions of Authors/Experts

Teaching Strategies

Obanya (1980) suggests that in order to enhance teaching and learning a teacher must make use of effective teaching strategies and methods. Every teacher is faced with the responsibility of selecting and designing suitable learning experiences to provide optimal learning opportunities for the students. The wide range of students' abilities complicates the task. Some learners have high knowledge and interest in a subject while others have low knowledge and interest. Their ages also vary for instance, with the introduction of Free Primary Education (FPE) in Kenya in 2002, students of varying ages were enrolled in primary schools which in turn led to variation of ages of students in primary schools from 14 to 20 years and this affects their comprehension in subjects. The teacher is faced with the challenge of varying teaching approaches and methodologies to cater for differences in ages, abilities and knowledge of learners. Classrooms are often composed of students from different backgrounds, with different levels of motivation and are also a wide ability range. This poses challenges to the teachers and calls for a variety of methods and approaches of teaching, the use of variety of approaches to teaching and incorporates the use of variety of resources. The use of models in the teaching of subjects is therefore critical since they enable the students to develop their intellectual and imaginative powers, inquiry, analytical and creative mind of approach to situations. Teaching models also improve their understanding and judgment, problem-solving skills and ability to communicate. The use of teaching models also enables the learners to see the relationships within what they already know and makes them enjoy doing appropriate subject activities. The models helps the teacher to deepen their knowledge of a subject, and the student by reducing poor quality of student-teacher interaction in many classes (SMASSE, 2004), and this is relevant in this study because it matches with academic standards in the country (Kenya).

Nicholls (1993) asserted that the teacher should plan his/her lesson such that consideration is made on the learner's prior knowledge and practical experiences on the topic. To make an impact in the teaching and learning of subjects, change must take place in the classroom. Education has to do with the development of knowledge, intelligence and behavior. The teaching techniques that a teacher should adopt must meet the demands of the learner. Therefore, the learners' past experience and abilities is essential because the teacher would use it to build new concepts. He should be able through discussions in a classroom to remove any misconceptions among learners. This is because some students in a class need more time to develop and mature intellectually. The teacher needs to bring about changes in the classroom and use a variety of teaching methods that will certainly transform the comprehension of learners in subjects. Benjamin Bloom's idea of taxonomies of objectives in the cognitive and affective domain pioneered the idea that all students will make better progress if they attain mastery of the intended outcomes of each stage of learning. He further stated that most students can attain a higher level of learning capability if instruction is approached sensitively and systematically. To make an impact in the teaching and learning of subjects, a change must take place in the classroom. The environment under which this a subject is taught ought to be both teacher and student friendly.

According to Wilber (2000), the greater the overlap between the teachers' fields of experience and students' field of experience, the better the communication. It is advisable therefore to explore the students' prerequisite knowledge based on the concepts he intends to teach. This implies that the teacher should take into account what the learners know when planning for subject lessons. They should build on any relevant knowledge and interest of the learners while addressing on any misconceptions. There is need for teachers of subjects to check on pre-requisite knowledge based on the concepts he intends to teach. This implies that the teacher should take into account what the learners know when planning for a subject lesson; this is relevant in this study because most teachers do prepare lesson plans.

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They should build on any relevant knowledge and interest of the learners while addressing on any misconceptions. There is need for teachers of a subject to check rather than presuppose that the learners have the necessary level of knowledge, understanding and skills needed for the intended outcome of the lesson and for effective communication to occur during a subject lesson.

It is important for teachers of subjects to realize that young children develop subject skills at different rates (Fuentes, 1998). Some children develop skills quite well than others do. The teacher should consider lesson objectives and abilities of his learners when choosing a teaching model to be used to make students understand a particular concept.

Effective teaching is intricate. It goes further than thorough planning, choice of approaches and methods and preparedness of teaching and learning materials. Teaching effectiveness is highly dependent on the teachers' factors and learner factors, learner factors include learner's knowledge about the subject and his or her interest. This means that the teacher should scrutinize the selected material to be used in classroom teaching to find out if it helps bring out the concept. The teachers should involve students in discussions and get their feedback through questions and answers (SMASSE, 2003)

Owuor (1995) contented that poor performance is a result of teachers who are not committed to work. Textbooks occupy an important place in the teaching and learning process in schools. They are looked at as a repositioning of the knowledge that is imported to the learners and also as a medium of presentation and ordering of the subjects for purposes of teaching. However, many teachers have little time for the welfare of students. Such teachers rely too much on the textbooks in the teaching of a subject. They do not also select such books carefully or use them with a great skill.

Text books are used in the teaching and learning, as a source of giving assignments, and also as a primary source of instruction. However, where a subject

teacher over-emphasizes on the use of textbooks in a classroom denies the learner an opportunity to think, organize data and to arrive independently at conclusions. This discourages in-depth learning and enhances rote learning because textbooks are so highly structured. In order to enhance the level of comprehension of students in a subject, textbooks should be combined with real things or resources which would discourage memorization of concepts hence improve performance of learners in the subject. Therefore, mean scores of learners who are taught using models alongside textbooks tend to be higher than those of students who are taught by non committed teachers who heavily depend on textbooks for teaching and learning of a subject.

Students with high levels of anxiety tend to have lower levels of a subject performance and achievement. It has been noted that a subject anxieties have a negative relationship with a subject performance and achievement. Students who perceive the subject as hard are generally anxious about a subject and consequently low comprehension and performance.

