FACTORS INFLUENCING TEACHER INTERVENTIONS FOR PRIMARY SCHOOL PUPILS WITH SLOW LEARNING ABILITIES IN KASARANI DIVISION, NAIROBI, KENYA

KAMUNGE, JANE WANGECI
E55/10034/2006

A THESIS SUBMITTED IN PARTIAL FULFILMENT FOR THE DEGREE OF MASTER OF EDUCATION (SPECIAL EDUCATION), IN THE SCHOOL OF EDUCATION OF KENYATTA UNIVERSITY

Kamunge, Jane
Factors influencing teacher intervention

SEPTEMBER 2009

KENYATTA UNIVERSITY LIBRARY
Declaration

This thesis is my original work and has not been presented for a degree or any other award in any other university.

KAMUNGE, JANE WANGECI
E55/10034/2006

We confirm that the work reported in this thesis was carried out by the candidate under our supervision.

1) DR. RACHEL W. KAMAU KANG’ETHE
DEPARTMENT OF EARLY CHILDHOOD EDUCATION
KENYATTA UNIVERSITY

2) DR. SIMON M. RUKANGU
DEPARTMENT OF EDUCATIONAL COMMUNICATION AND TECHNOLOGY
KENYATTA UNIVERSITY
Dedication

This work is dedicated to God Almighty for giving me life and energy; to my parents who instilled in me the importance of education and value of hard work.
Acknowledgment

In writing this thesis, I received immense help from a lot of people without whom this enormous task would not have been accomplished.

First and foremost, my heartfelt gratitude goes to my academic supervisors at Kenyatta University, Dr. Rachel W. Kamau Kang’ethe and Dr. Simon M. Rukangu for their intellectual stimulation, continued guidance and encouragement. Their patience and willingness to read my work despite their busy schedules was instrumental in ensuring that I completed this study.

Second, my special thanks go to my colleagues and the entire staff of Special Education at Kenyatta University for their moral support and constant encouragement during the study period. Specifically, much gratitude goes to Dr. Mugo under whose professional guidance I gained excellent knowledge in research methodology.

Third, I owe special thanks to all the head teachers and teachers who participated in this study for their co-operation. Without their help this study would not have been possible.

Finally, my deep appreciation goes to my husband George Mbugua for his unwavering support intellectually, financially and morally; son Dennis, daughters Maureen and Joy for their patience and understanding; Grace for her assistance in the house throughout the study period. Without their moral support I would not have managed. To you all who contributed in one way or another, thank you so much.
Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>i</td>
</tr>
<tr>
<td>Declaration</td>
<td>ii</td>
</tr>
<tr>
<td>Dedication</td>
<td>iii</td>
</tr>
<tr>
<td>Acknowledgment</td>
<td>iv</td>
</tr>
<tr>
<td>Table of contents</td>
<td>v</td>
</tr>
<tr>
<td>List of tables</td>
<td>vi</td>
</tr>
<tr>
<td>List of figures</td>
<td>x</td>
</tr>
<tr>
<td>List of abbreviations and acronyms</td>
<td>xi</td>
</tr>
<tr>
<td>Abstract</td>
<td>xii</td>
</tr>
</tbody>
</table>

CHAPTER ONE: INTRODUCTION .................................................................. 1

1.0 Introduction .............................................................................. 1
1.1 Background to the Study ....................................................... 1
1.2 Statement of the Problem ...................................................... 6
  1.2.1 Purpose of the Study ....................................................... 7
1.3 Objectives of the Study ......................................................... 7
1.4 Research Questions .................................................................... 8
1.5 Significance of the Study ...................................................... 9
  1.5.1 Teachers ........................................................................ 9
  1.5.2 Pupils ........................................................................... 9
  1.5.3 Teachers-Trainees/College Tutors .................................... 9
  1.5.4 Policy Makers ................................................................ 9
1.6 Delimitation and Limitations ................................................ 10
  1.6.1 Delimitation ................................................................... 10
  1.6.2 Limitations .................................................................... 10
1.7 Assumptions of the Study ....................................................... 11
1.8 Conceptual Framework ................................................................ 11
1.9 Operational Definition of Terms ............................................ 14

CHAPTER TWO: LITERATURE REVIEW .................................................. 15

2.0 Introduction .............................................................................. 15
2.1 Retention and Completion Trends in Kenyan Public Primary Schools. 15
2.2 Special Education in Regular schools in Kenya ..................................................17
2.3 The Concept of Slow Learning ......................................................................18
2.4 Characteristics of Pupils with Slow Learning Abilities ..................................20
  2.4.1 Limited Cognitive Capacity .................................................................20
  2.4.2 Poor Memory ......................................................................................21
  2.4.3 Distraction and Lack of Concentration ..................................................21
  2.4.4 Inability to Express Ideas ....................................................................22
2.5 Importance of Teachers in Assisting Pupils with Slow Learning Abilities ....23
2.6 Characteristics of Effective Intervention Strategies .......................................24
2.7 Studies Related to Special Education in Regular schools ..............................25
2.8 Summary ....................................................................................................26

CHAPTER THREE: METHODOLOGY ....................................................................27
3.0 Introduction .................................................................................................27
3.1 Research Design ..........................................................................................27
3.2 Variables ......................................................................................................27
  3.2.1 Dependent Variables ..........................................................................27
  3.2.2 Independent Variables .......................................................................28
3.3 Location of the Study ...................................................................................28
3.4 Target Population ........................................................................................28
3.5 Sampling Techniques and Sample size .........................................................29
  3.5.1 Sampling Techniques ..........................................................................29
  3.5.1.1 School Category ..............................................................................29
  3.5.1.2 Sample schools ...............................................................................29
  3.5.1.3 Teachers ..........................................................................................30
  3.5.1.4 Standard Six Lessons ......................................................................30
  3.5.2 Sample Size ..........................................................................................31
3.6 Research Instruments ....................................................................................31
  3.6.1 Teacher's Questionnaire (TQ) ................................................................32
  3.6.2 Lesson Observation Schedule (LOS) ..................................................32
  3.6.3 Head teachers' Questionnaire (HTQ) ..................................................32
3.7 Pilot Study ....................................................................................................33
  3.7.1 Validity ................................................................................................33
  3.7.2 Reliability ..............................................................................................33
5.1.5 Learning Resources and Teacher Interventions .................................................. 76
5.1.6 Pupil-related Factors and Teacher Interventions ........................................... 77
5.1.7 Other Findings ......................................................................................... 78
5.2 Conclusion ................................................................................................. 79
5.3 Recommendations of the Study ................................................................. 80
5.4 Suggestions for Further Research ............................................................... 84

References ....................................................................................................... 85

APPENDIX A: Teachers’ Questionnaire (TQ) ......................................................... 89
APPENDIX B: Lesson Observation Schedule (LOS) ................................................ 92
APPENDIX C: Head teachers’ Questionnaire (HTQ) ............................................. 93
APPENDIX D: Public Primary Schools in Kasarani Division ............................... 95
List of Tables

TABLE 1.1: Number of Teachers and Pupils Enrolment by Gender in Kasarani Division as at October 2006..........................................................3
TABLE 2.1: Primary School Repetition Rate by Grade in Kenya, 1999..............................15
TABLE 2.2: Primary School Completion Rates, 1993-2003..............................................16
TABLE 3.1: Distribution of Sampled Respondents from Schools in Kasarani Division........31
TABLE 4.1: Distribution of Teachers by Professional Qualification and Gender..................39
TABLE 4.2: Length of Teaching Experience of the Sampled Teachers................................41
TABLE 4.3: Teachers’ Views Concerning Characteristics of Pupils with Slow learning Abilities.................................................................43
TABLE 4.4: Observed Teacher Interventions during the Lessons........................................46
TABLE 4.5: Teachers’ Responses on Intervention Strategies they used to Assist Pupils with Slow Learning Abilities.........................................................48
TABLE 4.6: Head teachers’ Views on Intervention Strategies Used by Teachers..................52
TABLE 4.7: Significant Difference of Intervention Strategies Used by teachers..................53
TABLE 4.8: Teachers’ Responses on the Influence of Number of Pupils in Class...................54
TABLE 4.9: Suggested Suitable Class Size......................................................................54
TABLE 4.10: Types of Seating Arrangements Used by Teachers.........................................57
TABLE 4.11: Observed Classroom Seating Arrangements..................................................58
TABLE 4.12: Adequacy of Aspects Observed During the Lessons......................................59
TABLE 4.13: Influence of Teaching and Learning Resources on Teacher Interventions........61
TABLE 4.14: Teaching and Learning Resources Used in Observed Lessons .......................62
TABLE 4.15: Pupil-related Factors Influencing Teacher Interventions................................66
TABLE 4.16: Teachers’ Responses on Importance of Pre-primary school Education............67
TABLE 4.17: Challenges Faced by Teachers and Suggested Possible Solutions..................69
### List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Relationship between Prevailing Factors, Teacher Interventions and Learning Outcomes of Pupils with Slow Learning Abilities</td>
<td>13</td>
</tr>
<tr>
<td>4.1</td>
<td>Number of Pupils per Class across Sampled Schools</td>
<td>56</td>
</tr>
<tr>
<td>4.2</td>
<td>Head Teachers’ Responses on whether FPE has been Helpful in Assisting Pupils with Slow Learning Abilities</td>
<td>64</td>
</tr>
<tr>
<td>4.3</td>
<td>Teachers’ Responses on the Influence of Pupil-related Factors</td>
<td>65</td>
</tr>
</tbody>
</table>
List of Abbreviations and Acronyms

CDF: Constituency Development Fund
ECD: Early Childhood Development
EFA: Education for All
FPE: Free Primary Education
IEP: Individualized Education Programme
KCPE: Kenya Certificate of Primary Education
KESSP: Kenya Educational Sector Support Program
KIE: Kenya Institute of Education
KISE: Kenya Institute of Special Education
KNEC: Kenya National Examinations Council
MOE: Ministry of Education
MOEST: Ministry of Education, Science and Technology
QAS: Quality Assurance and Standards
SEN: Special Education Needs
SNE: Special Needs Education
TSC: Teachers' Service Commission
UN: United Nations
UNESCO: United Nations Educational, Scientific and Cultural Organization
UNICEF: United Nations International Children's Fund
UPE: Universal Primary Education
Abstract

The purpose of this study was to establish factors influencing teacher interventions while assisting pupils with slow learning abilities in public primary schools. Specifically, the study aimed at determining whether teacher-related factors, learning environment-related factors and pupil-related factors influenced the nature of intervention strategies used by teachers in a bid to enhance learning of these pupils. The study was conducted in Kasarani Division, Nairobi Province, Kenya. The study employed ex-post facto research design and focused on primary school teachers and head teachers. Random sampling technique was used to select eight schools from twenty-five public primary schools of Kasarani Division, Nairobi Province. One stream of class six was randomly selected from each of the sampled schools for a Mathematics and English lessons observation where there was more than one stream; otherwise, the stream was purposively selected where there was a single stream. Data was collected using three main instruments: Teachers’ Questionnaire (TQ), Head Teachers’ Questionnaire (HTQ) and Lesson Observation Schedule (LOS). A total of 128 teachers and 8 head teachers filled in the TQ and HTQ respectively while two class six lessons of Mathematics and English were observed. Data from the field was coded numerically and analyzed both qualitatively and quantitatively. Qualitative analysis involved making inferences from the teachers’ and head teachers’ responses from the open-ended questions and from lesson observation schedules using thematic approach. Quantitative analysis made use of Statistical Package for Social Sciences (SPSS) to give descriptive statistics such as mean, percentages, frequencies and tabulations. One-way Analysis of Variance (ANOVA) was used to determine significant differences of intervention strategies used by teachers. The study revealed that the primary school teachers used some intervention strategies to assist pupils with slow learning abilities in their classes which were not significantly different. However, the teachers’ individual attention to such pupils was lacking during the lessons and mainly used a whole class instructional approach. This contributed to their low academic attainment and hence learned helplessness. In view of this, it was recommended that teachers become sensitized on the importance of paying attention to these pupils in the teaching and learning process. The findings of the study indicated that the teachers were all trained but only very few had Special Needs Education (SNE) background. This probably influenced the effectiveness of intervention strategies used by the teachers to assist pupils with slow learning abilities. Going by this, it was recommended that more teachers be trained or in-serviced in SNE. The study also revealed that there was a tendency of teachers with less number of pupils in their classes and especially those trained in SNE to pay attention to those with learning difficulties as compared to those with large class sizes and more so if they lacked SNE background. Thus, it was recommended that the MOE through TSC employ more teachers to ease the shortage, a suitable class size be determined and adhered to in all schools in a bid to achieve maximum potential for every child.
CHAPTER ONE
INTRODUCTION

1.0 Introduction

This chapter discusses the background to the study, the statement of the problem, the purpose, objectives and significance of the study. It also highlights the assumptions, Delimitations and limitations, conceptual framework of the study as well as defining some terms that were used in the study.

1.1 Background to the Study

Global emphasis on education can be traced back to 1948 when the United Nations (UN) declared education a basic right for all. It is for this reason that Kenya is party to the Salamanca Statement and Framework for Action of 1994 that put emphasis on schools to accommodate all children regardless of their physical, intellectual, social, emotional, linguistics or other conditions, thus committed towards inclusive education. Similarly, recent policy initiatives in Kenya have focused on the attainment of Education for All (EFA) by 2015. This is in line with the government’s commitment to international declarations, protocols and conventions as resolved in world conferences on quality Education for All (EFA) held in Thailand, 1990 & Dakar, 2000. The current emphasis on Education for all is based on the principle that all children should have the opportunity to learn as clearly put in the Dakar Framework for Action, which states that:

In order to attract and retain children from marginalized and excluded groups, education systems must be inclusive, actively seeking out children who are not enrolled, and responding flexibly to the circumstances and needs of all learners (Inclusion International, 2006, Pg 8).
The provision of education especially to children has been given much emphasis. For the child of primary school age, this right is provided for in the Kenyan Children Act (2001), which asserts that appropriate educational services should be provided to all children. In Kenyan laws, this is evident in Sessional Paper No. 10 of 1965, which re-affirmed the government’s commitment towards Universal Primary Education (UPE). Also, the Kenyan government is fully committed to an education system that guarantees the right of every learner to quality and relevant education that contributes and enhances equity, economic growth and expansion of employment opportunities as stipulated in Sessional Paper No.1 of 2005. This entails reaching out to children with special needs by ensuring that appropriate educational interventions are put in place. Such accommodation would require teachers to plan and assist those with special needs. However, the problem that plagues every teacher is how to provide appropriate interventions to pupils with SEN in regular classrooms (Ndurumo, 1993). This may be attributed to factors related to pupils, teachers and the learning environment. Hence, there was need to determine prevailing factors influencing teacher intervention in a bid to enhance learning of such pupils in public primary schools in Kasarani Division, Nairobi Province, Kenya.

In prioritizing of children’s education for instance, the Kenyan government introduced Free Primary Education (FPE) in 2003. This was critical to the attainment of UPE as a key milestone towards the realization of Education for All (EFA) goal according to MOEST. However, influx of children in public primary schools after the introduction of FPE has resulted to high pupil enrolment and hence overstretched facilities, overcrowding in schools especially those in urban slums and large class sizes in densely populated areas (MOEST,
The trend of enrolment in public primary schools in Kasarani Division is clearly shown in table 1.1 below.

Table 1.1: Number of Teachers and Pupils' Enrolment by Gender in Kasarani Division as at October 2006

<table>
<thead>
<tr>
<th>Zone</th>
<th>Number of teachers</th>
<th>Pupil enrolment</th>
<th>Teacher-pupil ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
</tr>
<tr>
<td>Ruaraka</td>
<td>60</td>
<td>264</td>
<td>324</td>
</tr>
<tr>
<td>Kahawa</td>
<td>46</td>
<td>278</td>
<td>324</td>
</tr>
</tbody>
</table>

Source: City Council Nairobi: Education Department (2007)

Table 1.1 shows that on average, the teacher-pupil ratio in public primary schools in Ruaraka Zone is relatively high compared to Kahawa Zone. This has varied implications on the teaching and learning of pupils with slow learning abilities in those schools. According to the Ministry of Education, the standard teacher-learner ratio for SNE classes is approximately 1:6 (MOEST, 2003). The quality of teacher-pupil interaction is likely to vary with the number of pupils in a particular class. This is because the teacher-pupil ratio may be too high to allow individual pupils' attention by the teacher. Reddy (2006), notes that owing to large class sizes teachers often get too overwhelmed to give sufficient time to pupils with special needs. For this reason, many pupils with slow learning abilities may drop out of school not because they are not intelligent but due to the fact that they are failing academically as a result of lack of effective interventions. Yet, with persistence and tutoring, some can get through high school and even graduate from college. It is in this view that the study sought to establish intervention strategies used by teachers in relation to class sizes in public primary schools in Kasarani Division, Nairobi.

Due to Free Primary Education (FPE), enrolment in Early Childhood Development (ECD) centres has declined. Consequently, most ECD centres are no longer operational as parents have withdrawn their support (UNESCO, 2005). This means that a large number of children
entering primary schools do not pass through pre-primary schools. This hampers early identification and intervention of those with slow learning abilities. This is because of the fact that early identification enables the teacher to develop a proper insight into the causative factor of slow learning. Such information may help the teacher to device intervention strategies to prevent the condition before complication is evidenced. It was thus important to determine whether or not, early childhood education influences teacher interventions in a bid to enhance learning of pupils with slow learning abilities.

