

**ANALYSIS OF INSTRUCTIONAL STRATEGIES ENHANCING
ACADEMIC PERFORMANCE AMONG LEARNERS WITH
EMOTIONAL AND BEHAVIOUR DISORDERS IN PRIMARY
SCHOOLS, KANDARA SUB-COUNTY, MURANG'A COUNTY,
KENYA**

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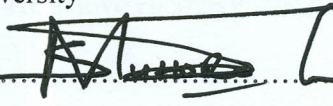
**A RESEARCH THESIS SUBMITTED IN PARTIAL FULFILLMENT
FOR THE DEGREE OF MASTER OF EDUCATION (SPECIAL
NEEDS EDUCATION) IN THE SCHOOL OF EDUCATION OF
KENYATTA UNIVERSITY**

OCTOBER, 2015

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other University

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DEDICATION

I dedicate this thesis to my wife and children from whom I am forever indebted. Their love encouragement and support was a great inspiration.

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I am grateful to the Almighty God for His grace and providence that has enabled me to come this far. My sincere appreciation goes to my family and friends for their encouragement and support.

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ABBREVIATION AND ACRONYMS

CBM	-	Curriculum-based measurements
CWPT	-	Class-wide peer tutoring
EBD	-	Emotional and Behavioural Disorders
IDEA	-	Individual with disability education Act
IEP	-	Individual Education Plan
KICD	-	Kenya Institute of Curriculum Development
KISE	-	Kenya Institute of Special Education
KU	-	Kenyatta University
LRC	-	Learning in Regular classroom
MDG	-	Millennium Development Goal
MHRD	-	Ministry of Human Resources Development
MoEST	-	Ministry of Education Science and Technology
SNE	-	Special Needs Education
SRSD	-	Self-Regulated Strategy Development
SWD	-	Students with Disabilities

ABSTRACT

The study sought to make an inquiry of instructional strategies used by teachers to enhance academic performance among learners with EBD in primary schools, Kandara Sub-county, Kenya. A descriptive survey design was used for the study in regular primary schools in Kandara Sub-county Kenya. The target population included the head teachers, Teacher counsellors and class six teachers. The sample size constituted 15 headteachers 15 teachers counsellors, 15 class teachers to make a total of 45 subjects from the target population of 266 persons. Interview guide, questionnaire and a checklist were used to collect data from the subjects. Observation schedules were also used to establish teaching and learning resources that teachers used. Pilot study was done in Ngurwe-ini Primary school to help determine validity and reliability of the instruments. Data were analyzed using description statistics where the mean, standard deviation, percentages and frequency distribution were used to describe the variables using the statistical package for social sciences (SPSS) version 21. The study findings revealed that; instructional strategies enhanced learning. Also, behavior characteristics hinder learning among learners with EBD. Majority of the teachers interviewed had O-Level certificate as their highest academic level, few had diploma and degrees. Most schools use textbooks as a major resource and ICT has not been integrated. The study recommended that schools should embrace use of ICT as an instructional strategy when teaching learners with EBD.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter presents the background to the study, statement of the problem, purpose, objectives and the research questions, significance of the study, limitations and delimitations, assumptions of the study, the conceptual framework and finally the definition of operational terms.

1.1 Background to the Study

The nation mental health and special education proposed definition of the term emotional or behavioral disorder to mean a disability characterized by behavioral or emotional responses in school so different from appropriate age, cultural, or ethnic norms that they adversely affect education performance. Education performance includes academic, social, vocational and personal skills.

The definition of EBD used in the individual with disabilities Act (IDEA) is used almost exclusively in school settings, primarily with the field of Special Education. Using the criteria for IDEA, about 2% of student population would meet the criteria for EBD. According to Kauffman (2001), learners included within 2% are primarily those who have trouble following directions, are oppositional, and who become aggressive towards others. Within the special education system, about 1% of the total student population is identified as having an EBD and in need of specialized services (US Department of Education, 2007).

According to Heward (2013), Nelson (2004); Kauffman (2001), possible causes of emotional disturbance and behavioral disorders include; biological factors such

as genetics, brain damage or dysfunction and allergies, temperaments, or physical illness family factors such as the family definition and structure, family influences on school success and failure, external pressure affecting families; school factors, such as deficiencies in the ability of the school personnel to accommodate learners variable intelligence academic achievement and social skills.

Credible studies in the United States and many other countries have consistently indicated that at least 6 to 10 % children and youth of school-age exhibit serious and persistent emotional or behavioral problems (Kauffman & Landrum, 2009). Students with emotional disabilities in USA by 2007 comprised 7.4% of the total school-age population of students with disabilities (US Department of Education, 2007).

In India by the year 2002 there were 41,875 regular schools benefiting more than 1,330,000 children with EBD in 27 states and four union territories (Government of India, Ministry of Human Resources Development, MHRD, 2003). Currently, the number of learners with EBD enrolled in regular schools is more than 5,600,000 that represents 26% of learners receiving formal education in regular schools.

In China currently the use of learning in the regular classroom (LRC), movement that gained popularities in 1990s, (Ellsworth & Zhang, 2007) has made approximately 67% of all students with identified EBD to be placed in general education classrooms of public schools (Deng & Harris, 2008).

In the African context, for example, special needs education in South Africa is a sector where the ravages of apartheid are most evident. In 1996 the South African Ministry of Education appointed the National Commission on Special Needs on education support services to investigate and make recommendation on all special needs and support in education and training (Education White Paper No. 6 in South Africa). Statistics show that only 64,200 learners with disabilities or impairment were accommodated in about 380 special schools (Department of Education, Republic of South Africa).