In order to reduce the high level of anxiety in a subject and change the perception that a subject is hard, the teacher should avoid taking learners through theories ad concepts which are abstract by dominating the class during teaching and learning. He or she should however make the lesson student centered by taking the learners through activities in order for them to conceptualize the abstract theories and concept in a subject which enhances their comprehension in a subjects and consequently high achievement. However, with the over emphasis of syllabus coverage in schools in Kenya, teaching and the learning in many schools is teacher-centered. This could be the reason why most students have high anxiety in subjects as they perceive the subjects as hard (Hambree, 1990)

Meece (2003) affirmed that lack of motivation in subjects continues to be a problem in many countries of the world. The teaching approach which the teacher adopts in the teaching of a subject in class sometimes discourages or dis-orientates a student that is why differences occur in mean scores of students in subject examinations. Where a teacher embraces the use of models and other teaching and learning resources alongside textbooks, comprehension of students in a subject is enhanced leading to better performance. Therefore, mean and scores of students in an experimental class, where models are used to elevate comprehension of students are higher than the mean scores of students in a control class where models are not used.

Take(1997) found an improvement in all mean scores in all demographic groups after reviewing quantitative research on changes in a subject achievement of various groups with the use of a subject models according to race, class, gender, ethnicity and language proficiency. This implies that comprehension of students in a subject improves as learners are given opportunity to actualize the subject concepts being taught. This also shows that where models are not used in the teaching of a subject, learners would detach the subject from what happens in everyday life leading to low comprehension and consequently low achievement. The lack of proficiency in the academic language of a subject is one of the reasons that students who, appear not to be fluent in English still have difficulty achieving competency in a subjects. To enhance student comprehension in a subject, teachers should acknowledge the importance of teaching them using models (Irujo 2007)

In Conway's concept in (2007), he believed that students had low performance in his geometry test because they did not understand the problem statement. Teaching models must be used by all teachers of subjects so as to enable students to comprehend the concept taught in subjects. This demystifies a subject leading to an improvement in mean scores in subject examinations.

Gichuhi (1996) suggests that attitude and subjects are not learned separately but simultaneously through complex interaction. He further says that students with a positive attitude in class are likely to perform much better than those with negative attitude hence students' difference in performance in a subjects have largely been attributed to negative attitude either towards a subject, the teacher and the school. Some students believe that a subject is hard and this is an attitudinal problem which the teacher should assist them change by making a subject more interesting and real to the learners and hence improve their comprehension and achievement in a subject.

If a teacher encourages the learners with a negative attitude towards a subject to practice and participate in the teaching and learning of the subject through the use of teaching and learning resources. The models make the subject appear real and enhance comprehension of students in subjects. This is because a learner is given an opportunity to observe, describe, and express himself hence inculcating positive attitude towards the subject. Johnson (1996) contended that the achievement differences in favor of boys exist in subjects. This implies that an attitudinal problem exists among female students and unless the subject teacher assists them to change their attitude towards a subjects, like mathematics female students would continue performing dismally due to low comprehension. The teacher should ensure that the approach adopted for teaching a subject ensure that all students, whether male or female spend more of their classroom time, on active learning. The teacher should also have good presentation skills, confidence, creativity and sense of humor. This would be done by use of models.

Differences in attitude related to gender was reported by Hart in 1989. Attitudes towards a subjects are crucial factors in affecting participation and comprehension in a subject. Students who portray negative attitude have low perception hence they are slow in comprehending subjects. Such students do not participate actively in the teaching and learning of subjects. Many female students have negative attitude towards mathematics subject because they believe that a subject is for male students.

A subject teachers also enhance the development of negative attitude towards mathematics among female students by openly expressing that mathematics is a hard a subject. This affects the comprehension of female students in mathematics hence low achievement.

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The Institutions of learning across the world are responding to political, economic, social and technological pressures to be more responsive to students' needs and more concerned about how well students are prepared to assume future societal roles in doing this, the following learning strategies are employed;

Lecture method, for many years, has been the most widely used instructional strategy in college classrooms. Nearly 80% of all U.S. college classrooms in the late 1970s reported using some form of the lecture method to teach students (Tomlinson, 2000). Although the usefulness of other teaching strategies is being widely examined today, the lecture still remains an important way to communicate information,

Resnick (1987), used in conjunction with active learning teaching strategies, the traditional lecture can be an effective way to achieve instructional goals. The advantages of the lecture approach are that it provides a way to communicate a large amount of information to many listeners maximizes instructor control and is non-threatening to students. The disadvantages are that lecturing minimizes feedback from students, assumes an unrealistic level of student understanding and comprehension, and often disengages students from the learning process causing information to be quickly forgotten.

The following recommendations can help make the lecture approach more effective (Redfield, et al 1981):

- 1. Fit the lecture to the audience.
- 2. Focus your topic remember you cannot cover everything in one lecture.
- 3. Prepare an outline that includes 5-9 major points you want to cover in one lecture.
- 4. Organize your points for clarity.
- 5. Select appropriate examples or illustrations.

- 6. Present more than one side of an issue and be sensitive to other perspectives.
- 7. Repeat points when necessary.
- 8. Be aware of your audience notice their feedback.

Case Method; providing an opportunity for students to apply what they learn in the classroom to real-life experiences has proven to be an effective way of both disseminating and integrating knowledge. The case method is an instructional strategy that engages students in active discussion about issues and problems inherent in practical application. It can highlight fundamental dilemmas or critical issues and provide a format for role playing ambiguous or controversial scenarios Underbakke, et al (1993).