Despite the overall importance of intervention strategies for pupils with slow learning abilities to enable them reach their optimum level of performance, several factors militate against such pupils from socially disadvantaged backgrounds. This is especially so for those receiving special education services in regular schools (Hegarty, 1993). Eddah Gachukia asserts this by stating that:

> Without special attention to the handicapped, poverty pockets, culturally affected children especially girls, Universal Primary Education (UPE) would be incomplete (East African Standard, 10th March 2003, Pg 5).

Research carried out by UNICEF shows that even with the introduction of Free Primary Education in Kenya, many children especially in Nairobi are still out of school. This may be attributed to factors such as lack of interest by parents of their children’s education. It could also be due to increased number of orphans in and out of school as a result of HIV/AIDS or due to the fact that most children themselves are homeless. It is thus difficult for teachers in such circumstances to plan for intervention strategies to assist those with slow learning abilities. This could probably be due to absenteeism as a result of such factors. This means that despite the increased enrolment, primary education continues to experience many challenges relating to equity, retention and quality of education in relation to all pupils.
irrespective of their circumstances (UNESCO, 2005). Thus this study intended to investigate factors related to pupils' backgrounds that influence teacher interventions in their effort to improve academic attainment of pupils with slow learning abilities.

As a matter of policy, primary school teachers are trained to teach all the subjects offered in the primary school curriculum. However, the content of the whole curriculum is too wide to cover while at the same time acquiring vital knowledge and ability to identify and develop the educational needs of pupils especially those with slow learning abilities. For this reason, one of the Kenyan government's objectives is to see teacher training colleges empower teachers to operate within an all-inclusive education. Also, the government of Kenya realizes that improvement in the quality of education services entails continuous skills upgrading for teachers. But this has not been the case, as many teachers have not been trained to handle children with special needs (MOEST, 2003). The Task Force by MOEST in 2003 recommended in-service of regular schoolteachers in Special Needs Education (SNE) to facilitate inclusion. Thus, measures have been put in place to support the professional growth of teachers, for instance, the training of primary school teachers in special education at Kenya Institute of Special Education (KISE), Kenyatta University (KU) and Maseno University among others. Despite these measures, demand for trained SNE teachers remains high (MOEST, 2003). This suggests that, despite the commitment to achieving education for all in an inclusive setting, few teachers have the knowledge on how to identify and assist pupils with slow learning abilities. This study set out to establish the training level of teachers to support pupils with slow learning abilities in selected public primary schools in Kasarani Division, Nairobi.
Retention and completion rates in public primary schools in Kenya can be aggravated by factors such as social, cultural, historical factors and poverty (Gathara, 2003 and UNESCO 2005). While these factors are important, it could as well be as a result of drop-out and repetition of pupils with slow learning abilities because of learned helplessness due to lack of appropriate intervention strategies. Although teachers assist these pupils, they are likely to employ different intervention strategies such as individual attention, remediation and special methods of teaching among others (Brown, 1976). The effectiveness of these intervention strategies is crucial to their academic attainments. However, the aspect of SEN in relation to pupils with slow learning abilities has not received much emphasis in the context of primary school education. Yet, it is an important factor in determining the overall performance of a school. This was the focus of this study.

1.2 Statement of the Problem

Education for All (EFA) has been an area of concern to all the stakeholders in the field of education worldwide and Kenya in particular. This requires that the learning needs of all pupils be met in an all-inclusive education. However, repetition and dropout of pupils continues to negatively influence completion and retention in Kenyan public primary schools. This is against the international spirit of Education for All (EFA). Studies carried out attribute this to factors such as increasing level of poverty, cultural factors or social related factors among others (Gathara, 2003; Gachukia, 2003; Machila, 2005; and Onyango, 2004). In response to these problems, the Government of Kenya introduced Free Primary Education (FPE) in January 2003 to provide funding to public primary schools and additional grants to support pupils with special needs. In addition, the Government in collaboration with development partners, civil societies and the private sector developed Kenya Educational
Sector Support Program (KESSP) to support the education sector development for the period 2005-2010. Despite these efforts, education of pupils with special needs, more so those with slow learning abilities in public primary schools remain constrained such that few of them complete the primary cycle or graduate within the expected time period (UNESCO, 2005). This means that there are other crucial factors relating to education of these pupils that deter their completion and retention in Public primary schools, which needed to be investigated in the Kenyan context. This study contended that one of such factors could be linked to factors influencing teacher intervention for pupils with slow learning abilities. The possibilities of repetition and dropout of such pupils due to lack of effective interventions by teachers, has not been established through systematic research as a possible cause to low completion and retention rates of such pupils in public primary schools in Kenya.

1.2.1 Purpose of the Study
The purpose of this study was to determine the factors influencing teachers in the way they assist pupils with slow learning abilities in public primary schools.

1.3 Objectives of the Study
Objectives of this study were to:

1. Establish the influence of the teachers’ background information to the intervention strategies they use to assist pupils with slow learning abilities in public primary schools in Kasarani Division.

2. Establish the teacher’s views concerning characteristics of pupils with slow learning abilities in public primary schools in Kasarani Division.
3. Establish the intervention strategies employed by teachers to assist pupils with slow learning abilities in public primary schools in Kasarani Division.

4. Establish the intervention strategies used by teachers to assist pupils with slow learning abilities in relation to the number of pupils in class.

5. Establish the types of teaching-learning resources used by teachers in the teaching and learning process in a bid to assist pupils with slow learning abilities.

6. Determine the types of pupil-related factors that influenced teacher interventions in a bid to enhance their learning.

1.4 Research Questions

The research was guided by the following questions:

1. Does the teachers’ background information influence the nature of intervention strategies they employ?

2. What are the teacher’s views concerning characteristics of pupils with slow learning abilities?

3. Which intervention strategies do teachers employ to assist pupils with slow learning abilities in public primary schools in Kasarani Division?

4. Does the number of pupils in class influence the way the teacher assists pupils with slow learning abilities?

5. Which types of teaching-learning resources are used by teachers to assist pupils with slow learning abilities?

6. What type of pupil-related factors influences teacher interventions in a bid to enhance their learning?
1.5 Significance of the Study

The findings of this study could be significant to the following:

1.5.1 Teachers:

The findings of this study may help them to evaluate their teaching strategies. They may gain insight into the needs of pupils with slow learning abilities. In addition, they may realize the importance of being sensitive to their educational needs and hence identify ways of assisting them so as to enhance their learning.

1.5.2 Pupils:

Pupils on the other hand may realize their abilities in the learning process. The study revealed pupils’ learning characteristics that may enable them realize the importance of teachers’ assistance to enhance their learning.

1.5.3 Teacher-Trainers /College Tutors

They may use the findings of this study while preparing their primary school teachers so that they can modify their training. This may include equipping teacher trainees with required intellectual grounding to enable them identify and make them accomplished instructors of pupils with slow learning abilities.

1.5.4 Policy Makers

The findings of this study are likely to be important to the Teachers’ Service Commission (TSC) and Quality Assurance and Standards (QAS) division in the Ministry of Education (MOE), Kenya National Examination Council (KNEC) as well as the Kenya Institute of Education (KIE). The MOE via TSC may realize the need to train more teachers in Special Needs Education (SNE) as well as employ more teachers to teach in Public primary schools.
The QAS division may use the findings of this study to formulate relevant in-service programmes for teachers. The KNEC may modify their mode of assessment in general and in particular reference to pupils with slow learning abilities. The KIE may be enlightened on the need to revise the primary school curriculum in order to accommodate pupils with slow learning abilities to enable them fit into the nation’s workforce.

1.6 Delimitation and Limitations

1.6.1 Delimitation

The study was restricted to eight selected public primary schools in Kasarani Division, Nairobi. The class teachers were the only teachers involved in the study. The study was restricted to only four aspects that influence teacher interventions: pupil-related factors, teacher-related factors, class size and availability, adequacy, suitability and utilization of teaching-learning resources.

1.6.2 Limitations

The study was only interested in the general intervention strategies employed by teachers. Much attention was not paid to intervention strategies pertaining to specific skill areas such as reading, writing, speaking and mathematics. There are many factors influencing teacher interventions while assisting pupils with slow learning abilities. However, the study was only limited to a few factors due to limited time available. The study was also limited to some selected public primary schools in Kasarani Division, Nairobi Province.
1.7 Assumptions of the Study

The study consisted of the following assumptions:

1. Teachers assisted pupils with slow learning abilities in their classes.
2. There was a relationship between prevailing factors, intervention strategies used by teachers and learning outcomes of pupils with slow learning abilities.
3. Teachers assisting pupils with slow learning abilities experienced some challenges.
4. Teachers and Head teachers would respond to the instruments honestly and to the best of their knowledge.

1.8 Conceptual Framework

One of the goals of primary education in Kenya is that of preparing learners to fit into and contribute towards the well being of society and the world of work. On this note, it should be realized that the importance of imparting life skills to learners is well articulated in the goals of Education for All (EFA). Ysseldyke (1993) noted that within the classroom, some learners already have developed the skills being taught, while others need help developing those skills and still others need to be taught prerequisite skills before they can learn the contents that others are learning. It is thus of paramount importance that instructions in the classrooms be adjusted to accommodate those individual differences so that all the learners reach the expected educational outcomes (Brown, 1976). This notwithstanding, certain factors are likely to influence teachers in the way they select and use intervention strategies to assist pupils with slow learning abilities. This in turn determines the learning outcome of such pupils. In such a case, pupils with slow learning abilities may experience learned helplessness due to lack of appropriate teacher interventions. This may be attributed to possible causes such as pupil-related factors, teacher-related factors and learning environment-related factors that
hinder effective teacher interventions. However, likely measures may lead to more teachers being trained in SNE; conducive learning environment, thus, suitable class size, availability, adequacy, suitability, and utilization of learning resources among others. This enables successful teacher interventions, which include individual attention, remediation and special methods of teaching among others. Subsequently, there could be improved learning of pupils with slow learning abilities. The relationship is summarized in Figure 1.1.
Figure 1.1: Relationship between Prevailing Factors, Teacher Interventions and Learning Outcomes of Pupils with Slow Learning Abilities

Learned helplessness of pupils with slow learning abilities due to lack of appropriate teacher interventions

**Possible Causes**

Pupil-related factors:
- Learning characteristics of pupils
- Health, educational background and social-related

Teacher-related factors:
- Gender, teaching experience
- Professional qualifications
- Lack of SNE trained teachers

Learning environment-related factors:
- Large class size
- Lack of availability, adequacy, suitability and utilization of learning resources and facilities

**Likely Measures Provides:**
- Suitable class size
- Availability, adequacy, suitability and utilization of learning resources and facilities
- More trained teachers in SNE

Hence, successful teacher interventions such as individual attention, remediation and special methods of teaching

**Expected Learning Outcomes**

- Improved learning of pupils thus,
  - Reduced repetition and dropout rates
  - Increased retention rate
  - Increased completion rate

*Source: Adapted from Ysseldyke, et al, (1993)*
1.9 Operational Definition of Terms

For the purpose of this study, the following terms were used:

**Dropout:** Pupils who leave school before completion of class 8 either willingly or otherwise.

**Enrolment:** Concept taken to control the number of pupils who register as members of classes at the beginning of the year.

**Factors:** Prevailing conditions in school that influence teaching and learning of pupils.

**Homeless Children:** Pupils who do not have a permanent place to call home.

**Inclusive Education:** Refers to schools, centers of learning and educational systems that are open to all children. It also means a process of identifying any barriers within and around the school that hinder learning and reducing or removing these barriers.

**Learning Environment:** Physical conditions in the classroom that includes resources, facilities, and class size that to some extent influence the teaching-learning process.

**Pupils with Slow Learning Abilities:** Refers to pupils who are generally unable to do the work expected of their age group or the class in which he or she is placed. Thus, they find it difficult to keep pace with their classmates and fail to attain what is expected of them.

**Repetition:** A year spent by a pupil doing the same work in the same grade at his or her previous year in school.

**Special Education Needs:** Varied needs of learners that require special educational attention; for example special educational needs of pupils with slow learning abilities.

**Intervention Strategies:** These are extra actions the teacher can take outside the classroom or when presenting lessons or interacting with pupils to assist their learning.
CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction

This chapter is devoted to reviewing literature relevant to the problem. It also looks at the work that has been done by other people related to the area of this study. The reviewed literature was discussed under the sub-sections outlined below.

2.1 Retention and Completion Trends in Kenyan Public Primary Schools

Grade repetition is a common feature in Kenyan public primary schools. Repeating grades is more prevalent in standard seven. This may be attributed to Kenya Certificate of Primary Education (KCPE) performance improvement (Daily Nation of 29th December 2006). Hence, public primary schools would have only bright pupils registered as candidates. The proportion of repeaters is clearly illustrated in Table 2.1.

Table 2.1: Primary School Repetition Rate by Grade in Kenya, 1999

<table>
<thead>
<tr>
<th>Class</th>
<th>STD 1</th>
<th>STD 2</th>
<th>STD 3</th>
<th>STD 4</th>
<th>STD 5</th>
<th>STD 6</th>
<th>STD 7</th>
<th>STD 8</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolment</td>
<td>945,650</td>
<td>913,912</td>
<td>815,665</td>
<td>784,079</td>
<td>696,212</td>
<td>635,021</td>
<td>631,114</td>
<td>445,244</td>
<td>5,866,897</td>
</tr>
<tr>
<td>Repeaters</td>
<td>163,018</td>
<td>119,057</td>
<td>102,821</td>
<td>104,509</td>
<td>83,398</td>
<td>78,841</td>
<td>107,084</td>
<td>18,439</td>
<td>777,159</td>
</tr>
<tr>
<td>Repetition rate (%)</td>
<td>17.2</td>
<td>13.0</td>
<td>12.6</td>
<td>13.3</td>
<td>12.0</td>
<td>12.4</td>
<td>17.0</td>
<td>4.1</td>
<td>13.2</td>
</tr>
</tbody>
</table>

Source; MOEST, Statistics Section (2004)

Machila (2005) revealed that in Kenya, out of the total number of pupils enrolled in standard one, more than 40 per cent drop out along the way and only 47 per cent of those who completed the primary cycle had graduated within the expected time period. This may be attributed to high repetition and dropout rates in public primary schools. The fact is that pupils with slow learning abilities, hitherto ignored, constitutes about 18 per cent of the total pupil population who are found in every grade level (MOEST, Task Force, 2003).
Nevertheless, they are likely to be victims of repetition and dropout as a result of low academic attainment. This could be due to lack of assistance in the learning process, such that some find this path of education extremely difficult as a result of learned helplessness (Stronge, 1992). This may make them drop out of school or otherwise they spend many years in primary school level due to repetition giving rise to over-age learners. Resulting from high repetition and dropout rates at primary school level, school completion and retention rates are low and hence transition rates from primary to secondary schools are below 50 per cent (MOEST, Statistics Section, 2004). The trend in Public primary school completion rate in Kenya is clearly illustrated in Table 2.2.

Table 2.2: Primary School Completion Rates, 1993-2003

<table>
<thead>
<tr>
<th>Year in STD 1</th>
<th>Year in STD 8</th>
<th>Enrolment in STD 1</th>
<th>Enrolment in STD 8</th>
<th>Completing STD 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>2000</td>
<td>918,800</td>
<td>449,200</td>
<td>49.9%</td>
</tr>
<tr>
<td>1994</td>
<td>2001</td>
<td>971,800</td>
<td>510,700</td>
<td>52.8%</td>
</tr>
<tr>
<td>1995</td>
<td>2002</td>
<td>952,100</td>
<td>541,300</td>
<td>56.9%</td>
</tr>
<tr>
<td>1996</td>
<td>2003</td>
<td>958,100</td>
<td>546,200</td>
<td>57.0%</td>
</tr>
</tbody>
</table>


Research carried out by UNESCO (2005) and Wanjiku (2005) also indicates that after an initial increase in enrolment with introduction of Free Primary Education (FPE) in Kenya, public primary schools are beginning to experience a decline in enrolment. The research revealed that this might be attributed to drop out rates and to a lesser degree, transfer to private schools due to unfriendly learning environment in public primary schools. This suggests that teachers are unable to cope with the large numbers of children entering school and in need of special attention. Such children may include those with slow learning abilities who may drop out if intervention strategies are not put in place to enhance their learning. There is need therefore to reduce dropouts by initiating measures and services for retention. This study sought to establish factors influencing teacher interventions in a bid to enhance
academic success of pupils with slow learning abilities in public primary schools in Kasarani Division.