Van Voorhis, (2001), Course content cases can come from a variety of sources. Many schools have transformed current events or problems reported through print or broadcast media into critical learning experiences that illuminate the complexity of finding solutions to critical social problems. The case study approach works well in cooperative learning or role playing environments to stimulate critical thinking and awareness of multiple perspectives.

Discussion, there are a variety of ways to stimulate discussion. For example, some teachers begin a lesson with a whole group discussion to refresh students' memories about the assigned reading(s). Other teachers find it helpful to have student's list critical points or emerging issues, or generate a set of questions stemming from the assigned reading(s). These strategies can also be used to help focus large and small group discussions (Wenglinsky, 2000).

Walberg, H. et al (1985), obviously, a successful class discussion involves planning on the part of the teacher and preparation on the part of the students. Teachers should communicate this commitment to the students on the first day of class by clearly articulating course expectations. Just as the teachers carefully plans the learning experience, the students must comprehend the assigned reading and show up for class on time, ready to learn.

Active Learning Louden, W., et al (2005), define active learning as learning environments that allow "students to talk and listen, read, write, and reflect as they approach course content through problem-solving exercises, informal small groups, simulations, case studies, role playing, and other activities -- all of which require students to apply what they are learning". Many studies show that learning is enhanced when students become actively involved in the learning process. Instructional strategies that engage students in the learning process stimulate critical thinking and a greater awareness of other perspectives. Although there are times when lecturing is the most appropriate method for disseminating information, current thinking in college teaching and learning suggests that the use of a variety of instructional strategies can positively enhance student learning. Obviously, teaching strategies should be carefully matched to the teaching objectives of a particular lesson.

Assessing or grading students' contributions in active learning environments is somewhat problematic. It is extremely important that the course syllabus explicitly outlines the evaluation criteria for each assignment whether individual or group. Students need and want to know what is expected of them (Weiss, I., et al 2004).

Co-operative Learning is a systematic pedagogical strategy that encourages small groups of students to work together for the achievement of a common goal. The term 'Collaborative Learning' is often used as a synonym for cooperative learning when, in fact, it is a separate strategy that encompasses a broader range of group interactions such as developing learning communities, stimulating student discussions, and encouraging electronic exchanges (Wenglinsky, H. 2002) Both approaches stress the importance of teachers and student involvement in the learning process.

When integrating cooperative or collaborative learning strategies into a course, careful planning and preparation are essential. Understanding how to form groups,

ensure positive interdependence, maintain individual accountability, resolve group conflict, develop appropriate assignments and grading criteria, and manage active learning environments are critical to the achievement of a successful co-operative learning experience. Before you begin, you may want to consult several helpful resources. In addition, the Program in Support of Teaching and Learning can provide teachers with supplementary information and helpful techniques for using co-operative learning or collaborative learning in primary classrooms (Masters, G.N. 2004,)

Integrating Technology, today, educators realize that computer literacy is an important part of a student's education. Integrating technology into a course curriculum when appropriate is proving to be valuable for enhancing and extending the learning experience for teachers and students. Many teachers have found electronic mail to be a useful way to promote student/student or teachers/student communication between class meetings. Others use list serves or on-line notes to extend topic discussions and explore critical issues with students and colleagues, or discipline- specific software to increase student understanding of difficult concepts (Embretson, S.E., et al 1999).

According to Whicker et al (1997), currently, our students come to us with varying degrees of computer literacy. Teachers who use technology regularly often find it necessary to provide some basic skill level of instruction during the first week of class.

Distance Learning, is not a new concept. We have all experienced learning outside of a structured classroom setting through television, correspondence courses, etc. Distance learning or distance education as a teaching pedagogy, however, is an important topic of discussion in schools today. Distance learning is defined as 'any form of teaching and learning in which the teacher and learner are not in the same place at the same time' (Wolf, S et al 2000, October).

Obviously, information technology has broadened our concept of the learning environment. It has made it possible for learning experiences to be extended beyond the confines of the traditional classroom. Distance learning technologies take many forms such as computer simulations, interactive collaboration/discussion, and the creation of virtual learning environments connecting regions or nations. Components of distance learning such as email, listserves, and interactive software have also been useful additions to the educational setting (Yu, F. 2000).

These strategies are most successful when they are implemented in a system that encourages collaboration among teachers and ctudents, and in which each is a part of a well-planned whole system. In some of the most successful schools, teachers themselves have become in-house experts in specific practices which they share with their colleagues. It is important to recognize that while these strategies are useful, little will be accomplished in implementing them unless there is ongoing documentation of their results. There must also be efficient methods of feeding that information back into the system so that there will be continuing progress in teaching and learning. It is also certain that these strategies are most effective when they are applied in positive, supportive environments where there is recognition of the emotional, social and physical needs of students and where individual strengths are recognized, nurtured, and developed Masters, G.N., et al (1996a).

Explanation method; this form is similar to lecturing. Lecturing is teaching by giving a discourse on a specific subject that is open to the public, usually given in the classroom. This can also be associated with modeling. Modeling is used as a visual aid to learning. Students can visualize an object or problem, then use reasoning and hypothesizing to determine an answer Wright, et al (2000).

In your lecture you have the opportunity to tackle two types of learning. Not only can explaining (lecture) help the auditory learner through the speech of the teacher, but if the teacher is to include visuals in the form of overheads or slide shows, his/her lecture can have duality. Although a student might only profit substantially from one form of teaching, all students profit some from the different types of learning Meiers, et al (2002, December). Demonstration; these are done to provide an opportunity to learn new exploration and visual learning tasks from a different perspective. A teacher may use experimentation to demonstrate ideas in a science class. A demonstration may be used in the circumstance of proving conclusively a fact, as by reasoning or showing evidence Masters, et al (1997).

Collaborating; having students work in groups is another way a teacher can direct a lesson. Collaborating allows students to talk with each other and listen to all points of view in the discussion. It helps students think in a less personally biased way. When this lesson plan is carried out, the teacher may be trying to assess the lesson by looking at the student's ability to work as a team, leadership skills, or presentation abilities. It is one of the direct instructional methods Meiers, M. (1999b, July and November).

A different kind of group work is the discussion. After some preparation and with clearly defined roles as well as interesting topics, discussions may well take up most of the lesson, with the teacher only giving short feedback at the end or even in the following lesson. Discussions can take a variety of forms, e.g. fishbowl discussions.

Collaborating (kinesthetic) is great in that it allows students to actively participate in the learning process. These students who learn best this way by being able to relate to the lesson in that they are physically taking part of in some way. Group projects and discussions are a great way to welcome this type of learning.

Learning by teaching; (German:LdL) is a widespread method in Germany, developed by Jean-Pol Martin. The students take the teacher's role and teach their peers. This method is very effective when done correctly. Having students teach sections of the class as a group or as individuals is a great way to get the students to really study out the topic and understand it so as to teach it to their peers. By having them participate in the teaching process it also builds self-confidence, self-efficacy, and strengthens students speaking and communication skills. Students will not only learn

their given topic, but they will gain experience that could be very valuable for life (Louden, W., et al 2005).

Theoretical Perspective

This study was based on Benjamin Bloom's Taxonomy (1994). According to Benjamin Bloom, some form of cognitive behavior, that is, behavior related to knowing or understanding can be arranged along a dimension of complexity. The level of thinking involves factual knowledge and the highest level involves making evaluations. Higher order thinking skill is the mental capacity.

Bloom's Taxonomy reflected the following: level 1 is knowledge where the student is required to be able to recall or recognize information. He must rely on memory or senses to acquire knowledge. Level II is comprehension and understanding for the student demonstrates the ability to arrange and organize information mentally. Level III refers to application skills that enables students to mentally select and apply (use) learned information to solve a problem. level IV focuses on analysis that requires students to be able to use cognitive process such as to be able to identify causes, reasons or motives, to analyze information and to find evidence to support specific opinion while level V refers to synthesis where students are required to be able to use original and creative thinking and solve problems for which there is no single right solution. In relation to the topic of study, all students will make better progress and perform better in a subject if they attain mastery of all stages of learning.

Most students can attain a high level of learning capability if instruction is approached by the teacher systematically and sensitively. With the current high enrolment rate in inclusive primary schools in Kenya, students no longer get help from teachers when they have learning difficulties and they are not given sufficient time to achieve /master. Since syllabus coverage is over emphasized, classroom experience, particularly in low – performing schools with limited resources is a continually reinforced feeling of failure hence assessment is more likely to encourage negative bravo towards subjects. Most teachers over emphasize on the use of text books than teaching models leading to low comprehension in a subject.

Related Studies

Baker, Simon and kameenui and Christen Murphy (1995) identified several causes of comprehensive failure in subjects. For instance, the reader does not have enough information about the topic to interpret the text. They also found out that the reader could not be having enough clues in the message to suggest which clues apply to the task at hand.

Hodrosky in 2009 conducted a research on the importance of teaching reading comprehension in subjects and the best way to teach reading comprehension strategies in a subject. In his research, he found that a subject did not only involve natural thoughts but language proficiency as well (Fuentes, 1998). A subject requires higher language abilities to comprehend abstract language.

Basile (1995) reported that while studies show that girls and boys start kindergarten on an equal footing, by standard six, girls are generally in a lower academic position than their male counterparts, particularly in areas of science subject.

Alkhateeb (2001) found no significant overall differences between male and female after conducting a 10 year study that explored gender differences in subject achievement of students in the last grade of primary school. This shows that students' attitude scores tend to decline as they move from lower primary to upper primary. This could mean that attitudinal change from positive attitude to negative attitude begins in their upper primary classes when the students are supposed to be seriously preparing to sit for their Kenya Certificate of Primary Examinations (KCPE). Hyde et.al in 1990 found that females outperformed males by a small proportion. This implies that gender differences in a subject do not appear in elementary level.

Summary of gaps identified

Regardless of all these researches that have been carried out the problem of poor performance still exists in inclusive primary schools in Nairobi- East District Kenya

The research by Benjamin Bloom was carried out in another country which is different from Kenya and by extension Nairobi East district which is geographically, culturally, economically and technologically different.

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CHAPTER THREE

Research Design

The study employed ex-posto-facto design because respondents recalled what happened and what is happening. Further this study looked into comparing significant difference between male and female teachers in terms of teaching strategies utilized. Therefore, the study looked at the descriptive comparative techniques. Descriptive studies are non experimental researches that describe the characteristics of a particular individual or of a group.

Target Population

The target population of this study was 161 teaching staff from all the six selected primary schools in Nairobi-East districts Kenya. It was from this population that a sample was selected.

Sample size

The study employed a sample of 161 teachers from the six schools in the district. All teachers in the six schools were included in the sample.