2.2 Special Education in Regular Schools in Kenya

Special education is important for human capital development as it prepares those who are most likely to be dependent to become self-reliant. Special education has for a long time been provided in special schools and special units attached to regular schools. However, Inclusive education is gaining ground all around the world, Kenya in particular (Randiki, 2002). This suggests that the learning needs of pupils who are especially gifted and talented, psychosocially different and with specific learning difficulties among others in regular classrooms have to be met. But the challenge is to examine ways and means of including all pupils who are different and diverse in regular classrooms. According to MOEST (2004), the main challenges relating to access and equity are provision of education policy, lack of data on children with special needs and inadequate tools and skills in identification and assessment. This means that special education has not been mainstreamed in all educational programmes. The situation is compounded by inappropriate and inadequate facilities and lack of equipment which makes it difficult to integrate special education in regular programmes as observed by research carried out by Odero (2004). He also attributed this to factors such as inadequate capacity among teachers to handle children with special needs, lack of coordination among service providers and inappropriate placement of children with disabilities. According to MOEST (2004), inadequate and expensive teaching and learning materials and inadequate supervision and monitoring of special education programmes further complicate the situation.
However, the government of Kenya is currently implementing measures to improve the participation of children with special needs in education. Under the Free Primary Education (FPE) for instance, additional grants are provided to children with disabilities enrolled in special education primary schools and units attached to regular primary schools to facilitate procurement of the necessary teaching and learning material resources. Regular public primary schools are also being provided with initial support to begin removing existing barriers that make the school environment unfriendly in a bid to facilitate inclusion of learners with special needs. A decisive issue is that of how the individual pupil can be ensured optimal education in accordance with his or her capabilities and needs in an all-inclusive education (Hegarty, 2003). To attain this, Kenya needs to embrace inclusive education and implement guidelines that mainstream Special Needs Education throughout the education systems. It is in this view that this study sought to establish the extent to which teachers assist pupils with slow learning abilities in regular classrooms in public primary schools.

2.3 The Concept of Slow Learning

A large number of pupils have difficulties learning basic subjects such as reading, writing and arithmetic. Consequently, they need special help. Brown (1976) estimated around 20 per cent as the number of children at some time during their school life in need of specialised help. Such pupils are likely to be regarded as ‘slow learners’ by teachers as they continuously under function in terms of educational attainment. He further pointed out that these pupils could be classified into two broad categories. The first category consists of those with retarded mental developments due to handicaps such as physical deficiencies, ill health, limited verbal experiences at home and emotional disturbances. The second category consists
of learners who have very limited cognitive ability. Such pupils have limited scope for achievement and often experience learning difficulties. Jenson (1980) pointed out that pupils with slow learning abilities have intelligence quotients between 76 and 89, thus fail to attain what is expected of them. For this reason, they are traditionally labelled as ‘dull normal’ or ‘slow learners’. He further noted that they often have problems in reading and arithmetic, while some have additional handicaps in physical and emotional, which impede their school progress and personal development. Their inadequate performance can be attributed to their limited cognitive ability.

Lerner (2000) observes that, though pupils with slow learning abilities, under achievers and those with learning disabilities have learning difficulties, there is a difference between them. A pupil slow in learning is one who is unable to do the work of the class in which he or she is placed or even the class below that. He or she is not up to the attainment levels of the various subjects that are normal for his age or grade. For under achievers, their ability is not so limited but their attainment is below the expected level of achievement. Their academic progress is limited by factors such as absenteeism, unfortunate personal circumstances, or inadequate environmental conditions. In comparison, Ndurumo (1993) defines specific learning disability as a disorder in one or more of development in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, spell, or do mathematical calculation. He further noted that the term does not include pupils whose learning problems are primarily the result of mental retardation or sensory impairment like blindness or deafness. Nevertheless, the three categories of pupils mentioned above need help in form of special intervention strategies in regular classrooms. However, most of them struggle along in ordinary classes failing to have the special attention that they need. Failure
to recognize and provide for their learning difficulties is one of the contributory causes of their low achievement (Reddy, 2006). This suggests that in order for them to achieve a reasonable degree of academic success, some form of special or remedial teaching is necessary. Thus, early identification of such pupils would enable the teacher to device appropriate intervention strategies so as to enhance their learning.

2.4 Characteristics of Pupils with Slow Learning Abilities

Classroom teachers often face common challenges in the teaching and learning process in relation to pupils with slow learning abilities. The learning characteristics are discussed in the following sub-sections:

2.4.1 Limited Cognitive Capacity

Within the classroom, teacher-initiated intervention strategies may be influenced by the pupils’ learning characteristics. This is because teachers are guided by these characteristics to identify those with slow learning abilities. One such characteristic is limited cognitive ability. Schonell as quoted by (Reddy, 2006), defines general intelligence as:

An inborn, all-round mental power, which is but slightly altered in degree by environmental, influences although its realisation and direction are determined by experience. Intelligence is viewed not merely as an unfolding or maturing of this innate potentiality but also as something that grows and develops in the course of the child’s active experience of his environment.

From Schonell’s idea of intelligence, it could be that pupils with slow learning abilities fail to cope with learning situations and to reason abstractly due to limited cognitive capacity. They experience difficulty with the complex mental operation of reasoning and are usually slower to observe the features of things and to perceive relationships between things in their experience. Also, they are unable to employ cognitive strategies that are essential to facilitate
retention processes. This means that they are very poor in the process of developing concepts or general ideas which underlie a great deal of school work, especially in language and number work. However, research indicates that they can succeed academically with intervention strategies such as remediation, individual attention and special methods of teaching when compared with normal pupils (Meecer and Mercer, 1998). But no work has been done to determine whether or not teachers use such intervention strategies and factors that influence them in the Kenyan context. This was subject for exploration in this study.

2.4.2 Poor Memory

Poor memory is another characteristic associated with pupils with slow learning abilities that hamper their educational progress. Flavell (1977) defines memory as a series of cognitive processes including recognition and recall, knowledge and cognitive strategies. Each of these processes has an influence on learning. Pupils with slow learning abilities are unable to retain information in memory storage for a long time and recall it when needed. This implies that efficiency of initial learning is important for recall and retention. One such strategy is to make sure that pupils go over the material more times to ensure it is fixed in their minds (Gearheart, 1985). However, in such circumstances the teacher needs to motivate his pupils so that they will want to learn and develop their potentials. How the teachers accomplish this in public primary schools in Kasarani Division was another focus of this study.

2.4.3 Distraction and Lack of Concentration

Curtis and Shaver (1980), reveals that the attention spans of pupils with slow learning abilities is relatively short. They cannot concentrate on the instruction of the teacher, which is mostly verbal exposition for more than a stretch of thirty minutes. They need short and
frequent lessons for better perceptions. Such strategies may include personalized systems of instructions that can cater for their needs and also draw and sustain their attention for a little longer time as well as promote concentration. Wearmouth (2000) reveal that pupils with slow learning abilities are able to concentrate in enjoyable and successful work for a considerable time. Hence, the degree to which the work is suited to these learners’ capacity, and also engages interest and activity is important. In such a case, the teacher may incorporate creative and practical activities in their lessons that seem to promote the development of good attention and of work habits among pupils with slow learning abilities. This study aimed at revealing the extent to which teachers use some of such intervention strategies in order to promote pupils’ attention.

2.4.4 Inability to Express Ideas

Pupils’ ability to express themselves orally and to comprehend what is said to them is very important for academic success. But pupils with slow learning abilities have difficulties in finding and combining words. Hence, they often have recourse to gestures or to action rather than words. Turnbull (2002) argues that such pupils have difficulties in knowing what to say or if they know what to say, in finding ways of saying it. To express ideas one must be good at communication that involves listening as well as talking, but pupils with slow learning abilities are poor at remembering messages and listening to instructions. Because of this fact, they are unable to express ideas with clarity. Thus, for full development of such learners’ ability to express themselves, teachers need to encourage pupils to feel free to express their feelings and ideas through participation in the teaching and learning process. Such teaching strategies may include group activities, discussions and motivational techniques (Mastopieri
and Scruggs, 2000). Whether the primary school teachers of Kasarani Division do this or not, was subject to exploration during this study.

2.5 Importance of Teachers in Assisting Pupils with Slow Learning Abilities

Quality of education depends on the teaching force. Professional training in special education may enable some teachers to identify and teach pupils with slow learning abilities more effectively than teachers who have not received such training. The Education Commission Report of Kamunge (1988), recommended that regular teachers be trained in remedial teaching methodology to enable them effectively identify and teach children with learning problems. This implies that teachers have more contact with pupils and thus ideally placed to recognise and respond to cases of pupils with learning difficulties such as slow learning abilities. In support of this, Minskoff (2001), in his study concluded that early intervention of such pupils has the potential to make them normal that is indistinguishable from their peers by the time they are in secondary schools. This suggests that, early identification of pupils with slow learning abilities is a pre-requisite to intervention, which leads to prevention before complication thereby enhancing their learning process.

Since effective teaching deals with the needs, interests and abilities of pupils as individuals, it requires teachers’ dedication regardless of the challenges they face while assisting such pupils in regular classrooms (Bala, 2004). However, teachers may not have the skills and knowledge to identify and assist pupils with slow learning abilities. While this is likely to be the case, it can also be attributed to mutual lack of understanding or even lack of professional training or respect. This implies that teachers should be continually sensitised on the importance of being sensitive to individual learners’ educational needs. This may be
achieved through in-service training courses or school-based programmes in Special Needs Education (SNE). The current study intended to establish the influence of teachers' professional qualifications and views concerning pupils with slow learning abilities on intervention strategies they use to assist them in public primary schools in Kasarani Division.

2.6 Characteristics of Effective Intervention Strategies

Children of today are the citizens of tomorrow and hence it is essential to enable pupils with slow learning abilities reach their optimal level of performance. This is not possible without adequate intervention strategies. There is every possibility that each classroom has some pupils who are slow in learning. These pupils come to school regularly but are likely to become dropouts if their educational needs are not adequately met. The fact is that, these pupils should be identified as early as possible so that required intervention strategies can be planned at the earliest (Reddy, 2006). If this is done, then teaching methods can be precisely planned to suit their needs to enable the teacher to combat their slow learning problems in an effective manner. Ysseldyke (1993), points out that the influence of specific intervention strategies depends on the entry level of the pupil. Bos and Vaugh (2002) says that, some certain strategies are most effective when a child is learning how to perform a task while others are only influential when a child knows how to perform a task but needs to be more skilled in its execution. It is therefore very essential for the teacher entrusted with the task of instructing pupils to have an insight to various ways in which they can adjust instruction to meet individual pupils’ needs.

Brown (1976) identifies remedial measures, which constitute educational programmes for pupils with slow learning abilities. Such intervention strategies include:
1. Adjusting lessons to meet pupils needs
2. Provision of many instructional options
3. Motivation
4. Individual Attention
5. Restoration and Development of Self-confidence
6. Development of Good Work Habits
7. Elastic Curriculum
8. Remedial Instruction
9. Special Methods of Teaching; for example IEP and Computer technology
10. Peer Tutoring

This study sought to establish which among such interventions are used by teachers in the circumstances of the prevailing factors in public primary schools in Kasarani Division.

2.7 Studies Related to Special Education in Regular Schools

Over the years there has been concern on the best ways to educate learners with special needs in regular schools. Hence, scattered studies have been carried out in Kenya concerning the inclusion of learners with special needs into the mainstream primary schools. Odero (2004), in his study of pupils with special needs in regular schools has revealed that negative and stereotypic attitudes, lack of qualified personnel as well as lack of policy are among factors that hinder education of learners with special needs in an inclusive setting. He observes that much as the learning barriers exist, inclusion has emerged as the most effective way to provide education and training for learners with special needs in general.

Mutua (2005), in his research of education for learners who are gifted and talented in primary schools, observes that inclusive education for these learners has been limited in that classroom teachers do little to accommodate learning needs of learners who are gifted and talented. While Kamau (2004), in her study of measures used in the identification of children who are gifted and talented, asserts the need to initiate the process of identifying and providing appropriate educational services and other relevant provisions for children who are
gifted and talented. Onyango (2004), in her research findings on differential perceptual learning style preferences, observes that pupils are different in the way they internalise, process and remember information. She further points out that mandatory identification of a learner’s perceptual learning style upon selection to a new educational institution would be one step towards improving learning achievement. However, the studies did not investigate on various factors that influence intervention strategies used by teachers. This was the essence of this study.

From the foregoing studies, it can be observed that inclusion of learners with special needs in regular schools is faced by various challenges. This made it important to investigate on the teaching and learning of pupils with slow learning abilities in public primary schools. Specifically, information was needed to determine classroom teaching processes that enhance their learning. Hence the study focused on factors influencing teacher interventions in public primary schools in Kasarani Division, Nairobi Province.

2.8 Summary
The chapter has reviewed the related literature to the problem of the study. Pupil-related and teacher-related factors have been seen to influence teacher interventions. Characteristics of effective intervention strategies and studies related to Special Education in regular schools have also been reviewed.
CHAPTER THREE
METHODOLOGY

3.0 Introduction

This chapter describes the research design, study population, sampling technique and sample size, instrumentation, piloting, data collection and analysis methods that were used in the study.

3.1 Research Design

The study employed the \textit{ex-post facto} research design in which the role teacher, pupil and learning environment factors play in influencing intervention strategies used by teachers was investigated. An \textit{ex-post facto} research design is defined as a systematic empirical inquiry in which the scientist does not have direct control of independent variables because their manifestation have already occurred or they are inherently not manipulable (Cohen, 1994). Hence, inferences about relations among variables are made without direct intervention from concomitant variation of independent and dependent variables. For this reason, variables like physical facilities, learning and human resources and other school-related factors that influenced teacher interventions could not be manipulated. This enabled the study to get the teachers' and head teachers' opinion, perceptions, practices, their experiences and the kind of atmosphere and context in which they act and respond in public primary schools in Kenya in relation to pupils with slow learning abilities.

3.2 Variables

3.2.1 Dependent Variables

The dependent variables were teacher interventions for pupils with slow learning abilities.
3.2.2 Independent Variables

The independent variables used for the study included the pupil-related factors which were their learning characteristics, health, and socio-economic and educational background. The teacher-related factors which were their gender, qualification, teaching experience, preferred teaching techniques and their views concerning characteristics of pupils with slow learning abilities. The learning environment-related factors which were the availability, suitability, adequacy and utilisation of teaching-learning resources as well as the class size, seating arrangements and the aspect of time.

3.3 Location of the Study

The study was carried out in Nairobi, Kenya, which was purposively selected. Being a district as well as a province, Nairobi has fairly many public primary schools. It was also chosen because of having both high and low socio-economic status zones. It should be noted that socio-economic status of a zone largely determines its economical potential which consequently influences poverty levels and to some extent academic performance. The research was done in Kasarani Division. The Division is a highly extensive area in Nairobi Province with 25 public primary schools. Though other divisions have equally many schools, Kasarani was chosen because of the researcher’s familiarity with the school’s locations. Kerlinger (1973) observes that a researcher should be familiar with the research locale, a fact that also influenced the choice of the division.

3.4 Target Population

The research targeted public primary school teachers and head teachers in Kasarani Division, Nairobi. The Ministry of Education records for the year 2008 indicated that there were 25
public primary schools in Kasarani Division, Nairobi (See appendix D). The enrolment statistics indicated that there were approximately 648 teachers in total and 29,891 pupils in those schools.

3.5 Sampling Techniques and Sample Size

3.5.1 Sampling Techniques

Different sampling techniques were used to select different samples as follows:

3.5.1.1 School Category

The study was restricted to public primary schools in Kasarani Division. This is because, unlike Private schools, public primary schools accommodate learners from all levels of socio-economic status, both advantaged and disadvantaged. For this reason, the public primary schools were purposively selected.

3.5.1.2 Sampled Schools

A list of public primary schools from the Director of Education’s office in Nairobi Province indicated that the schools in Kasarani Division are divided into two zones: Ruaraka and Kahawa. To control for socio-economic status and academic performance, four schools were randomly selected from each zone to give a total of eight schools. The selection of a representative sample of public primary schools from the two zones was done using a stratified random sampling technique. Within the zones, schools were stratified on the basis of their academic performance as measured by the school mean scores for the K.C.P.E, 2007 results. Thus, the target was good versus poor performing schools. Two schools from each stratum were selected from each zone using Lucky Dip type of simple random technique.
resulting in a total of eight schools (See appendix D). This technique ensured that, every
school had the probability of being selected and that selection of one did not affect the
selection of the other in any way, thus ensuring a representative sample (Gay, 1992).

3.5.1.3 Teachers

From each of the sampled schools, 16 class teachers, one from each stream in all the class
levels, were purposively selected to fill in the teachers’ questionnaire (TQ). Random
sampling was used to select two streams from which the class teachers were purposively
selected where there were more than two streams. The class teachers were chosen by virtue
of being both agents of teaching and administrators of their classes. Thus, the research used
128 class teachers as the subjects of the study. This falls above the minimum acceptable
sample of 10% for a survey of the target population. All the eight head teachers of the
sampled schools were included in the study sample. The head teachers were targeted to
provide administrator’s view concerning the conditions of the learning environment in their
schools.

3.5.1.4 Standard Six Lessons

In each of the sampled schools, one stream of standard six was randomly chosen from those
schools with more than one stream for a Mathematics and English lessons observation, while
for those with only one stream, purposive sampling was used. Standard six was chosen
because being one of the upper classes, subjects are taught by different teachers. It was also
chosen because of being the first class of standard one to benefit from FPE. Mathematics and
English subjects were chosen because of the possibility of supervised work during the lesson
by the teacher. Thus, it was easier to notice manifestations of certain lack and disorders that
are unique characteristics of pupils with slow learning abilities. In addition, they are key subjects in both primary and secondary school units of education.

3.5.2 Sample Size

The sample comprised eight public primary schools. This was 32% of the total number of public primary schools in Kasarani Division and being a descriptive study, 32% was considered well enough as a representative sample. According to Gay (1992), a sample of 10% is considered the minimum for a descriptive research. A total of 128 teachers and eight Head teachers filled in the teachers’ questionnaire (TQ) and Head teachers’ questionnaire (HTQ) respectively. This formed 19.8% of all the teachers and 32% of all the Head teachers in Kasarani Division. Ary and Razevicoh (1972), rightly observes that, in descriptive research; 10-20% of the total population is acceptable. A total of 16 Mathematics and English lessons of standard six were observed. The distribution of the sample size for this study is shown in Table 3.1.