Sampling procedure

The study employed universal sampling technique, where by all the teachers in six schools were included in the study and this was because of their limited number. Both Male and female teachers were included in the sample.

Research Instruments

The research tools that were utilized in this study included the following:

(I) Face sheet to gather data on the respondents' demographic characteristics (gender age, qualifications, number of years teaching experience in the primary school and number of a subjects taught in one academic year.

(2) Research devised questionnaires to identify the various teaching strategies utilized by the respondents.

The response modes and scoring are as follows:

Response Mode	Rating	Interpretation
Strongly agree	4	Agree with no doubt at all
Agree	3	You agree with some doubt
Disagree	2	You disagree with some doubts
Strongly disagree	1	You disagree with no doubt at all

Validity and Reliability of the Instrument

Content validity was ensured by subjecting the researcher devise questionnaire on teaching strategies utilized to judgment to three content experts. Content validity index of 0.8 was realized this made the instrument valid. After applying the formulae as indicated in Appendix V

The test-retest technique was used to determine the reliability of the instruments was administered twice to teachers not included in the study a cronbach Alpha of 0.7 was realized which made the instrument reliable.

Data Gathering Procedures

Before the Administration of the Questionnaires

- 1. An introduction letter was obtained from the College of Higher Degrees and Research for the researcher to solicit approval to conduct the study form respective heads of primary schools.
- 2. When approved, the researcher prepared a list of the qualified respondents from the six schools.
- 3. The respondents were explained about the study and were requested to sign the Informed Consent Form(Appendix3)

- 4. Reproduced more than enough questionnaires for distribution.
- 5. The researcher selected researcher assistants who were first briefed on how to distribute the questionnaires to assist the researcher

During the Administration of the Questionnaires

- 1. The respondents were requested to answer completely and not to leave any part of the questionnaires unanswered.
- 2. The researcher and assistants were emphasizing retrieval of the questionnaires within five days from the day of distribution.
- 3. On retrieval, all returned questionnaires were checked if all were answered.

After Administration of the Questionnaires

The data gathered was collated, encoded into the computer and statically treated using the Statistical package for social sciences (SPSS).

Data Analysis

The frequency and percentage distribution were used to determine the demographic characteristics of the respondents.

The means were applied to test for the extent of teaching strategies utilized. An item analysis was used to illustrate the strengths and weakness based on the indicators in terms of mean and rank.

The following mean range ware used to arrive at the mean of the individual indicators and interpretation.

Mean Range	Response Mode	Interpretation
3.26-4.00	Strongly agree	Very good
2.51-3.25	Agree	Good
1.76-2.50	Disagree	Very poor
1.00-1.75	Strongly disagree	Poor

Table 1: The Various Teaching Strategies Utilized.

Ethical Considerations

To ensure ethics the following were done:

- 1. The respondents were requested to sign the informed consent
- 2. Authors quoted in this study were recognized through citations and referencing
- 3. Findings were Presented in generalized manner

Limitation of the Study

Extraneous variables which were beyond the researcher's control such as respondents' honesty biases and uncontrolled setting of the study, the researcher however tried to avoid this by first explaining to the respondents that the study was for academic purpose only. They were thus requested to be honest and objective in their responses

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

Profile of Respondents						
Category	Frequency	Percent				
Gender						
Male	95	59.4				
Female	66	41				
Total	161	100				
Age						
20-35	47	29.2				
36-49	95	59.0	*******			
50 and above	19	11.8				
Total	161	100				
Qualification						
Certificate	80	49.7				
Diploma	54	33.5	······			
Bachelors	26	16.1				
Masters	1	6				
Total	161	100				
Teaching experience						
Less than/below 1 year	12	7.5				
1-2	17	10.6				
3-4	31	19.3				
5-6	28	17.4				
7 years and above	73	45.3				
Total	161	100				
A subjects taught						
1-2	38	23.6				
3-4	69	42.9				
5 and above a subjects	54	33.5				
Total	161	100				

Table 2

Source; primary data

According to table 2, it was revealed that more than a half of the respondents were male with (59.4%) while female respondents were (41%)

Educational qualification is another vital factor in education. In this study out of 161 respondents majority (80) had certificate as the highest educational qualification with (49.7%). Diploma holders had (33.5%) while bachelor holders were at (16.1%) the least were masters' holders with (6%). In every work place world wide academic qualification is a major factor in recruitment of employees for better performance. The government of Kenya has also started the program of recruiting teachers for both primary and secondary schools basing on the best educational qualifications. Therefore without qualified and well established teachers with high educational qualifications it's quite difficult for them to deliver so as to sustain quality education.

As far as number of years worked in the same institution, majority represented teachers who had worked for seven years and above with (45.3%) and (19.3%) belonging to those who had worked between 3-4 years. Those who had worked between 5-6 years had (17.4%) and teachers who had worked between 1-2 years had a percentage of 10.6. Lastly a few respondents (7.5%) had worked for less than or below one year this showed that; in Kenya the government does not transfer teachers very often. They are allowed to stay in their schools so as to establish good standards of education.

As far as the number of subjects taught in one academic year, it was revealed that those teachers who had taught between 3-4 subjects were the majority with (42.9%) followed by those that taught 5 and above subjects with (33.5%). Lastly were those that taught between 1-2 subjects with a percentage of (23.6%). The study revealed that those teachers that taught 3-4 subjects were not over worked while those who taught 5 and above subjects were overworked. It was also concluded that those that taught between 1-2 subjects were very relaxed and hence did not perform well. Therefore for better performance teachers should not be over worked or over relaxed.

Table 3

Teaching Strategies Utilized in Primary Schools

Category	Mean	Interpretation	Rank
Active learning	3.29	Very good	1
Lecture method	3.17	Good	2
Case method	3.14	Good	3
Demonstration method	3.14	Good	4
Discussion method	2.98	Good	5
Collaborating method	2.90	Good	6
Leaning by teaching	2.89	Good	7
Explanation method	2.80	Good	8
Cooperative learning	2.79	Good	9
Interacting technology	2.52	Good	10
Distance learning	2.41	Poor	11
Total	2.91	Good	

Source; primary data

Results in table 3 indicate that active learning was ranked first with a mean of (3.29). Lecture method followed second with a mean of (3.17). Case method and demonstration method were at per with a mean of (3.14) and they appeared at position 3. Discussion method followed at fifth position with a mean of 2.98. At the sixth position was collaborating method with a mean of (2.90). Learning by teaching was by teaching was fairly ranked at position seven with a mean of (2.89). Explanation method was good and ranked at position 8 with a mean of (2.80).Cooperative learning was

ranked 9 with a mean of 2.79. Interacting technology was also good but widely differed from cooperative learning with a mean of (2.52) was ranked in the tenth position. However distance learning method was revealed as very poor method with a mean of (2.41) of all the methods mentioned above it was ranked at the last position eleven.

In summary the average mean of teaching strategies was generally good and had a mean of (2.91)

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#### Table 4

Significant Differences between Male and Female Teachers in Terms of Extent of Teaching Strategies Utilized

| Categories | Subcategory | t-value | Sig-value | Interpretation | Decision<br>on HO |
|------------|-------------|---------|-----------|----------------|-------------------|
| Teaching   | Male        | 0.909   | 0.365     | Insignificant  | Accepted          |
| strategy   | Female      |         |           | Difference     |                   |

## Source; Primary Data

It was found out from the respondents, that there was as insignificant difference between male and female teachers in terms of the extent of teaching strategies utilized as represented by 0.909 in terms of the t-value and 0.365 in terms of the sig- value respectively. This result led to the acceptance of the stated null hypothesis leading to the conclusion that teaching strategies utilized in primary school are not influenced by the number of teaching experience and number of subjects in one academic year.

## Table 5

# Relationship between Extent of Teaching Strategies and Number of Teaching Experience.

| Categories      | f-value | Sig-value | Interpretation | Decision on |
|-----------------|---------|-----------|----------------|-------------|
|                 |         |           |                | НО          |
| Extent teaching | 0.472   | .756      | Insignificant  | Accepted    |
| strategies Vs   |         |           | relationship   |             |
| Number of       |         |           |                |             |
| Teaching        |         |           |                |             |
| experience      |         |           |                |             |
|                 |         |           |                |             |

## Source: Primary Source

Table 5 reveals that the relationship between extent of teaching strategies and number of teaching experience is insignificant since the sig. value is 0.756, greater than the 0.05 level of significance implying that the teaching strategies have no much effect on number of teaching experience.

## Table 6

# Relationship Between Extent of Teaching Strategies and Number of Subjects Taught in Academic Year One.

| Categories                                                                               | f-value | Sig-value | Interpretation              | Decision on<br>HO |
|------------------------------------------------------------------------------------------|---------|-----------|-----------------------------|-------------------|
| Extent of Teaching<br>strategies Vs number<br>of subjects taught in<br>one academic year | 0.156   | .855      | Insignificant<br>difference | Accepted          |

Source: Primary Data

Table 6 reveals that the relationship between extent of teaching strategies and number of subjects taught in one academic year is insignificant since the sig. is 0.854 greater than 0.05 level of significance implying that extent of teaching strategies has no effect on number of subjects taught in one academic year – F-value is 0.156 which is a sign of insufficiency resulting to acceptance of the stated null hypothesis leading to conclusion that the extent of teaching strategies is not influences by number of subjects taught in one academic year.

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#### **CHAPTER FIVE**

## FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

### Introduction

This chapter mainly deals with summary of key findings, summary conclusion and recommendations related to the teaching strategies utilized in primary schools drawn from the findings and analyses made after conducting the study.

#### Findings

The major purpose of this study was to determine the teaching strategies utilized in primary schools. It was guided by five specific objectives which included (i) determining the profile of primary school teachers in terms of age, gender, professional qualification, number of years teaching experience and number of subjects taught in one academic year. (ii) Identifying the various teaching strategies utilized by the teachers in primary schools. (iii) Determining the extent of the teaching strategies utilized by primary school teachers. (iv) Establishing if there is a significant difference between male and female in terms of extent of the teaching strategies utilized by primary school teachers. (v) Establishing if the extent of the teaching strategies utilized by the teachers are influenced by the number of years teaching experience and number of subjects taught in one academic year.

The studies revealed that majority of respondents were male with (59.4%). It also revealed that more than a half of the respondents had attained certificate as their educational qualifications with (49.7%). Almost a half of the respondents had teaching experience of 7 years and above with (45.3%). Majority of the respondents taught (3-4) subjects in one academic year with (42.9%).

The study indicated that various teaching strategies were utilized in selected inclusive primary schools which included the following; Active learning, lecture method, case method, demonstration method, discussion method, collaborating method, learning by teaching, explanation method, co-operative learning, interacting technology and distance learning. But majority of the respondents used active learning which was ranked at position one with a mean of (3.29) indicating that it was often used by respondents.