Table 3.1: Distribution of Sampled Respondents from Schools in Kasarani Division

<table>
<thead>
<tr>
<th>Zone</th>
<th>No of schools</th>
<th>Sampled schools</th>
<th>Sampled teachers</th>
<th>Sampled Head teachers</th>
<th>Standard six lessons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kahawa</td>
<td>13</td>
<td>4 (30.8%)</td>
<td>64</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Ruaraka</td>
<td>12</td>
<td>4 (33.3%)</td>
<td>64</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>8 (32%)</td>
<td>128 (19.8%)</td>
<td>8 (32%)</td>
<td>16</td>
</tr>
</tbody>
</table>

Table 3.1 shows how eight schools, 128 teachers, eight Head teachers and 16 Mathematics and English lessons of standard six were sampled from the target population.

3.6 Research Instruments

Data was collected using the following instruments:
3.6.1 Teacher’s Questionnaire (TQ)
It was used because of its objectivity and potential in providing a great deal of information from respondents even in the absence of the researcher. It was designed to seek information about teachers’ Gender and professional qualification, years of teaching experience and their views on characteristics of pupils with slow learning abilities. It also sought information regarding intervention strategies they employed to assist them as well as the challenges they encounter. It was newly constructed with some items being adapted from Machila (2005) and Onyango (2004).

3.6.2 Lesson Observation Schedule (LOS)
A lesson observation schedule was used to collect information on various intervention strategies used by teachers to assist pupils with slow learning abilities in their classes. Use of observation method facilitates a broader look at behaviour as well as factors affecting behaviour. Thus, the instrument was used to gather information concerning the learning environment such as availability, adequacy, suitability and utilisation of resources as well as class size. This could influence teacher interventions especially for pupils with slow learning abilities in the teaching and learning process. According to Cohen (1994), classroom observation produces a broad description of the class teachers’ practices and methods. While Kothari (2004) note that observations are better in eliminating subjective bias if done accurately. Specifically, it involved observing a total of two lessons for Mathematics and English subjects in a randomly selected stream of standard six in each of the selected schools.

3.6.3 Head Teachers’ Questionnaire (HTQ)
It was administered to all the Head teachers in the sampled schools. This is because they
are the main implementers of the Government policies and curriculum in their schools. Therefore, they were in a position to discuss the problems facing them while handling learning difficulties of pupils in their respective schools. It was newly constructed but some of the items were adapted from the earlier studies of Gathara (2003) and Odero (2004).

3.7 Pilot Study

Piloting was carried out in two schools, one from each zone, which were purposively selected from public primary schools in Kasarani Division. The schools involved were not among the ones sampled for the actual study. Reliability coefficient of all the instruments administered was determined during the piloting. Thus, necessary adjustments were made to improve on the instruments before the actual data collection.

3.7.1 Validity

Validity is the degree to which a test measures what it purports to measure (Borg and Gall, 1989). Content and construct validity of the instruments was enhanced at the design stage since some of the items were adapted from earlier studies by Gathara (2003); Machila (2005); Odero (2004) and Onyango (2004). The pilot study was carried out to check the appropriateness of the language used in the questionnaire as well as determining the difficulty of the items in the instruments. Thus, necessary modifications of the tools were made, hence improving the level of the instruments’ validity.

3.7.2 Reliability

Reliability coefficient of all the instruments was determined after the piloting stage. In this case, the instruments were administered to the subjects involved in the pilot study at different
times in close succession using the test-retest method. This was done in two consecutive days after which correlation between the two sets of data was determined using Pearson Product Moment Correlation Formulae. A reliability coefficient of 0.75 was obtained which was considered appropriate for the study.

Scott’s (1959) method of determining Correlation Coefficient was used in case of LOS. In this case two concurrent observations were made by both the researcher and the researcher assistant independently. The degree of agreement between them was checked. The items being observed were thus reviewed and redefined and observation procedure repeated until high agreement inter-rater was reached.

3.8 Data Collection Procedures

In actual data collection, the selected schools were visited and through their respective school head teachers, arranged to meet the class teachers. During such meetings, arrangements were also made regarding when the observation of lessons was to be done. Data was collected using questionnaires, which were administered to the head teachers and class teachers on individual basis. A total of two standard six lessons of both Mathematics and English subjects were observed in each of the schools selected.

In administration of research instruments, each class teacher as well as the head teacher were given the questionnaire to fill and collected after filling. Questionnaires were numbered to make it easy for the identification of the respondents. The participants were given adequate explanation before responding to the items. The study made all possible attempts to ensure that the data obtained from the questionnaires was valid and reliable. This was done by
establishing good rapport with the respondents, urging them to be as honest as possible and assuring them that their answers were going to be treated with utmost confidentiality.

3.9 Data Analysis

Data collected from questionnaires and observations was carefully organized and analysed. Kerlinger (1973) defines analysis as categorization, ordering, manipulating and summarizing data to obtain answers to research questions. In this study, data was analysed both quantitatively and qualitatively. Qualitative analysis involved making inferences from teachers' and head teachers' responses from open-ended questions. Quantitatively, data was processed using the Statistical Package for Social Sciences (SPSS). Descriptive statistics for each scale and summary statistics was compiled. Results were given in the form of mean, frequency, percentages and tabulations to show the probable factors influencing teacher interventions for primary school pupils with slow learning abilities. Information from observation was used to explain further the results from the statistical data collected and analysed.

3.10 Logistical and Ethical Considerations

Permission was sought from the Ministry of Education (MOE) before any data collection. During the initial visits to the sampled schools, permission was sought from the head teacher before involving him or her and the teachers. Further consultation was done with standard six Mathematics and English teachers and agreed on the convenient time when lessons observation was to be done. The consent of the teachers was sought before being given the questionnaire to fill and before being observed in their classes in the teaching and learning process. The researcher established a good rapport with the head teacher and the teachers.
They were assured that the information would be treated as confidential and used only for the purpose of the study.

3.11 Summary

This chapter has described the research design and method used in the study. It has also highlighted the related variables explored, study locale, target population, sampling, data collection and analysis as well as Logistical and Ethical Considerations. The findings of the study are analysed, presented and discussed in the next chapter.
CHAPTER FOUR
DATA ANALYSIS, PRESENTATION AND DISCUSSION

4.0 Introduction

In this chapter, data analysis, presentation and discussions are presented. For systematic presentation, the chapter is sub-divided into the following five sections: Methods of data analysis; teacher-related factors; learning environment-related factors; pupil-related factors and general comments given by the teachers and head teachers on challenges facing them in the teaching and learning of pupils with slow learning abilities. Each analysis is followed by an interpretation and then discussion.

4.1 Methods of Data Analysis

Questionnaires filled and returned were counted and checked for completeness. It was noted that three teachers did not return their questionnaires while some were incomplete. Thus, one-twenty five teachers’ questionnaires were analysed and unanswered questions were indicated as gaps in the data sheet. Data from the Lesson Observation Schedule (LOS) and questionnaires were carefully organised, coded numerically and analysed both qualitatively and quantitatively. In this case, items from the questionnaires and lesson observation schedule were arranged according to individual research questions and analysed data presented in tabular form where possible.

In particular, quantitative analysis involved quantitative data collected from LOS, teachers’ and head teachers’ questionnaires which was entered into the computer and processed using the Statistical Package for Social Sciences (SPSS). One-way ANOVA (Analysis of Variance) method of analysis was also used to determine the difference of intervention strategies used
by teachers in the different schools involved in this study. This helped to ascertain whether the difference was statistically significant or not. To facilitate presentation and analysis of data, tabular layouts were used. For comparison, results were given in the form of mean, frequencies and percentages to answer research questions 1, 2, 3, 4, 5 and 6.

Qualitative analysis involved making inferences from the teachers, and head teachers’ responses from the open-ended questions using thematic approach. Further qualitative analysis was done on the views given by teachers and head teachers on challenges they faced in relation to teaching and learning of pupils with slow learning abilities. General information from observation of lessons proceedings was also analysed qualitatively. This information was used to explain further the results from qualitative and quantitative data collected and analysed to answer research questions 1, 2, 3, 4, 5 and 6.

4.2 Teacher-related Factors

The study described the teachers’ background information pertaining to their gender, professional qualification and teaching experience. This was followed by analysis of teachers’ views from their responses concerning characteristics of pupils with slow learning abilities as well as the intervention strategies they used. The influence of these teacher-related factors on the intervention strategies they used was also analysed. The last part of this section contains the analysis of the head teachers’ responses concerning their views on intervention strategies used by teachers in their schools.
4.2.1 Teachers’ Background Information

Various aspects of teacher-related variables were elicited from teachers’ questionnaire as discussed below.

4.2.1.1 Teachers’ Professional Qualification

The issue of teachers training is important in teaching and learning of pupils with slow learning abilities in public primary schools. The study sought to find out whether the teachers in the schools that participated in this study had received any training. Relevant information on this aspect is summarised and presented in Table 4.1.

Table 4.1: Distribution of Teachers by Professional Qualification and Gender

<table>
<thead>
<tr>
<th>Professional qualification</th>
<th>Males (%)</th>
<th>Females (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI Certificate</td>
<td>9.6</td>
<td>51.2</td>
<td>60.8</td>
</tr>
<tr>
<td>Diploma (DIP.ED)</td>
<td>4.0</td>
<td>16.8</td>
<td>20.8</td>
</tr>
<tr>
<td>Graduate (B.ED)</td>
<td>2.4</td>
<td>13.6</td>
<td>16.0</td>
</tr>
<tr>
<td>Others</td>
<td>0.0</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16.0</strong></td>
<td><strong>84</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td>Trained in Special Education (SNE)</td>
<td>4.0</td>
<td>24.8</td>
<td>28.8</td>
</tr>
</tbody>
</table>

Table 4.1 shows that all the teachers in the study were trained with the highest professional qualification being graduate (B.ED). It was noted that 16% of the teachers involved in the study were graduate teachers, 20.8% were Diploma trained while majority of the teachers (60.8%) were PI certificate holders. Only 2.4% of the teachers had other qualifications not included in the questionnaire. This can be explained by the fact that trained primary school teachers can pursue further education through different avenues. For instance, PI trained teachers can enrol for diploma or degree courses during holidays. In such a case, both public and private institutions have provided opportunities and interested teachers can pursue
education up to the university level. However, amongst these teachers involved in the study only 28.8% were trained in Special Needs Education (SNE). The findings are in support of the report by Kamunge (1988) who recommended the training of regular teachers in remedial teaching methodologies. Ndurumo (1993) observes that training in SNE equips teachers with knowledge and skills to identify and assist pupils with learning difficulties. On this basis, teachers who are trained in special education are likely to pay attention to educational needs of pupils with slow learning abilities because they can easily recognise the indicators unlike the untrained ones. This was ascertained in the few lessons that were observed. In this case, teachers trained in SNE tended to pay attention to pupils with learning difficulties during the teaching and learning process compared to those who lacked the training. Thus, it is important for the MOE to encourage teachers to pursue further education under school based or in-service programmes especially in the area of SNE. This will enable the TSC to ensure that every public primary school has at least one teacher trained in SNE. There is also need to incorporate SNE into the teacher training colleges’ curriculum so as to equip teacher trainees with skills and knowledge to identify and assist pupils with slow learning abilities.

Further analysis showed that 84% of the teachers were females while only 16% were males. Similar trend was noted in LOS where out of the sixteen teachers observed in the lessons, twelve of them were females and only two were males. This suggests that majority of teachers in these Public primary schools were females. This could be interpreted to mean lack of taking care of gender in a representative proportion by Teachers’ Service Commission (TSC) while posting teachers. Such a situation is likely to result to variation in relation to intervention strategies used by teachers in schools to assist pupils with slow learning abilities. However, the fact that this study was carried out in an urban setting where
the number of female teachers is expected to be higher than that of males, the extent to which
gender influenced teacher interventions was beyond the scope of the study.

4.2.1.2 Teaching Experience of the Sampled Teachers

The length of experience in any field is expected to pay a significance role in performance.
Therefore the years of teaching experience reveals variation in relation to intervention
strategies used by teachers to assist pupils with slow learning abilities. Teachers were
questioned about their years of teaching experience. Their experience was categorised into
five groups, as can be seen in Table 4.2.

Table 4.2: Length of Teaching Experience of Sampled Teachers

<table>
<thead>
<tr>
<th>Teaching experience (years)</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;2</td>
<td>3</td>
<td>2.4</td>
</tr>
<tr>
<td>2-5</td>
<td>7</td>
<td>5.6</td>
</tr>
<tr>
<td>6-10</td>
<td>15</td>
<td>12.0</td>
</tr>
<tr>
<td>11-20</td>
<td>78</td>
<td>62.4</td>
</tr>
<tr>
<td>&gt;20</td>
<td>21</td>
<td>16.8</td>
</tr>
<tr>
<td>No information</td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>125</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4.2 shows that the number of teachers increases as their years of experience increases.
Majority of the teachers were relatively old in the profession. Specifically, more than 60%
had more than 10 years of teaching experience. However, the percentage of teachers with
experience of 20 years and above dropped to 16.8%. Teachers with 6-10 years of teaching
experience were 12% while those with 2-5 years and less than 2 years of teaching experience
were only 5.6% and 2.4% respectively. This suggests that most of the primary school
teachers were experienced enough to enable them identify pupils with slow learning abilities
and device appropriate interventions to enhance their learning. However, this was not the case especially in English and Mathematics lessons observed. The teachers observed in their lessons mainly used whole class instructional approach irrespective of the presence of learners who needed special attention in the teaching and learning process. The situation was worsened by the fact that there was hardly adequate time for the teacher to mark pupils’ supervised work during the lesson. This could be taken to mean that even though the teachers were experienced enough to recognise pupils with slow learning abilities in their classes, they failed to assist them accordingly. This is probably because of some other prevailing factors related to teachers, pupils and the learning environment.

4.2.2 Teachers’ Views Concerning Characteristics of Pupils with Slow learning Abilities

The teachers’ questionnaire also aimed at revealing existing teachers’ views concerning characteristics of pupils with slow learning abilities. Thus, possible indicators for identifying such pupils were suggested. The teachers sampled as subjects of the study were asked to indicate their extent of agreement on a five point Likert Scale. Their responses were grouped in 14 items and their results analyzed using frequencies and computed mean scores. However, some teachers did not give their responses to some of the items. The results are summarised in Table 4.3.
Table 4.3: Teachers’ Views Concerning Characteristics of Pupils with Slow Learning Abilities

<table>
<thead>
<tr>
<th>Pupils’ Characteristics</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f %</td>
<td>f %</td>
<td>f %</td>
<td>f %</td>
<td>f %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not finish exercises in class</td>
<td>2 1.6</td>
<td>18 14.4</td>
<td>13 10.4</td>
<td>54 43.2</td>
<td>38 30.4</td>
<td>125</td>
<td>3.9</td>
</tr>
<tr>
<td>Difficult in paying attention</td>
<td>9 7.2</td>
<td>10 8.0</td>
<td>10 8.0</td>
<td>65 52.0</td>
<td>31 24.8</td>
<td>125</td>
<td>3.8</td>
</tr>
<tr>
<td>Do not remember things learnt</td>
<td>5 4.0</td>
<td>15 12.0</td>
<td>14 11.2</td>
<td>50 40.0</td>
<td>39 31.2</td>
<td>123</td>
<td>3.8</td>
</tr>
<tr>
<td>Exhibits reversals and omissions</td>
<td>9 7.2</td>
<td>15 12.0</td>
<td>12 9.6</td>
<td>45 36.0</td>
<td>42 33.6</td>
<td>123</td>
<td>3.8</td>
</tr>
<tr>
<td>Poor in basic reading and writing</td>
<td>6 4.8</td>
<td>6 4.8</td>
<td>10 8.0</td>
<td>51 40.8</td>
<td>50 40.8</td>
<td>123</td>
<td>4.0</td>
</tr>
<tr>
<td>Poor in Arithmetic computation</td>
<td>3 2.4</td>
<td>19 15.2</td>
<td>11 8.8</td>
<td>53 42.4</td>
<td>38 30.4</td>
<td>124</td>
<td>3.8</td>
</tr>
<tr>
<td>Deficiencies in basic comprehension</td>
<td>2 1.6</td>
<td>8 6.4</td>
<td>15 12.0</td>
<td>61 48.8</td>
<td>37 29.6</td>
<td>123</td>
<td>4.0</td>
</tr>
<tr>
<td>Seem unmotivated to learn</td>
<td>15 12.0</td>
<td>31 24.8</td>
<td>18 14.4</td>
<td>42 37.6</td>
<td>17 13.6</td>
<td>123</td>
<td>3.1</td>
</tr>
<tr>
<td>Fear to ask and answer questions</td>
<td>11 8.8</td>
<td>16 12.8</td>
<td>18 14.4</td>
<td>52 41.6</td>
<td>25 20.0</td>
<td>122</td>
<td>3.5</td>
</tr>
<tr>
<td>Deficiencies in basic study skills</td>
<td>7 5.6</td>
<td>9 7.2</td>
<td>17 13.6</td>
<td>61 48.8</td>
<td>30 24.0</td>
<td>124</td>
<td>3.8</td>
</tr>
<tr>
<td>Poor organisation and handwriting</td>
<td>7 5.6</td>
<td>18 14.4</td>
<td>9 7.2</td>
<td>55 44.0</td>
<td>34 27.2</td>
<td>123</td>
<td>3.7</td>
</tr>
<tr>
<td>Drop out of school before class 8</td>
<td>13 10.4</td>
<td>26 20.8</td>
<td>12 9.6</td>
<td>47 37.6</td>
<td>25 20.0</td>
<td>123</td>
<td>3.4</td>
</tr>
<tr>
<td>Enjoyable to assist while teaching</td>
<td>5 4.0</td>
<td>26 20.8</td>
<td>9 7.2</td>
<td>38 30.4</td>
<td>47 37.6</td>
<td>125</td>
<td>3.8</td>
</tr>
<tr>
<td>Often last in rank order in exams</td>
<td>13 10.4</td>
<td>20 16.0</td>
<td>3 2.4</td>
<td>34 27.2</td>
<td>55 44.0</td>
<td>125</td>
<td>3.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10 6.2</strong></td>
<td><strong>237 13.5</strong></td>
<td><strong>17 1</strong></td>
<td><strong>9.77</strong></td>
<td><strong>70 6</strong></td>
<td><strong>40.3</strong></td>
<td><strong>50 8</strong></td>
</tr>
</tbody>
</table>

Table 4.3 above indicates that teachers had almost the same views concerning characteristics of pupils with slow learning abilities. This is because all the mean scores are above three out of five which is the average mean score. The highest mean score (m=4.0) corresponds to teachers’ view that these pupils are poor in basic reading and writing as well as having
deficiencies in basic comprehension abilities. On the other hand, the lowest mean score (m=3.1) corresponds to the teachers' view that these pupils seem unmotivated to learn. In particular, 40.8% of the teachers strongly agreed and agreed that these pupils have difficulties in basic reading and writing, while 4.8% strongly disagreed and disagreed, while 8% were unsure and two teachers did not respond. On the other hand, while only 8% and 9% disagreed with the statement that these pupils have deficiencies in basic comprehension abilities and study skills, most (48.8%) teachers agreed on the same. Few teachers (1.6%) and (14.4%) strongly disagreed and disagreed respectively that pupils who do not finish exercise in class during most of the lessons have slow learning abilities, 10.4% were unsure, 43.2% agreed and 30.4% strongly agreed with this statement.

On the issue of difficult in paying attention or focus on an activity to completion as an identification of pupils with slow learning abilities, 7.2% of the teachers said they strongly disagreed with the statement, 8% said they disagreed and were unsure while majority (52%) were in the agreement with the statement and 24.8% strongly agreed. Only 4% of the teachers strongly disagreed that difficulties in remembering experiences and things learnt was an indicator of pupils with slow learning abilities and that it is enjoyable to assist these pupils. About the statement that these pupils frequently exhibit reversals, inversions or omissions in writing, 7.2% of the teachers strongly disagreed, 12% disagreed, 9.6% were unsure, 36% agreed and lastly 33.6% strongly agreed. Similarly, 2.4% of the teachers strongly disagreed on poor mathematical computation and reasoning as an indicator to help identify pupils with slow learning abilities, 15.2% disagreed, 8.8% were unsure, most (42.4)% agreed and 30.4% strongly agreed.
The table further shows that most (41.6%) of the teachers agreed that these pupils are shy and fear to answer or ask questions in class while 20% strongly agreed, 12.8% disagreed, 14.4% were unsure and only 8.8% strongly disagreed with the statement. While only 5.6% of the teachers strongly disagreed that poor organization and handwriting is a sign of a pupil with slow learning abilities, most (44.6%) agreed with this statement. However, 44% of the teachers strongly agreed that these pupils are often the last ones in rank order at the end of term exams and 37.6% agreed that most of them drop out before completing standard eight or keep on repeating classes as opposed to 20.8% who disagreed with this statement. Generally, the analysis reveals that despite having received some training as shown in Table 4.1, the issue of identifying specific learning needs of these pupils by the teachers need to be enhanced for their successful inclusion. The influence of specific intervention strategies depends on the entry level of the pupil (Ysseldyke, 1993). This requires teachers to have an insight to various ways in which they can adjust instruction to meet individual pupils’ needs. Therefore, there is need for the school administration to emphasize on screening of pupils in their schools in order to identify those with slow learning abilities.

Further analysis reveals that teachers share the same view that pupils with slow learning abilities are found in all classes. All the teachers (100%) agreed that these pupils are found in their classes. Similarly, this view is shared by all the head teachers of the sampled schools where they all (100%) agreed that such pupils are found in their schools. The finding was in agreement with that of Brown (1976) who estimated around 20% as the number of children at some time during their school life in need of specialised help. On responding to the question on whether they assist these pupils from the teachers’ questionnaire, 99.2% of the teachers said ‘yes’ and only 0.8% said ‘no’. This probably explains why some of the teachers
(37.6%) and (30.4%) as reflected in Table 4.3, strongly agreed and agreed respectively that it is enjoyable to assist pupils with slow learning abilities in the teaching and learning process. But, in observed lessons, such assistance was not given to such pupils. This implies that teachers are willing to assist these pupils in the teaching and learning process but in the actual sense, this does not happen. This could have been as a result of prevailing classroom factors that hindered effective teaching. It is thus imperative for appropriate measures to be taken by all concerned in order to create an enabling classroom environment.

4.2.3 Intervention Strategies Used by Teachers

The study considered the interventions being used by teachers to enhance learning of pupils with slow learning abilities in their classes. These intervention strategies included individual attention, use of varied teaching techniques and motivational techniques among others. During the observation of lessons, the extent to which the teachers gave attention to pupils with learning difficulties was determined using the descriptions: Always, Sometimes, Rarely and Very rarely. In this case the average number of pupils in class during the observation was also determined. The results are presented in Table 4.4.

Table 4.4: Observed Teacher Interventions during the Lessons

<table>
<thead>
<tr>
<th>Extent</th>
<th>Average number of pupils in class</th>
<th>Total observations n=16</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>35</td>
<td>1</td>
<td>6.25</td>
</tr>
<tr>
<td>Sometimes</td>
<td>60</td>
<td>2</td>
<td>12.50</td>
</tr>
<tr>
<td>Rarely</td>
<td>70</td>
<td>7</td>
<td>43.75</td>
</tr>
<tr>
<td>Very rarely</td>
<td>80</td>
<td>6</td>
<td>37.50</td>
</tr>
</tbody>
</table>

Table 4.4 above shows that most of the teachers (43.75%) rarely gave attention to pupils with learning difficulties, 12.5% and 37.5% sometimes and very rarely did that respectively. From
the table, only 6.25% of the teachers observed always gave individual attention to pupils in the teaching and learning process. The information revealed that the teacher-pupil interaction tended to vary with the number of pupils in a particular class. Less number of pupils in class enabled the teacher to always and sometimes give attention to those with learning difficulties during the lesson. On the other hand, teachers with large number of pupils in class rarely and very rarely attended to individual pupils' learning needs during the lesson. It was only through individual attention that the teachers would recognise those with slow learning abilities. But this was missing in the teaching and learning process. This suggests that such pupils went unnoticed during the lessons.

Nevertheless, teachers need to be sensitive to individual pupils' needs, interests and abilities despite the challenges they face while assisting those with slow learning abilities (Meercer and Mercer, 1998). Such behaviour can be achieved by using techniques that are learner-centered such as individual attention and motivational techniques. However, in most of the lessons observed this was lacking which rendered such pupils to be passive participants in the teaching and learning process. The finding supports observation by Onyango (2004) who in her study found that pupils are different in the way they internalise, process and remember information and hence the need for identification of a learner's perceptual learning style. It is thus important to sensitise teachers on the need to pay attention to pupils with slow learning abilities in the teaching and learning process in order to improve learning achievement.

Teachers however when asked to state how often they used different intervention strategies gave the following responses as shown in Table 4.5.
### Table 4.5: Teachers’ Responses on Intervention Strategies they Used to Assist Pupils with Slow Learning Abilities

<table>
<thead>
<tr>
<th>Teacher Intervention</th>
<th>Total Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=1,875</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th></th>
<th>Sometimes</th>
<th></th>
<th>Often</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attend to pupils’ individual learning needs</td>
<td>22</td>
<td>17.6</td>
<td>73</td>
<td>58.4</td>
<td>30</td>
<td>24.0</td>
<td>125</td>
<td>2.00</td>
</tr>
<tr>
<td>Give extra lessons to pupils with slow learning abilities in various subjects</td>
<td>46</td>
<td>36.8</td>
<td>72</td>
<td>57.6</td>
<td>7</td>
<td>5.6</td>
<td>125</td>
<td>1.69</td>
</tr>
<tr>
<td>Pupils with slow learning abilities are given work suited to their capabilities</td>
<td>37</td>
<td>29.6</td>
<td>59</td>
<td>47.2</td>
<td>26</td>
<td>20.8</td>
<td>122</td>
<td>1.90</td>
</tr>
<tr>
<td>Motivate pupils with slow learning abilities by relating reading materials to their interest</td>
<td>43</td>
<td>34.4</td>
<td>65</td>
<td>52.0</td>
<td>16</td>
<td>12.8</td>
<td>124</td>
<td>1.80</td>
</tr>
<tr>
<td>Use varied modes of presentation in the teaching and learning process</td>
<td>55</td>
<td>44.7</td>
<td>60</td>
<td>48.8</td>
<td>9</td>
<td>7.5</td>
<td>124</td>
<td>2.00</td>
</tr>
<tr>
<td>Really try to get through to most pupils with difficulties in class work</td>
<td>53</td>
<td>42.4</td>
<td>67</td>
<td>53.6</td>
<td>5</td>
<td>4.0</td>
<td>125</td>
<td>1.60</td>
</tr>
<tr>
<td>Structure activities so that the students can see and hear in order to comprehend</td>
<td>46</td>
<td>36.8</td>
<td>71</td>
<td>56.8</td>
<td>8</td>
<td>6.4</td>
<td>125</td>
<td>1.70</td>
</tr>
<tr>
<td>Usually help pupils who are inattentive in class</td>
<td>53</td>
<td>42.4</td>
<td>65</td>
<td>52.0</td>
<td>6</td>
<td>4.8</td>
<td>124</td>
<td>1.60</td>
</tr>
<tr>
<td>Incorporate modelling in the teaching and learning Process</td>
<td>70</td>
<td>56.0</td>
<td>43</td>
<td>34.4</td>
<td>11</td>
<td>8.8</td>
<td>124</td>
<td>1.50</td>
</tr>
<tr>
<td>Give opportunities to pupils with slow learning abilities to participate in class activities</td>
<td>74</td>
<td>59.2</td>
<td>45</td>
<td>36.0</td>
<td>6</td>
<td>4.8</td>
<td>125</td>
<td>1.50</td>
</tr>
<tr>
<td>Encourage pupils with slow learning abilities to ask and answer questions</td>
<td>28</td>
<td>22.4</td>
<td>82</td>
<td>65.6</td>
<td>13</td>
<td>10.4</td>
<td>123</td>
<td>1.90</td>
</tr>
<tr>
<td>Give tasks that are sufficiently challenging to individual pupils</td>
<td>48</td>
<td>38.4</td>
<td>70</td>
<td>56.0</td>
<td>6</td>
<td>4.8</td>
<td>124</td>
<td>1.70</td>
</tr>
<tr>
<td>Give more time to pupils with slow learning abilities to finish their exercises</td>
<td>56</td>
<td>44.8</td>
<td>65</td>
<td>52.0</td>
<td>4</td>
<td>3.2</td>
<td>125</td>
<td>1.59</td>
</tr>
<tr>
<td>Pupils with slow learning abilities from my class seek for additional assistance</td>
<td>62</td>
<td>49.6</td>
<td>58</td>
<td>46.4</td>
<td>4</td>
<td>3.2</td>
<td>124</td>
<td>1.50</td>
</tr>
<tr>
<td>Organize for group activities to ensure Pupil-pupil interaction</td>
<td>26</td>
<td>20.8</td>
<td>77</td>
<td>61.6</td>
<td>16</td>
<td>12.6</td>
<td>119</td>
<td>1.90</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>719</td>
<td>38.3</td>
<td>972</td>
<td>51.8</td>
<td>167</td>
<td>8.9</td>
<td>1,858</td>
<td>1.70</td>
</tr>
</tbody>
</table>

From table 4.5 above, it is clear that some few teachers failed to respond to particular items, thus, the total number of responses for such an item was less than the expected one-twenty five. Table 4.5 generally indicates that most teachers tended to employ some interventions to
assist pupils with slow learning abilities in their classes. This is because all the mean scores are above one out of three which is the average mean score. But the ways by which they did so as well as the extent varied considerably. Specifically, 24.0% and 58.4% of the teachers said they often and sometimes respectively, attended to pupils’ individual learning needs, and only 17.6% said they never did so. The actual situation is further disclosed in lesson observation as shown in Table 4.4 where only 6.25% of the teachers observed always gave attention to pupils with learning difficulties during the lesson. On the issue of whether the teachers gave extra lessons to these learners, 36.8% said they never did so, while most teachers (57.6%) said they sometimes gave them and a few (5.6%) said they often did so. Some 20.8% and 29.6% of the teachers said that they often and never respectively, gave pupils work suitable to their capabilities while most (47.2%) said they sometimes gave them suitable work. About motivation of pupils with slow learning abilities, 34.4% of the teachers said that they never related the reading materials to the interests of the learners, while 52% said they sometimes did so and only 12.8% said they often gave pupils work that was related to their interests.

The table further indicates that 44.7% of the teachers never used varied modes of presentations when teaching as compared to 48.8% and 7.5% of the teachers who said they sometimes and often respectively did so. Likewise, 42.4% and 53.6% of the teachers said that they never and sometimes respectively try to get through to most of the pupils with slow learning abilities in order to assist them and only 4.0% said they often attempted to get through to these learners. Also, 36.8% of the teachers as shown in Table 4.5 said they never structured their activities to be heard and comprehended, 56.8% sometimes and only 6.4% of the teachers said they often prepared lessons that could be heard and comprehended by these
learners. From the table, 42.4% of the teachers said they never helped pupils who are inattentive in class, 52% did it sometimes while only 4.8% often did it.

The results also indicate that majority of the teachers (56%) said they never incorporated modeling in the teaching and learning process, 34.4% sometimes modeled and only 8.8% often incorporated modeling in the lessons. While 59.2% of the teachers said they never gave pupils with slow learning abilities opportunities to participate in class, 36% sometimes did so and only 4.8% said they often gave them opportunities to get involved in class activities. Few teachers (22.4%) said they never encouraged pupils with slow learning abilities to ask and answer questions in class, while majority of the teachers (65.6%) said they sometimes did so and only 10.4% of the teachers said they often encouraged such pupils to ask and answer questions in class. However, in observed lessons of Mathematics and English, teachers concentrated on the bright pupils to give answers in the questioning technique used during the teaching and learning process. On the other hand, some teachers (38.4%) said that they never gave tasks that are challenging to these pupils, but majority (56%) and 4.8% said they sometimes and often did so respectively.

The results from Table 4.5 also shows that some teachers (44.8%) and (3.2%) said that they never and often respectively, gave more time to pupils with slow learning abilities to finish their exercises but majority (52%) said they sometimes did it. On the question of whether pupils with slow learning abilities from their classes seek for additional assistance, 49.6% and 46.4% of the teachers indicated that they never and sometimes respectively, while only 3.2% of the teachers said they often did it. Finally, majority of the teachers (61.6%) said that they sometimes organised group activities to ensure pupil-pupil interaction and only 20.8%
said they never organised group activities. But the real situation on the ground was disclosed in observed lessons where only few of the teachers organised group activities while majority did not.

In contrast to the above findings, information gathered during the observation of lessons was evidently different which revealed that majority of the teachers (81.25%) rarely and very rarely gave individual attention to pupils with learning difficulties as reflected in Table 4.4. Thus, their responses gave contradictory confirmation though the shortcomings were disclosed in the lessons observed. This can be interpreted to mean that majority of the teachers acknowledged the importance of assisting these pupils in the teaching and learning process, but in the real sense most teachers did not use the mentioned intervention strategies. This suggests that most teachers did not employ interventions they considered appropriate for assisting pupils with slow learning abilities in their classes. Such a practice could be attributed to certain prevailing factors that influenced them such that they ended up being unsuccessful in their endeavour. However, it requires teachers' dedication to assist such pupils in regular classrooms despite the challenges they face (Meecer and Mercer, 1998).

In addition to LOS findings, information gathered from the head teachers on their view concerning intervention strategies used by teachers in their respective schools gave a further confirmation. Responses from the head teachers' questionnaire indicate that all the teachers (100%) employed remedial teaching in a bid to assist pupils with slow learning abilities. This and other intervention strategies they used are presented in Table 4.6.
Table 4.6: Head Teachers’ Views on Intervention Strategies Used by Teachers

<table>
<thead>
<tr>
<th>Intervention Strategies</th>
<th>Frequency (n=8)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual attention</td>
<td>1</td>
<td>12.50</td>
</tr>
<tr>
<td>Remedial instruction after lessons</td>
<td>8</td>
<td>100.00</td>
</tr>
<tr>
<td>Peer tutoring</td>
<td>4</td>
<td>50.00</td>
</tr>
<tr>
<td>IEP</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Computer technology</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

As shown in table 4.6 above, most head teachers (50%) suggested that teachers in their schools use peer tutoring method compared to only (12.5%) who mentioned individual attention. This can be interpreted to mean that teachers are not able to effectively cater for individual pupils’ learning needs in their classes. This could be due to large class sizes in these schools. The finding supports observations of other researchers who established that owing to large class sizes, teachers often get too overwhelmed to give sufficient time to pupils with special needs (Odero, 2004 and Reddy, 2006). In such circumstances, teachers often resort to methods like remedial instruction after lessons and sometimes peer tutoring that can be administered outside the class teaching time in a bid to assist these pupils. Whereas the effectiveness of intervention strategies was beyond investigation by this study, such interventions may make these pupils be left out in the teaching and learning process, hence a feeling of learned helplessness.