The study revealed that there was insignificant difference between male and female teachers in terms of extent of teaching strategies utilized with a sign. Value of (0.365) leading to acceptance of null hypothesis of there is no significance different between male and female teachers in terms of teaching strategies utilized.

There was insignificant relationship between extent of teaching strategies and number of teaching experience with a sig. value of (0.756) making the null hypothesis of there is no significant relationship between extent of teaching strategies and number of teaching experience accepted. Lastly there was insignificant difference between extent of teaching strategies and of number of subjects taught in one academic year with a sig. value of (0.855) making the null hypothesis of there is no significant relationship between extent of subjects taught accepted.

## Conclusions

Based on the purpose of this study, the null hypothesis there is no significant difference between male and female teachers in terms of extent of teaching strategies utilized are not influenced by number of teaching experience and number of subjects taught in one academic year.

The theory of Benjamin Bloom's taxonomy (1994) on cognitive understanding on teaching strategies was found to be valid on the view that learning depends on the understanding / comprehension of information.

#### Recommendations

In view of the findings and discussion of the study, the following recommendations were made. The government should recruit more female teachers to join in the teaching profession since in this study it was revealed that male teachers were much more in numbers compared to female teachers.

The government should sponsor teachers to enroll in higher institutions of learning to attain higher educational qualifications that lead to better delivery to improve performance since majority of the respondents had attained certificate as their highest educational qualifications therefore content delivery become difficult leading to poor performance.

Distance learning method should be integrated with other teaching strategies since it was ranked last and is not child centered hence it leads to poor performance as students are not able to understand the concept instead teachers are advised to vary the teaching strategies they use depending on the ability of the students.

More research should be carried out the same geographical, culturally, economically and technologically to find out why there is still poor performance in those inclusive primary school in Nairobi East District Kenya.

Most schools in Nairobi East District Kenya are performing poorly since most of the teachers have attained certificate as their highest educational level compared to master's level that was attained by only one person. Therefore teachers should go for higher learning for better performance. Active learning method should be often used compared to distance learning that was ranked very poor with a mean of (2.41)

#### Suggestions for further study

The gaps identified in the literature review can be bridged following the recommendations in this study.

To generate new data and add to the existing body of knowledge the researcher recommends on future researchers to research on teaching strategies utilized in inclusive primary schools and its effectiveness in teaching English.

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## **APPENDIX 1A**

## TRANSIMITTAL LETTER



## **APPENDIX 1 B**

#### Transmittal Letter for the Respondents

Dear respondent,

Greetings!

I am a Masters candidate in Special Needs Education Candidate of Kampala International University. Part of the requirements for the award in a dissertation. My study is entitled, **Teaching Strategies Utilized in Selected Inclusive primary schools in Nairobi East District Kenya** 

Within this context, may I request you to participate in this study by answering the questionnaires. Kindly do not leave any option unanswered. Any data you will provide shall be for ecademic purposes only and no information of such kind shall be disclosed to others.

May I retrieve the questionnaire within five days (5)?

Thank you very much in advance.

Yours faithfully,

Ms. Bosire Esther Moraa

## **APPENDIX 11**

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| CLEARANCE | FROM | ETHICS | COMMITTEE |
|-----------|------|--------|-----------|
|           |      |        | COMMENCE  |

| Date                                                  |
|-------------------------------------------------------|
| Candidate's Data                                      |
| Name                                                  |
| Reg.#                                                 |
| Course                                                |
| Title of study                                        |
| Ethical Review Checklist                              |
| The study reviewed considered the following:          |
| Physical Safety of Human A subjects                   |
| Psychological Safety                                  |
| Emotional Security                                    |
| Privacy                                               |
| Written Request for Author of Standardized Instrument |
| Coding of Questionnaires/Anonymity/Confidentiality    |
| Permission to Conduct the Study                       |
| Informed Consent                                      |
| Citations/Authors Recognized                          |
| Results of Ethical Review                             |
|                                                       |

\_\_\_\_\_ Approved

Conditional (to provide the Ethics Committee with corrections)

-

\_\_\_\_\_ Disapproved/ Resubmit Proposal

## Ethics Committee (Name and Signature)

Chairperson

Members

.

**.** .

## APPENDIX III

## **INFORMED CONSENT**

I am giving my consent to be part of the research study Ms. Bosire Esther Moraa that will focus on teaching strategies utilized in selected inclusive primary schools in Nairobi East District Kenya.

I shall be assured of privacy, anonymity and confidentiality and that I will be given the option to refuse participation and right to withdraw my participation anytime.

I have been informed that the research is voluntary and that the results will be given to me if I ask for it.

.

Initials:\_\_\_\_\_

Date:\_\_\_\_\_

## APPENDIX IV A

## **RESEARCH INSTRUMENT**

# DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENT

Please answer by putting a tick for the most appropriate answer

| 1. Gender                  | Male<br>Female |                        |
|----------------------------|----------------|------------------------|
| 2. Qualification under edu | cation discip  | pline (please specify) |
| Diploma                    |                |                        |
| Bachelor's                 |                |                        |
| Masters                    |                |                        |
| 3. Number of years teachir | ng experience  | e:                     |
| Less than / b              | ellow 1 year   |                        |
| 1-2 years                  |                |                        |
| 3-4 years                  |                |                        |
| 5-6 years                  |                |                        |
| 7 years and a              | bove           |                        |
| 4. Number of subjects taug | ht in one ac   | ademic year:           |
| 1-2 a subjects             |                |                        |
| 3-4 a subjects             |                |                        |
| 5 and above a sub          | jects          |                        |

# QUESTIONNAIRE TO DETERMINE TEACHING STRATEGIES UTILIZED IN PRIMARY SCHOOLS

## PART B:

Direction 1: please write your rating (by ticking on the space before option which corresponds to your choice in terms of teaching strategies utilized in your school. Kindly use the scoring sheet bellow:

| Response mode     | Rating | Description                       |
|-------------------|--------|-----------------------------------|
| Strongly agree    | 4      | You agree with no doubt at all    |
| Agree             | 3      | You agree with some doubt         |
| Disagree          | 2      | You disagree with some doubt      |
| Strongly disagree | 1      | You disagree with no doubt at all |

| No. | LEVELS:                          | 1 | 2 | 3 | 4 |
|-----|----------------------------------|---|---|---|---|
|     | In your teaching you always use: |   |   |   |   |
| 1   | Case method                      |   |   |   |   |
| 2   | Lecture method                   |   |   |   |   |
| 3   | Discussion method                |   |   |   |   |
| 4   | Active learning                  |   |   |   |   |
| 5   | Co-operative learning            |   |   |   |   |
| 6   | Interacting technology           |   |   |   |   |
| 7   | Distance learning                |   |   |   |   |
| 8   | Explaining method                |   |   |   |   |
| 9   | Demonstration method             |   |   |   |   |
| 10  | Collaborating method             |   |   |   |   |
| 11  | Learning by teaching             |   |   |   |   |

Relationship between extent of teaching strategies and number of a subjects taught in one academic year

| Response mode     | Rating | Description                       |
|-------------------|--------|-----------------------------------|
| Strongly agree    | 4      | You agree with no doubt at all    |
| Agree             | Э      | You agree with some doubt         |
| Disagree          | 2      | You disagree with some doubt      |
| Strongly disagree | 1      | You disagree with no doubt at all |

| Indicator                                           | 4 | 3 | 2   | 1 |
|-----------------------------------------------------|---|---|-----|---|
|                                                     |   |   |     |   |
| Teachers with more a subjects prepare regularly     |   |   |     |   |
| Teachers with more language a subjects use teaching |   |   | ۰., |   |
| aids regularly during the lessons                   |   |   |     |   |
| Teachers with few number of a subjects deliver the  |   |   |     |   |
| content well                                        |   |   |     |   |
| Teachers with more a subjects attend lessons more   |   |   |     |   |
| regularly                                           |   |   |     |   |
| Teachers with less a subjects mark pupils work      |   |   |     |   |
| regularly                                           |   |   |     |   |
| Teachers with more a subjects give assignments to   |   |   |     |   |
| pupils more regularly                               |   |   |     |   |
|                                                     |   |   |     |   |

Source: primary data

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## APPENDIX V

# Formulae for establishing validity of the instrument

 $CV_1 = CV1_{1 +} CV1_{2 +} CV1_3$ 

Total questionnaires (TQ) =45

Relevant questions =36

CV<sub>1 =</sub>36/45

 $CV_1 = 0.8$ 

## **APPENDIX VI**

# Formulae for Establishing Instrument Reliability

$$\mathbf{r}_{xy} = \frac{N\sum xy - (\sum X)(\sum Y)}{\sqrt{\left[N\sum X^2 - (\sum X^2)\right]\left[N\sum Y^2 - (\sum Y^2)\right]}}$$

----

Where

- N Number of Respondents
- X Scores from the first test
- Y Scores from the second test

## **APPENDIX VII**

## Researcher's curriculum vitae

| PERSONAL PROFILE:    |        |                                 |
|----------------------|--------|---------------------------------|
| NAME                 | :      | Bosire Esther Morraa            |
| NATIONALITY          | :      | Kenvan                          |
| DATE OF BIRTH        | :      | 1969                            |
| MARITAL STATUS       | • ,    | Married                         |
| GENDER               | :      | Female                          |
| ID NO                | :      | 10020961                        |
| RELIGION             | 8      | Christian                       |
| CELL PHONE           | :      | 0722575028                      |
| LANGUAGE PROFICIENCY | a<br>a | English, Kiswahili and Ekegusii |

## **EDUCATIONAL BACKGROUND:**

| YEAR      | INSTITUTION                          | QUALIFICATION           |
|-----------|--------------------------------------|-------------------------|
| 2010-2012 | Kampala International University     | Masters in SNE(Student) |
| 2007-2009 | Kampala International University     | BED/SNE{Arts}           |
| 2003-2007 | Kenya Institute of Special Education | Diploma (SNE)           |
| 1995-1997 | Thogoto Teachers College.            | P1                      |
| 1984-1987 | Kereri girls high School             | Division 3              |
| 1977-1983 | Riokindo Primary school              | KCPE                    |

## **PROFESSIONAL TRAINING**

[ have attended/ participate in the following training and awarded certificate as follows

- Mwanyagetinge Welfare Association Chairmen from 2007- 2009 and also from 2010- 2012 (K.I.U)
- Participated in Kiswahili seminar/ course conducted by Oxford University press Eastern Africa.

## <u>REFEREES</u>

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 Diwapa Medical centre
 P.O Box 313-00516 Dandora Nairobi
 Tel: 072171714498

2. Henry Charles Noah Onkund
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