The results also indicate that none of the schools use special methods of teaching such as IEP and Computer technology to assist pupils with slow learning abilities. These methods enhance interactive learning, encourage individual attention and also help to hold learners attention and interest unlike lecture method. Therefore, they are suitable methods for pupils
with slow learning abilities who have trouble paying attention to a task for more than a stretch of thirty minutes due to their relatively short attention span according to Curtis and Shaver (1980). Thus, there is need to find out the effectiveness of various intervention strategies in teaching a particular subject with special reference to pupils with slow learning abilities.

Further analysis was done to ascertain whether there was statistical significant difference of intervention strategies used by teachers in the different schools involved in the study. The head teachers’ comments on intervention strategies used by teachers in their schools was thus analysed by use of One-way ANOVA method of analysis at $\alpha = 0.05$ level. The summary of the results is presented in Table 4.7.

**Table 4.7: Significant Difference of Intervention Strategies Used by Teachers**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>d.f</th>
<th>MS</th>
<th>F-ratio</th>
<th>5% F-limit (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Sample</td>
<td>0.775</td>
<td>7</td>
<td>0.11</td>
<td>0.2559</td>
<td>2.42</td>
</tr>
<tr>
<td>Within Sample</td>
<td>13.76</td>
<td>32</td>
<td>0.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14.54</td>
<td>39</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.7 reveal that there was no significant difference in the use of these intervention strategies by teachers across the schools studied ($F =0.2559$, $p=2.42$). This is because all the teachers in these schools tended to use more of remedial instruction after lessons compared to the other intervention strategies. This means that teachers are influenced by the same prevailing factors in the way they assist pupils with slow learning abilities in public primary schools. Thus, there is need for appropriate measures to be put in place to enable teachers to employ effective interventions during the lesson in order to achieve maximum potential for every child.
4.3 Learning Environment-related Factors

Learning environment is important in the teaching and learning process as far as assisting pupils with slow learning abilities is concerned. Thus factors such as class size, seating arrangement and teaching-learning resources influence teacher interventions in a bid to enhance learning of these pupils. These factors are discussed below.

4.3.1 Class Size

Teachers were asked to state whether or not the number of pupils in their classes hindered them from being effective in assisting pupils with slow learning abilities. Their responses are presented in table 4.8 below.

Table 4.8: Teachers’ Responses on the Influence of Number of Pupils in Class

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>118</td>
<td>94.4</td>
</tr>
<tr>
<td>NO</td>
<td>7</td>
<td>5.6</td>
</tr>
<tr>
<td>Total</td>
<td>125</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.8 shows that majority of the teachers (94.4%) agreed that the number of pupils in their classes hindered them from being effective in assisting pupils with slow learning abilities. Those who said it does not were only 5.6%. On responding to the question on suitable class size, teachers suggested the following as indicated in table 4.9 below.

Table 4.9: Suggested Suitable Class Size

<table>
<thead>
<tr>
<th>Number of Pupils</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>15-29</td>
<td>17</td>
<td>13.6</td>
</tr>
<tr>
<td>30-44</td>
<td>90</td>
<td>72.0</td>
</tr>
<tr>
<td>45-59</td>
<td>16</td>
<td>12.8</td>
</tr>
<tr>
<td>Total</td>
<td>125</td>
<td>100.0</td>
</tr>
</tbody>
</table>
As shown in Table 4.9, majority of the teachers (72%) expressed that they preferred classes that had pupils ranging from 30-44, 13.6% said they preferred having classes with 15-29 pupils, 12.8% said they would wish to have an average of 45-59 number of pupils in their classes while only 1.6% of the respondents wanted to have classes with 0-14 pupils. The teachers gave reasons that a manageable class size would enable them to give sufficient attention to pupils with slow learning abilities and assist them accordingly. Large class sizes may hinder the teacher from being sensitive to pupils’ individual learning needs. As noted in observed lessons, most teachers tended to concentrate only on the bright pupils while asking questions and marking books in the supervised work. This denied those with slow learning abilities who are particularly shy and hardly complete exercises in class the opportunity to participate in the learning process.

Again, the information obtained from the observed lessons indicated that the classes were over enrolled as the number of pupils per class ranged from 50-80. Similarly, pupils’ enrolment from records obtained through the head teachers’ questionnaire suggested an over enrolment in all the schools. In order to have a general view of this enrolment, a bar graph showing the approximated number of pupils per class calculated from all the schools in this study was drawn as in Figure 4.1.
Figure 4.1: Number of Pupils per Class across Sampled Schools

Figure 4.1 shows that on average, majority of the schools had their classes with 60-90 numbers of pupils per class. From the figure, it can also be observed that only less than 10% of the classes in all the schools had an enrolment of 30-44 per class. The study also revealed that most of the schools had more than three streams and all used single shift. This contradicts the MOEST (2003) regulation which recommended that the class size for a regular classroom be 40-50 pupils and that of SNE be 6-10. In this case, it is obvious that the teachers were overwhelmed by the large number of pupils in their classes to give special attention to those with special needs. This means that although Table 4.1 shows that all the teachers were professionally qualified, such a class size may render them ineffective. With large class sizes, teachers may not effectively employ intervention strategies to assist pupils with slow learning abilities. Therefore, the MOE in collaboration with TSC should enforce the policy on class size. This could mean recruitment of more teachers or redistribution of already employed ones in a bid to have an appropriate teacher pupil-ratio in all schools. This may also require additional classrooms which call for combined effort between the parents and the government.
4.3.2 Seating Arrangements

The study sought to establish the type of seating arrangements used by teachers in their classes and whether it influenced the intervention strategies they used. Frequencies of the responses the teachers gave in relation to this are summarised in Table 4.10.

Table 4.10: Types of Seating Arrangements Used by Teachers

<table>
<thead>
<tr>
<th>Type of Seating Arrangement</th>
<th>Responses</th>
<th>Percentage (%)</th>
<th>Positively (%)</th>
<th>Negatively (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columns with inadequate space in between</td>
<td>68</td>
<td>54.4</td>
<td>2.4</td>
<td>52.0</td>
</tr>
<tr>
<td>Columns with adequate space in between</td>
<td>21</td>
<td>16.8</td>
<td>14.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Groups</td>
<td>36</td>
<td>28.8</td>
<td>23.2</td>
<td>5.6</td>
</tr>
<tr>
<td>Total</td>
<td>125</td>
<td>100.0</td>
<td>40.0</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Table 4.10 shows that the primary school teachers used different seating arrangements in their classes. All the teachers (100%) said that it influenced them but differently while assisting pupils with slow learning abilities. In particular, 54.4% said they used columns with inadequate space in between of which 52% said it influenced them negatively while only 2.4% said it influenced them positively. In case of teachers who said they used columns with adequate space in between and groups, the rating obtained was 16.8% and 28.8% respectively. However, for the teachers who used columns with space in between, 14.4% said it influenced them positively while only 2.4% said they were influenced negatively. Similarly, for those who used groups, 23.2% and 5.6% said it influenced them positively and negatively respectively. Generally, the results in Table 4.10 indicate that teachers said they were influenced more negatively than positively by the type of seating arrangement they used in their effort to assist pupils with slow learning abilities. This could be attributed to most classes being large in majority of the schools as shown in Figure 4.1. This implies that most
classes were overcrowded making it difficult for teachers to freely go round the class assisting pupils with slow learning abilities.

This was confirmed further by analysis done using the information gathered from observed lessons in relation to seating arrangements. The results are presented in Table 4.11.

**Table 4.11: Observed Classroom Seating Arrangements**

<table>
<thead>
<tr>
<th>Seating Arrangement</th>
<th>Total observations n=16</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individually</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>In pairs</td>
<td>1</td>
<td>6.25</td>
</tr>
<tr>
<td>In groups</td>
<td>4</td>
<td>25.00</td>
</tr>
<tr>
<td>Whole class</td>
<td>11</td>
<td>68.75</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Table 4.11 indicates that majority of the teachers (68.75%) commonly used whole class instructional approach where as 25% and 6.25% organised their pupils in groups and pairs respectively during the lessons. However, none of the teachers observed organised the pupils on individual basis type of seating arrangement. In the few lessons where groups were used, the groups were too large to allow for effective participation by all pupils in group activities.

Furthermore as indicated in Table 4.10, there was inadequate space in between the pupils’ desks in most classes for the teacher to go round the class assisting those with learning difficulties. This suggests that the teachers mainly used the lecture method as a teaching technique. In such a case pupils with slow learning abilities lacked the special attention they needed. Where as this is true from the observed lessons, other techniques such as question and answer were also used. However, the questions were mainly directed only to pupils who seemed quick to give the correct answers or seated at the front. It was only through responses
that the teacher would know those pupils who are slow in understanding what is being taught. Yet, such pupils went unnoticed in the teaching and learning process and were hardly given a chance to respond to questions asked by the teacher in the teaching and learning process.

This implies that teacher interventions are not only influenced by the number of pupils in class but also by the seating arrangement. Due to large class sizes and small classrooms, there is often overcrowding in classes. This makes it impossible for teachers to organise pupils individually as well as to organise for group activities in class. Thus, most teachers rarely gave individual attention to pupils as shown in Table 4.4. Therefore, the aspect of classroom size in relation to the number of pupils to be accommodated must be taken into consideration to ensure effective teacher interventions. This can be achieved by building more classrooms to accommodate the large number of pupils enrolled in public primary schools in the light of FPE. It is thus important for the government to set aside some fund for this purpose under FPE endeavour or Constituency Development Fund (CDF).

The study also considered the adequacy of space for activities in class in a bid to assist pupils with slow learning abilities during the lesson. This and other aspects observed in LOS are summarised in Table 4.12.

Table 4.12: Adequacy of Aspects Observed during the Lesson

<table>
<thead>
<tr>
<th>Aspect Observed</th>
<th>Very adequate</th>
<th>Adequate</th>
<th>Inadequate</th>
<th>Not there</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total observations = 16</td>
<td>f  %</td>
<td>f %</td>
<td>f %</td>
<td>f %</td>
</tr>
<tr>
<td>Time to assist pupils</td>
<td>0 0.00</td>
<td>0 0.00</td>
<td>16 100.00</td>
<td>0 0.00</td>
</tr>
<tr>
<td>Space for activities in class</td>
<td>0 0.00</td>
<td>0 0.00</td>
<td>14 87.50</td>
<td>2 12.50</td>
</tr>
<tr>
<td>Time to mark pupils books</td>
<td>0 0.00</td>
<td>0 0.00</td>
<td>12 75.00</td>
<td>4 25.00</td>
</tr>
<tr>
<td>Time for group work in class</td>
<td>0 0.00</td>
<td>1 6.25</td>
<td>5 31.25</td>
<td>10 62.50</td>
</tr>
</tbody>
</table>
Table 4.12 above shows there was inadequate space for class activities in majority of the lessons (87.5%) observed and in some cases (12.5%) the space was not available. The table also shows that time to assist pupils was inadequate in all the lessons (100%) observed. Similarly, time to mark pupils books as well as for group activities in class was also inadequate which was observed in 75% and 31.25% of the lessons respectively. In most of the lessons observed (62.5%), teachers did not plan for group work in class and only 6.25% did so. It was also noted that time to assist pupils especially those who seemed to have learning difficulties was inadequate in all the lessons observed (100%). This was an indication that teachers concentrated more on coverage of the syllabus rather than being sensitive to pupils’ learning needs. Such lack of learner-centred approach to teaching denied pupils with slow learning abilities opportunities to participate in the teaching and learning process. Consequently, they find it difficult to keep pace with their classmates and attain what is expected of them. Such failure by the teacher to device appropriate intervention strategies for such pupils despite being crucial may result to their low academic attainment. The relationship between teacher interventions and pupils’ academic attainment was beyond the scope of this study. However, teachers should be encouraged to be sensitive to learning needs of pupils with slow learning abilities. This would require concerted effort by all stakeholders to deal with the challenges facing teachers in a bid to assist pupils with slow learning abilities in the teaching and learning process.

4.3.3 Learning Resources and Teacher Interventions

Teaching and learning resources are important for effective teacher interventions in the teaching and learning of pupils with slow learning abilities. This is because they motivate these pupils to learn and also increase their retention capacity. However, resources must not
only be available but also adequate, suitable and well utilised to be effective in assisting pupils with slow learning abilities. Teachers were asked to state whether teaching and learning resources influenced them and in which way while assisting pupils with slow learning abilities. Their responses are presented in Table 4.13.

Table 4.13: Influence of Teaching and Learning Resources on Teacher Interventions

<table>
<thead>
<tr>
<th>Teachers’ Responses</th>
<th>Number of teachers</th>
<th>Percentage (%)</th>
<th>Ways in which teachers were influenced</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Availability (%)</td>
</tr>
<tr>
<td>YES</td>
<td>121</td>
<td>96.6</td>
<td>24.8</td>
</tr>
<tr>
<td>NO</td>
<td>4</td>
<td>3.2</td>
<td>N/A</td>
</tr>
<tr>
<td>Total</td>
<td>125</td>
<td>100.0</td>
<td>24.8</td>
</tr>
</tbody>
</table>

Table 4.13 shows that majority of the teachers (96.6%) agreed that teaching and learning resources influenced the success of the intervention strategies they used. In case of the ways by which they were influenced, they gave varied responses in which 24.8% pointed out availability, 32% mentioned adequacy, and 29.6% thought that the resources were unsuitable and only 13.6% attributed this to utilisation. The teachers’ responses indicate that adequacy of the teaching and learning resources is the key influencing factor followed by suitability. This is because of the large number of pupils per class as reflected in figure 4.1, hence inadequate facilities such as desks and textbooks. It is also due to the fact that though found in regular classrooms pupils with slow learning abilities require special help in the teaching and learning process to enable them unleash their full potential. This can be achieved by developing curriculum materials for such pupils by KIE while MOE supplies the materials to all schools in the light of FPE to enable the learners access the school curriculum.
While the teachers gave their views, results from observed lessons indicated that the textbooks were available in all the lessons observed. This and other learning and teaching resources observed are presented in table 4.14 below.

<table>
<thead>
<tr>
<th>Resource Materials</th>
<th>In class</th>
<th>How used</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YES (%)</td>
<td>NO (%)</td>
</tr>
<tr>
<td>Total observations=16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textbooks</td>
<td>100.0</td>
<td>0.00</td>
</tr>
<tr>
<td>Charts</td>
<td>62.50</td>
<td>37.50</td>
</tr>
<tr>
<td>Models</td>
<td>6.25</td>
<td>93.75</td>
</tr>
<tr>
<td>Teacher-made resources</td>
<td>0.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 4.14 above indicates that the textbooks were available in all the lessons observed (100%). However, it was noted that the textbooks were not enough in most of the classes observed and hence not effectively used in majority of the lessons observed (87.5%) but only used effectively in 12.5% of the lessons observed. This implies that pupils had to share the few textbooks available. This has an implication on the teaching and learning of pupils with slow learning abilities. Such pupils are unable to keep pace with their classmates. Therefore, for them to succeed in their class work, they require special attention by the teacher, personalised assistance, more practice and revision and also being given work suited to their potential. This cannot be achieved if resources commonly used by teachers such as textbooks are not enough. It was also noted that even though the charts were there in some of the lessons observed (62.5%), they were hardly utilised by teachers in the teaching and learning process. In particular, in majority of the lessons (90%) where the charts were in class, they were ineffectively utilised and only utilised in 10% of the cases.
As shown in table 4.14, it was observed that models and teacher-made resources were either not used or not there at all in class. Use of such teaching aids creates pupils’ interest and motivation. This is particularly important for pupils with slow learning abilities who require motivational techniques in order to sustain their attention as well as promote concentration (Brown, 1976). Additional teaching also helps in repetition and hence reinforces retention of knowledge and skills learnt. Therefore, for teachers to cater for the learners’ individual needs effectively, they should be encouraged to improvise learning materials where necessary so as to create a satisfactory learning environment for all pupils.

Remarks given by the head teachers from the sampled schools on whether or not their schools are adequately equipped to handle pupils with slow learning abilities, was that majority of the head teachers (80%) said they were not. Some of the reasons given were that the overcrowded classes made it difficult for the teachers to assist these learners and that they lacked enough funds to purchase relevant materials. However, a few head teachers (20%) indicated that they were adequately equipped, giving reasons such as having sufficient trained teachers and a special unit in the school. When asked to give their view on whether FPE has been helpful to teachers in relation to assisting pupils with slow learning abilities or not, 94% were in agreement while only 6% disagreed. The results of their responses are illustrated in a pie chart as shown in Figure 4.2
Those who agreed gave reasons like funds provided has helped to purchase some teaching and learning resources such as textbooks and increased number of organised seminars and workshops which have been sensitising teachers on inclusive education. But others who disagreed said that FPE has resulted to over enrolment making it difficult to give attention to those with special needs due to overcrowded and overstretched facilities. This means that even though FPE has been helpful in the endeavour to the realisation of EFA, it has also impacted negatively on the education of pupils with slow learning abilities. Thus, the need for expansion of school facilities, for instance building more classrooms so as to accommodate the large number of pupils entering public primary schools in the light of FPE. This coupled with employment of more teachers and especially those trained in Special Needs Education (SNE) will ensure that the educational needs of pupils with slow learning abilities are taken care of in the classroom teaching.
4.4 Pupil-related Factors

This section presents the analysis of data obtained from teachers’ questionnaires in relation to pupil-related factors that influence success of intervention strategies they use. The main factors that influence them while assisting those with slow learning abilities are discussed.

4.4.1 Pupil-related Factors and Teacher Interventions

Teachers were asked to state whether or not pupil-related factors influenced the success of intervention strategies they used to assist those with slow learning abilities and to give examples of such factors. Their responses are summarised in Figure 4.3 and Table 4.15.

Figure 4.3: Teachers’ Responses on the Influence of Pupil-related Factors

![Pie chart showing 96.8% yes and 3.2% no]

Figure 4.3 above shows that majority of the teachers (96.8%) were in agreement that pupil-related factors influenced the success of the interventions they used and only 3.2% disagreed with this statement. Some of the factors identified by the teachers are presented in Table 4.15.
Table 4.15: Pupil-related Factors Influencing Teacher Interventions

<table>
<thead>
<tr>
<th>Factors</th>
<th>Responses</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socio-economic background (Poverty)</td>
<td>74</td>
<td>59.2</td>
</tr>
<tr>
<td>Health</td>
<td>20</td>
<td>16.0</td>
</tr>
<tr>
<td>Abused Children</td>
<td>6</td>
<td>4.8</td>
</tr>
<tr>
<td>Broken homes</td>
<td>8</td>
<td>6.4</td>
</tr>
<tr>
<td>Language problem</td>
<td>5</td>
<td>4.0</td>
</tr>
<tr>
<td>Orphan hood</td>
<td>12</td>
<td>9.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>125</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 4.15 above indicates that among the factors given, socio-economic background was highlighted as the key factor by 59.2% of the teachers, while 16% mentioned health-related issues such as HIV-AIDS and the rest 4.8%, 6.4%, 4.0% and 9.6% reported factors such as abused children, broken homes, language problem and orphan hood respectively. Pupils from poor background or who are homeless for instance, lack basic needs such as food and shelter where as abused children, those from broken homes and orphaned may sometimes lack sense of belonging and also experience psychological trauma. Such pupils may lack concentration in the teaching and learning process. In other cases, absenteeism due to the influence of such factors as well as sickness may be common to the affected pupils. This implies that it was difficult for teachers to plan for intervention strategies for pupils with slow learning abilities in such circumstances.

The table further reveals that (9.6%) of the teachers identified language as a barrier to successful intervention strategies. Language used in teaching must be well comprehended by pupils to ensure effective communication between the learner and the teacher. But, as reflected in Table 4.3 page 43, pupils with slow learning abilities have deficiencies in basic
comprehension abilities. This can make them shy and may even fear to ask and answer questions in class. This explains why these pupils were not participating in the question and answer method used by the teacher in the teaching and learning process. However, the language skill could be developed through use of teaching strategies such as group activities, discussions and motivational techniques. But such techniques were rarely used by teachers in the teaching and learning process as reflected in Table 4.5 and Table 4.6. It thus requires teachers’ dedication despite the challenges they face while assisting such pupils in regular classrooms. This suggests that there is need to consider how to deal with these factors that may hinder effective teaching and learning if the goal of EFA is to be realised.

4.4.2 Pre-primary School Education and Teacher Interventions

Early childhood education is critical to early identification of pupils with slow learning abilities. This could enable teachers device appropriate intervention strategies so as to alleviate specific learning difficulties among pupils with slow learning abilities before complication. Analysis of the teachers’ view on the importance of pre-primary school educational background in relation to assisting pupils with slow learning abilities was done. The results are presented in Table 4.16.

<table>
<thead>
<tr>
<th>Teachers’ view</th>
<th>Responses</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very helpful</td>
<td>28</td>
<td>22.4</td>
</tr>
<tr>
<td>Helpful</td>
<td>71</td>
<td>56.8</td>
</tr>
<tr>
<td>Sometimes helpful</td>
<td>24</td>
<td>19.2</td>
</tr>
<tr>
<td>Unhelpful</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>125</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 4.16 above shows that majority of the teachers (56.8%) felt that pre-school educational background is helpful in assisting pupils with slow learning abilities. On the other hand only 1.6 % indicated that it was unhelpful, 22.4% viewed it as very helpful and 19.2% said it was sometimes helpful. While giving their comments on the challenges facing them while assisting these pupils, both the head teachers and teachers cited lack of early identification and intervention due to failure of such pupils to pass through pre-primary school level. The finding confirms observation made by UNESCO (2005) that enrolment in Early Childhood Development (ECD) centres have declined in the light of FPE. On this basis, pre-school education should be compulsory and free to all children before entry to primary school in the light of FPE. This way, pupils with slow learning abilities will be hopefully identified early enough and intervention strategies put in place accordingly. Such interventions make their learning difficulties less severe by the time they join primary schools.

4.5 General Comments given by Teachers on the Challenges they faced in the Teaching and Learning of Pupils with Slow Learning Abilities

Teachers were further asked to state some of the challenges they faced while assisting pupils with slow learning abilities in their classes. They also suggested possible solutions to the challenges. Their responses were grouped using thematic approach as shown in Table 4.17.
### Table 4.17: Challenges Faced by Teachers and Suggested Possible Solutions

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Number of teachers n=125</th>
<th>Percentage (%)</th>
<th>Suggested possible solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large number of pupils in class to handle</td>
<td>125</td>
<td>100.0</td>
<td>More teachers to be employed for an ideal teacher-pupil ratio</td>
</tr>
<tr>
<td>Lack of adequate and suitable teaching and learning materials</td>
<td>60</td>
<td>48.0</td>
<td>Head teacher to buy more and suitable resources using FPE funds</td>
</tr>
<tr>
<td>Overcrowded classes</td>
<td>40</td>
<td>32.0</td>
<td>More classrooms to be constructed</td>
</tr>
<tr>
<td>Lack of specialised skills</td>
<td>45</td>
<td>36.0</td>
<td>In-service teachers on special Needs Education</td>
</tr>
<tr>
<td>Absenteeism among pupils</td>
<td>58</td>
<td>46.4</td>
<td>Aim at poverty reduction and care of orphaned children</td>
</tr>
<tr>
<td>Syllabus too wide and demanding</td>
<td>83</td>
<td>66.4</td>
<td>Some topics to be removed from primary school syllabus</td>
</tr>
<tr>
<td>Curriculum exam oriented</td>
<td>76</td>
<td>60.8</td>
<td>Curriculum to be revised and be made pupil-centred</td>
</tr>
<tr>
<td>Lack of early identification and intervention</td>
<td>53</td>
<td>42.4</td>
<td>Pre-school education be free and compulsory</td>
</tr>
<tr>
<td>Language barrier</td>
<td>32</td>
<td>25.6</td>
<td>Encourage pupils to talk English right from home</td>
</tr>
<tr>
<td>Lack of time to assist due to heavy workload</td>
<td>92</td>
<td>73.6</td>
<td>Workload reduced to allow the teacher to give time to those with slow learning abilities</td>
</tr>
</tbody>
</table>

From table 4.17 above, all the teachers (100%) suggested that large numbers of pupils in class as well as lack of time to assist pupils due to heavy workload (73.6%) were the main challenges facing them while assisting pupils with slow learning abilities. However, 48% attributed this to lack of adequate learning resources, 32% to overcrowded classes, 36% to lack of specialised skills and 46.4% to absenteeism among pupils. While some 66.4% pointed out too wide and demanding syllabus, exam oriented curriculum (60.8%), lack of early identification and intervention (42.4%) and only 25.6% identified language barrier as a challenge to effective interventions. The finding supports the observations of other researchers in similar studies by Kamau, (2004); Mutua, (2005) and Odero, (2004).
The teachers went further to give possible solutions to these challenges as highlighted in table 4.17 above. In case of too wide syllabus and exam-oriented curriculum for instance, the teachers recommended that some topics be removed from the primary school syllabus and that curriculum be revised to become pupil-centred respectively. If there is too much content to be covered coupled with the intention of producing good mean grades in national exams, teachers are not likely to put effort in assisting those with slow learning abilities in their classes as they view it as a waste of time. It is thus important to revise the school curriculum to make it learner-centred as well as evaluation system by KNEC in a bid to allow successful integration of pupils with slow learning abilities in the teaching and learning process. This can be achieved by having a curriculum guideline that caters for pupils with slow learning abilities in classroom teaching. School based examinations can also be used to provide certification to such learners who are unable to sit for national examinations successfully.

Further analysis of the head teachers' general comments indicated that all the head teachers (100%) agreed that the class size due to high enrolment was the major challenge facing teachers in a bid to assist pupils with slow learning abilities. However, majority (94%) of the head teachers as indicated in Figure 4.2 mentioned that FPE has provided learning resources, for instance textbooks and therefore does not pose as a major challenge. Other challenges suggested by the head teachers not suggested by the teachers were: Lack of enough facilities, uncooperative parents and pupils from poor backgrounds who can hardly afford meals. However, they suggested possible solutions such as introduction of feeding programmes in schools under FPE. This implies that if appropriate intervention measures are put in place, teachers will successfully assist pupils with slow learning abilities in the teaching and learning process.
4.6 Summary

In this chapter, data collected through lesson observation schedules and questionnaires have been presented, analysed, interpreted and results discussed with reference to the research questions. The new finding was that majority of the teachers rarely give individual attention to pupils with slow learning abilities in the teaching and learning process due to prevailing factors that hinder them to do so. This may lead to low academic attainment by such pupils, hence learned helplessness and sometimes school drop-out.
CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction
This chapter presents a summary of the research findings, conclusions made in accordance with research results, recommendations for future implementations and suggestions for further research in this aspect of education.

5.1 Summary of the Research Findings
The study intended to establish the factors influencing teacher interventions in a bid to assist pupils with slow learning abilities in which *ex-post facto* research design was used. The study was carried out in Kasarani division, Nairobi and three sets of the instruments were used. These included:

- Questionnaires for head teachers
- Questionnaires for teachers and
- Lesson observation schedules.

The summary of the findings of this study based on the research questions are as follows:

5.1.1 Teachers' Background Information
Out of the eight head teachers who completed the questionnaires, seven were females and one was a male. There were also more female teachers than male teachers in the observation of lesson proceedings where the female teachers observed were 12 while the male teachers were only four. The same trend was reflected in the teachers’ questionnaires with 82.4% being females and 17.6% males. This is an indication that there are more females teachers posted to urban Public primary schools and particularly in Nairobi which was the focus of
this study. Transfer of most of these teachers to other areas by the TSC also becomes
difficulty because of their Spouses who may be working in Nairobi as well. For this reason,
the issue of Gender was not considered as a teacher-related factor influencing teacher
interventions in this study. However, a similar study can be carried out in a rural setting for
comparison purpose. From the questionnaires and lesson observations, it was noted that
majority of the teachers were P1 certificate holders followed by diploma teachers and the
least were graduate teachers. In the teachers’ questionnaires for instance, 62.4% of the
respondents were P1 certificate holders, 20.8% were diploma holders and 16.8% were
graduate teachers. While the lesson observations indicated that there were 12 teachers who
had P1 certificates, three with diploma certificates and one was a graduate. From all the
respondents, only 28.8% of the teachers had trained in special education while 71.2% did not
have special education training background. Generally, all the teachers involved in the study
had received some training but only very few had SNE background.

Teachers’ teaching experience as indicated by those observed in lesson proceedings ranged
from five years of teaching experience to 20 years. Five teachers had taught for less than five
years, four for 15 years and five for 16 years and above. Two teachers did not indicate their
years of experience. The respondents in the teachers’ questionnaires showed that the
majority, at 62.4%, had taught for years ranging between 11-20 years, followed by those who
had taught for over 20 years at 16.8%, 2-5 years at 5.6% and lastly teachers who had taught
for less than two years were only 3.2%. Therefore, all teachers in the study had a substantial
experience in the teaching profession. However, even though the teachers were experienced
enough to identify pupils with slow learning abilities, they hardly assisted them in the
teaching and learning process accordingly.
5.1.2 Teacher’s Views Concerning Characteristics of Pupils with Slow learning Abilities

The study also sought to find out the teachers’ views in relation to characteristics of pupils with slow learning abilities. The results indicate that all teachers (100%) were in agreement that there are pupils with slow learning abilities in their classes with 99.2% saying that they offer assistance to them. However, the effectiveness of this assistance was questionable. The head teachers shared the same view concerning the presence of such pupils in their schools. Teachers’ perception on pupils with slow learning abilities in their classes is such that they shared common views in relation to most of the characteristics of these pupils. However, the importance of identifying them in the teaching and learning process needed to be emphasized. Generally, the teachers acknowledged the importance of assisting pupils with slow learning abilities in their classes. However, assistance was rarely given to such pupils in the teaching and learning process in the lessons observed.

5.1.3 Interventions Strategies Used by Teachers

The study also sought to find out intervention strategies used by teachers to assist pupils with slow learning abilities. The results indicate that there was no significant difference in the techniques used by teachers to assist pupils with slow learning abilities. The findings of the study revealed that:

1. Although it is important to give individual attention to pupils with slow learning abilities during the lesson, most teachers did not effectively do this. Teachers did not actually use the intervention strategies they considered appropriate to assist these pupils in the teaching and learning process.
2. Teachers did not give opportunities to pupils with slow learning abilities to participate in class activities. It was found that majority of the teachers used whole class instructional approach to teaching. Though question and answer method was also widely used, teachers concentrated on the bright pupils to give the answers. Only few pupils who are bright and quick actively participated in answering questions posed by the teacher. In this case, pupils with slow learning abilities were left out rendering them passive participants in the teaching and learning process.

3. Majority of the teachers and head teachers suggested that they used remedial instruction after the lessons to assist pupils with slow learning abilities. This is whereby the pupils are taught and given extra work after the lesson. Thus, interventions such as group activities to ensure pupil-pupil interaction were hardly used in classroom teaching.

4. Special methods of teaching such as IEP and Computer technology were not used at all to assist pupils with slow learning abilities in all the schools involved in the study. Time for group work, to mark pupils’ books and to assist those with leaning difficulties during the lesson was limited in all the lessons observed.

5.1.4 Class Size and Teacher Interventions

The fourth research question intended to find out the relationship between intervention strategies used by teachers and number of pupils in class. The study established that:

1. All the teachers through the questionnaire indicated that the high number of pupils in class hindered them from being effective in assisting pupils with slow learning
abilities in their classes. Enrolment per class ranged between 50-80 pupils. In most of the cases, the teacher-pupil ratio was too high to allow for individual attention. Individualized instruction which is very important in assisting pupils with slow learning abilities was thus lacking in the schools studied.

2. The classes were overcrowded due to large number of pupils in the classrooms that were relatively small in size. In some cases, the desks were few and had to be shared by more pupils than it should. Hence, it was noted that teachers mainly used the lecture method to teach and rarely gave individual attention to pupils with slow learning abilities.

3. In the few lessons where the teacher attempted group activities, the groups were quite large and all pupils were not able to participate and especially those who lacked confidence and were shy. It was also difficult to come up with a seating arrangement that could allow for the teacher to go round the class. Such crowded classrooms hindered the teacher from assisting those with slow learning abilities.

4. Teachers were unable to mark all pupils’ books in class because of the large number of pupils. Hence, marking of supervised work was only for the few pupils who were able to complete their work in the course of the lesson thereby lifting up their hands in all the lessons observed. The teacher could not also go round the class checking the pupils’ progress on the class work due to the overcrowded classrooms.
5.1.5 Learning Resources and Teacher Interventions

The fifth question sought to establish the type of teaching-learning resources that influence the use of intervention strategies by teachers. The study revealed that:

1. The text-books were the most commonly used resources by the teachers in the teaching and learning process. The text books were used by pupils to do some exercises in class. However, the text-books available were few in most of the lessons observed and the pupils had to share. This encouraged copying of class work among pupils. Hence the teacher could not easily recognize those who had difficulties in doing the class work.

2. Generally, the teachers did not consider the use of teaching aids while preparing for their lessons. The few charts and models that were present in some classes were not utilized. The failure to incorporate such teaching aids in the teaching and learning process did not motivate pupils with slow learning abilities whose attention span is relatively short and therefore the need to arouse their interest in a bid to sustain their attention.

5.1.6 Pupil-related Factors and Teacher Interventions

The sixth question was to find out if factors associated with pupils influence the type and success of intervention strategies used by teachers. The study revealed the following:

1. Pupil-related factors influenced the way teachers assisted pupils with slow learning abilities. The common factor mentioned by the teachers was poor socio-economic background. Other factors mentioned included abused children, children from broken
homes, language problems and orphaned children. The teachers indicated that these factors made it difficult for pupils to respond effectively to interventions and sometimes to follow up their progress due to cases of absenteeism.

2. Lack of educational background because of failure to go through pre-primary school made it hard for teachers to intervene successfully. The finding indicate that majority of the teachers viewed this level of education as helpful and therefore necessary. This would hopefully help in early identification of pupils with slow learning abilities and hence appropriate interventions put in place early enough before the leaning problem become severe.

5.1.7 Other Findings

The study established the following other issues that were beyond the scope of this study. Out of the eight head teachers of the schools involved in the study, six of them were females and only two were males. All the schools involved in the study were established before the year 1991. The schools in the study had their classes ranging from two-streams to four streams, an enrolment of 970-1,635 pupils and a total of 182 teachers of which 160 were females and only 22 were males. Seven of the schools used single shift type while only one of the sampled schools used the double shift.

Among the challenges faced by teachers while assisting pupils with slow learning abilities, include the fact that some parents are uncooperative and thus there is hardly collaboration between the teachers and the parents in a bid to enhance the learning of pupils with slow learning abilities. On the other hand the teachers do not have enough time to pay individual
attention to pupils with slow learning abilities due to large number of pupils in class and heavy workload.

5.2 Conclusion

The study has identified some factors that influence teacher interventions for pupils with slow learning abilities in public primary schools. From the summary of the findings given in section 5.1, it can be concluded that teachers acknowledged the importance of assisting pupils with slow learning abilities. It was also observed that they were able to identify them in their classes because of their teaching experience. However, majority of them lacked SNE background thus skills and knowledge to effectively assist these pupils in the teaching and learning process. Moreover, teachers did not give individual attention to pupils with slow learning abilities in the teaching and learning process accordingly. Instead, remedial teaching was the main intervention strategy used by majority of the teachers to assist these pupils. This probably encouraged such pupils to be left out in the teaching and learning process because it was only done after the lessons. Such a situation is likely to result to low academic attainments by such pupils, thus, learned helplessness and sometimes school drop-out.

Lack of teacher interventions during the lesson could be attributed to prevailing factors related to teachers, pupils and the learning environment such as large class size, poor seating arrangements, suitability and adequacy of teaching-learning resources, poor educational background as well as socio-economic related factors which hindered teachers from successfully assisting these learners. Some of these factors influenced teacher interventions during the lesson proceedings, while others influenced them by consequential effects occurring either before or after the actual learning and teaching process.
It therefore emerged that personalized systems of instruction such as individual attention and IEP that cater for these learners’ needs are rarely used by teachers. This coupled with their learning characteristics which include limited cognitive ability, poor memory, relatively short attention span and inability to express ideas might have contributed a great deal to their low academic attainment and hence learned helplessness. Therefore, a concerted effort is needed to alleviate problems that hinder effective teacher interventions in a bid to assist these pupils in public primary schools. In particular, parents, teachers, school administration and the government should play a pro-active role in ensuring that appropriate measures are put in place in order to facilitate inclusion of these learners.

5.3 Recommendations of the Study

The study recommends that:

1. All head teachers and teachers should receive some training in Special Needs Education (SNE). This will enable them to gain insight into the needs of pupils with slow learning abilities. Thus, SNE should be incorporated into the teacher training colleges curriculum so that teachers can acquire vital skills and knowledge to enable them identify these pupils and device effective ways and means of assisting them in the teaching and learning process. Such training will ensure increased number of teachers in regular public primary schools who can handle increasing number of pupils with slow learning abilities.

2. Efforts should be made by the quality assurance and standard (QAS) division in the Ministry of Education (MOE) in organising for relevant in-service programmes for all teachers in public primary schools where they can be enlightened and sensitised on
the need to be sensitive to individual learners' needs in the teaching and learning process. There should be an effort to create awareness on the presence of pupils with slow learning abilities in public primary schools and establish appropriate intervention strategies for them. This will facilitate inclusion.

3. The KIE should revise the school curriculum to allow successful integration of pupils with slow learning abilities. For instance, establish a curriculum guideline for early childhood programmes and primary schools with special reference to pupils with slow learning abilities. This will enable these learners attain their optimum level of development and independent functioning to enable them fit into the nation’s work force. The SNE division at KIE should also develop curriculum materials for all areas of special needs education, pupils with slow learning abilities included. While MOE supplies relevant and adequate learning materials and resources to schools in the light of FPE to enable all learners access the school curriculum.

4. The school administration should emphasize on screening of pupils in their schools in order to identify those with slow learning abilities. This should be done on regular basis and the necessary support given.

5. The TSC should ensure that there is a specialised teacher trained in SNE in every public primary school to support children with slow learning abilities. In this case the Teachers Service Commission (TSC) should employ more teachers especially those trained in SNE who have graduated from the universities. There is also need to post those trained in SNE through distance learning and school based programmes to regular schools where there are pupils with slow learning abilities. This might ease
the need for SNE teachers in regular schools. The teacher should work in
collaboration with other teachers as well as parents of these pupils for successful
interventions of their learning difficulties.

6. The MOE should sponsor early childhood programmes in the light of FPE. Pre-
school education should be Free and compulsory to all children before entering class
one. This will encourage parents to take their children through pre-primary school
before joining standard one. This is likely to facilitate early identification of those
with slow learning abilities and thus early intervention before the learning problem
become severe.

7. KNEC should develop school based examinations to provide certification for learners
with slow learning abilities who may not be in a position to sit for the national
examinations successfully. This will hopefully reduce cases of school drop-out due to
low academic achievement in public primary schools.

8. In the present study, it was observed that most teachers did not involve pupils with
slow learning abilities during the lesson, which did not enhance their participation in
the teaching and learning process. In view of this, it is recommended that teachers
provide opportunities in class and support to pupils with slow learning abilities to
enable them participate in the teaching and learning process.

9. Teachers and parents should be encouraged to form associations which will enable
them to share information, to report on any problem experienced by children and
participate in decision making in the provision of special needs education to their children when necessary.

10. The MOE should emphasize on schools to have extra streams to accommodate high number of pupils being enrolled. This will reduce class size to a teacher-pupil ratio of 30-40 per class, hence allowing effective teacher-pupil interaction in a bid to assist pupils with slow learning abilities.

11. The MOE in conjunction with the relevant ministries should restructure the physical environment in all schools to accommodate all learners. For instance, building more classrooms using the constituency Development Fund. This will ease congestion such that the Seating arrangements allow free movement by the teacher in class so that he/she can give individual attention to all the pupils accordingly in the teaching and learning process.

12. The TSC should redistribute teachers where necessary to ensure that all schools get the right proportion of teachers in terms of gender, those trained in special education and in accordance to overall pupil enrolment following the already outlined Curriculum Based Establishment (CBE) rule.

13. Efforts should be made by the government to improve the living standard of the community in a bid to achieve EFA by the year 2015. In this case, issues like that of orphaned, abused and homeless children should be given priority to ensure that learning of pupils with slow learning abilities and in such circumstances, is not disrupted thereby reducing cases of school dropout.
5.4 Suggestions for Further Research

1. The study was carried out in urban setting and in public schools. Further research can be done in rural settings and among private schools so that informed generalisation of influence of prevailing factors on teacher interventions can be made.

2. The present study investigated on general intervention strategies used by teachers to assist pupils with slow learning abilities irrespective of specific learning difficulties. There is need for a study to be done to establish intervention strategies pertaining to specific skill areas such as reading, writing, speaking and mathematical calculation.

3. With improved technology, appropriate experiment can be undertaken to investigate the effectiveness of computer technology as an intervention strategy in teaching a particular subject with special reference to pupils with slow learning abilities.

4. Research can be done to establish the relationship between teacher interventions and academic attainment of pupils with slow learning abilities.

5. The study did not exhaustively deal with all the factors which influence teacher interventions; therefore, there is need for further research to investigate the influence of teachers' attitude towards pupils with slow learning abilities on the intervention strategies they use.
References


Children Act (2001). Published by Kenya Alliance for Advancement of Children. (KAACR) and action Aid-Kenya.


APPENDIX A: Teachers’ Questionnaire (TQ)

This questionnaire aims at getting your opinion in relation to the teaching and learning of pupils with slow learning abilities in Kasarani Division. The information you give will remain confidential and used only for its intended academic purpose. Kindly fill the questionnaire with honesty and individuality. Your identity will remain confidential and you need not write your name. The questionnaire is divided into three parts: Part 1 requires general information about yourself and your school. Part 2 requires information on what you think are the learning characteristics of pupils with slow learning abilities. Part 3 requires information about intervention strategies you use and the factors that influence you in the way you assist their learning.

Part 1: General information

Please indicate by writing or placing a tick where necessary in the spaces provided.

1. Gender? Male [ ]; female [ ]

2. Name of your school_________________________________________________________

3. Number of pupils in your class_________________________________________________ 

4. Highest professional qualification? PI Certificate [ ]; Diploma trained (DIP.ED) [ ]; Graduate trained (B.ED) [ ]; Others (specify)_____________________________

5. Are you trained in Special Education? YES [ ]; NO [ ]

6. Teaching experience in years: less than 2 [ ]; 2-5 [ ]; 6-10 [ ]; 11-20 [ ]; over 20 [ ]

Part 2: Your Views on Characteristics of pupils with slow learning abilities

7. Do you have pupils with slow learning abilities in your class? YES [ ]; NO [ ]

8. Do you assist them? YES [ ]; NO [ ]

9. The statements below are possible classroom “clues” for identifying pupils with slow learning abilities in your class. Please show by indicating against each statement the extent of your agreement using the following indicators: 1-Strongly Disagree (SD); 2-Disagree (D); 3-Unsure (U); 4-Agree (A); or 5-Strongly Agree (SA)
Pupils' characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pupils who do not finish exercise in class during most of the lessons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficult in paying attention or focus on an activity to completion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulties in remembering experiences and things learnt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequently exhibits reversals, inversions, or omissions in writing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulties in basic reading, writing and spelling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor in mathematical computation and reasoning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deficiencies in basic comprehension abilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pupils who seem unmotivated to learn</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>These pupils are shy and fear to ask or answer questions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deficiencies in basic study skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulties with organisation and poor handwriting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most of these pupils drop out of school before completing class 8 or keep on repeating classes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is enjoyable to assist these pupils in the teaching and learning process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>They are often the last ones in rank order at the end of the term exams</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Part 3: Intervention Strategies

10. The statements below show some intervention strategies used by teachers.

Indicate against each statement basing on how you assist pupils you perceive to have slow learning abilities, as either 1-Never (N); 2-Sometimes(S); or 3-Often (O)

<table>
<thead>
<tr>
<th>Teacher intervention</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attend to pupil's individual learning needs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Give extra lessons to pupils with slow learning abilities in various subjects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pupils with slow learning abilities are given work suited to their capabilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivate pupils with slow learning abilities by relating reading materials to their interest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use varied mode of presentation in the teaching and learning process</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Really try to get through to most pupils with difficulties in class work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure activities so that the students can see and hear in order to comprehend</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usually help pupils who are inattentive in class</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incorporate modelling in the teaching and learning process</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Give opportunities to pupils with slow learning abilities to participate in class activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encourage pupils with slow learning abilities to ask and answer questions during the teaching and learning process</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Give tasks that are sufficiently challenging to individual pupils</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Give more time to pupils with slow learning abilities to finish their exercises</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pupils with slow learning abilities from my class seek for additional assistance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organise for group activities to ensure pupil-pupil interaction</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Answer this part by ticking in the appropriate box or filling in the spaces provided.

11. Does the number of pupils in your class hinder you from being effective in assisting pupils with slow learning abilities? YES [ ]; NO [ ]

Suggest with a reason the suitable class size ____________________________

12. Which type of classroom seating arrangement do you use in your class? Columns with no space in between [ ]; Columns with space in between [ ]; Groups [ ]; Others (specify) ____________________________

Does it influence you in the way you assist pupils with slow learning abilities? YES [ ]; NO [ ]

In which way does it influence you? Negatively [ ]; Positively [ ]

13. Do teaching-learning resources influence the teaching and learning of pupils with slow learning abilities in your class? YES [ ]; NO [ ]

14. In which of the following ways do the teaching-learning resources affect the teaching and learning of pupils with slow learning abilities in your class? Availability [ ]; Adequacy [ ]; Suitability [ ]; Utilization [ ]

15. Do pupil-related factors influence the success of intervention strategies you use to assist pupils with slow learning abilities in your class? YES [ ]; NO [ ]

Give examples of such factors; Health [ ]; socio-economic background [ ]; Any other (specify) ______


17. Comment on the challenges you face and possible solutions in relation to the teaching and learning of pupils with slow learning abilities in your class ____________________________

Thank you for co-operation

Jane W. Kamunge

Researcher
APPENDIX B: Lesson Observation Schedule (LOS)
(To be filled by the researcher while observing the lessons proceedings)
The purpose of this instrument was to find out how teachers assist pupils with slow learning abilities during the lessons. It sought information regarding the learning environment and how it influenced intervention strategies used by teachers.

**General information about the teacher and the school**

Date: ______________________ School: ______________________
Class: _________________ No of pupils: ______________________

1. Teacher’s professional qualifications: ______________________
2. Teaching experience in years: ______________________
3. Gender: Male [ ]; Female [ ]

**Observation of Lesson Proceedings**

4. Does the teacher give attention to pupils with learning difficulties?
   1. Always [ ]; 2. Sometimes [ ]; 3. Rarely [ ]; 4. Very rarely [ ]

5. In which way does the teacher organise the pupils during the lesson proceedings?
   1. Individually [ ]; 2. In pairs [ ]; 3. In groups [ ]; 4. Whole class [ ]; 5. Others (specify) ______

6. How adequate are the following in relation to assisting pupils with slow learning abilities
   i. Time to assist pupils [ ]
   ii. Space for activities in class [ ]
   iii. Time to mark pupils’ books [ ]
   iv. Time for group work in class [ ]

7. Which of the following resource materials are in class and how are they used in assisting pupils with slow learning abilities

<table>
<thead>
<tr>
<th>Resource materials</th>
<th>In Class</th>
<th>How Used</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YES</td>
<td>effectively</td>
<td>ineffectively</td>
</tr>
<tr>
<td>T/Books</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Charts</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Models</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Teacher-made resources</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

8. Any other classroom observation made (Specify) ______________________
APPENDIX C: Head Teachers' Questionnaire (HTQ)

We are interested in your views about the challenges you face at your school in relation to assisting of pupils with slow learning abilities. The information you give will remain confidential and used only for the intended academic purpose. Please answer the questions as honestly as possible. The first part requires you to give some personal and general information. The second part requires your views on intervention strategies used by teachers in your school. Answer both sections by either ticking in the appropriate box or filling in the spaces provided.

**Part 1: Personal and general information**

1. Name of the school

2. District: ___________ Division ___________ Zone ___________

3. Gender: Male [ ]; Female [ ]

4. Year when the school was established: _________________

5. School location: ___________________________________________

6. Type of school shifts: single shift [ ]; double shift [ ]

7. Number of streams by class

<table>
<thead>
<tr>
<th>Class</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streams</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Number of teachers as of January 2008

Male: ________ Female: ________ Total: ________________


<table>
<thead>
<tr>
<th>Class</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Number of pupils repeating a grade this school year

<table>
<thead>
<tr>
<th>Class</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What is the possible cause of this repetition? 

11. Number of pupils dropped out of school this year.

<table>
<thead>
<tr>
<th>Class</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What is the possible cause of the above dropout? 

**Part 2: Your Views on Intervention Strategies used by teachers in your School**

12. Are there pupils with slow learning abilities in your school? YES [ ]; NO [ ]

13. If yes, in which ways do teachers assist such pupils in your school? 1. Individual attention [ ]
   2. Remedial instruction after lessons [ ]
   3. Peer tutoring [ ]
   4. Computer technology [ ]
   5. IEP [ ]

6. Others (Specify) 

14. Is your school adequately equipped to handle pupils with slow learning abilities? YES [ ]; NO [ ]

15. Give reasons to your answer given in (14) above 

16. In your own view has Free Primary Education (FPE) been helpful to teachers in relation to assisting pupils with slow learning abilities? YES [ ] NO [ ]

17. Give reasons to the answer given in (16) above 

18. Comment on the challenges you face and possible solutions in relation to the teaching and learning of pupils with slow learning abilities in your school 

Thank you for co-operation

Jane W. Kamunge

Researcher
APPENDIX D: Public Primary Schools in Kasarani Division

<table>
<thead>
<tr>
<th>Ruaraka Zone</th>
<th>Kahawa Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Baba Dogo</td>
<td>1. Garden estate</td>
</tr>
<tr>
<td>2. Daniel Comboni</td>
<td>2. Githurai*</td>
</tr>
<tr>
<td>3. Drive in*</td>
<td>3. Kahawa</td>
</tr>
<tr>
<td>5. Kariobangi North</td>
<td>5. Kamiti</td>
</tr>
<tr>
<td>6. Mathare 4A</td>
<td>6. Kasarani*</td>
</tr>
<tr>
<td>7. Mathare North</td>
<td>7. Kenyatta university*</td>
</tr>
<tr>
<td>8. Marura*</td>
<td>8. Kiwanja</td>
</tr>
<tr>
<td>10. M.M. Chandaria</td>
<td>10. Marurui</td>
</tr>
<tr>
<td>12. Thika Road*</td>
<td>12. Njathaini</td>
</tr>
<tr>
<td></td>
<td>13. Roysambu*</td>
</tr>
</tbody>
</table>

Key*--------- Sampled Schools