In Kenya the Ministry of Education commissioned the special education task force to investigate the challenges facing individuals with special needs and to make recommendation. These findings published in 2003, reported that learners with EBD are usually educated in rehabilitation centres. The centres are not well structured to maximize their potential (Kochung, 2003). This is unfair given the rate of academic failure experienced by these students. Academic achievement may serve as a critical protective or preventive factor for students with EBD. Numerous scholars have noted that academic instruction should be the first line of defense in dealing with amelioration and treatment of EBD. This study therefore, attempts to find out instructional strategies that teachers use to enhance academic performance among primary school learners with EBD in Kandara District, Murang'a County, Kenya.

1.2 Statement of the Problem

According to Kauffman and Landrum (2009), lack of effective instruction contributes to poor academic and behavior. Consequent to the policy on full inclusion, learners with EBD have been placed in the general education

classrooms, with varying levels of support by trained specialists. Arguably, students with EBD are not well served by educators who are not trained in or do not receive adequate technical assistance to implement effective classroom and behavioral management strategies. The rate of school failure, suspension, expulsion and dropout by learners with EBD are a grim testimony to the ineffective instructional strategies. In the Kenyan context, no empirical research studies have been conducted on instructional strategies enhancing academic performance in Kandara Sub-county. Ineffective instructional strategies may not result to higher academic achievement and improved behavior.

SNE teachers in Kenya are trained at Kenya Institute of Special Education (KISE), Kenyatta and Maseno Universities among others (SNE Policy, 2009). The institutions equip teachers with the necessary skills and competencies to enable them teach learners with EBD among other disabilities. However, Gargiulo (2009) noted that students with EBD may not benefit from certain strategies. Learners identified as EBD are among those most difficult to teach and the least likeable in educational setting. There has been high prevalence of learners with EBD and low academic performance in Kandara District. In light of the above, the proposed study seeks to investigate the instructional strategies that teachers use to enhance academic performance of learners with EBD in primary school in Kandara sub-county, Kenya.

1.3 The purpose of the Study

The purpose of the study was to analyze the instructional strategies enhancing academic performance among learners with EBD in primary schools, Kandara Sub-county, Murang'a County, Kenya.

1.4 Objectives of the Study

The objectives of the study sought to:

- a) Determine the instructional strategies being used by teachers in teaching learners with EBD in Primary Schools in Kandara Sub-county, Kenya.
- b) Determine the behavioral characteristics that hinder learning among learners with EBD in primary schools in Kandara Sub-County, Kenya.
- c) Investigate the impact of instructional strategies used by teachers for improving academic performance of learners with EBD in primary schools in Kandara Sub-County, Kenya.
- d) Find out the availability of teaching and learning resources used by teachers in teaching learners with EBD in primary schools in Kandara Sub-County, Kenya.

1.4 Research Questions

The following are the research questions:

- a) What are the instructional strategies used by teachers in teaching learners with EBD in primary schools in Kandara Sub-county, Kenya?
- b) What are the behavioral characteristics that hinder learning among learners with EBD in primary schools in Kandara Sub-County, Kenya?
- c) What are the preferred instructional strategies used by teachers when teaching learners with EBD in primary schools in Kandara Sub-county, Kenya?
- d) What are the teaching and learning resources available for use by teachers in teaching learners with EBD in primary schools in Kandara Sub-county, Kenya?

1.6 Significance of the Study

The findings from this study may enhance quality education in the sense that teachers may use the gaps identified to improve their teaching strategies. The Ministry of Education through the Council of Quality Assurance And Standards may also carry out capacity building seminars for teachers on the basis of findings of this study, hence, improving the standard of education in Kandara Sub-County.

The research findings may further give important feedback to curriculum developers in KICD and Education Planners in MoE during curriculum review for learners with EBD. Indeed, the outcome should enhance the teaching of learners with EBD in Kandara Sub-county. Precisely, the findings will contribute to relevant literature and knowledge on instructional strategies enhancing academic performance among learners with EBD in Kandara Sub-County, Kenya.

1.7 Limitations and Delimitations of the Study

1.7.1 Limitations

Financial constrains did not allow the researcher to select a larger sample of detailed study. Besides, the study was confined to instructional strategies that the researcher deemed applicable and relevant to the study. The study was also limited to findings within public primary schools.

1.7.2 Delimitation

The study was carried out in Kandara Sub-county of Murang'a County. This therefore did not allow for wider generalization of the findings to cover the whole county or all Kenyan primary schools.

1.8 Assumptions of the Study

The basic assumptions to this study included; schools selected to have learners with EBD and the school heads are aware of learners with EBD in their schools. It was also the assumption of the researcher that instructional strategies influence behaviour of learners and teachers would be honest in responding to research questions.

1.9 Theoretical and Conceptual Framework

1.9.1 Theoretical Framework

The study was guided by Bloom's Taxonomy Theory. In 1956, Benjamin Bloom of the University of Chicago introduced a taxonomy theory i.e. classification system which many educators today consider a valuable tool for guiding instructions and evaluating learners. It refers to a classification of different objectives that educators set for learners (learning objectives). These objectives are divided into three domains; cognitive, affective and psychomotor. He asserts that the major purpose of constructing the taxonomy in education is to facilitate instruction thus, improving the exchange of ideas and materials to the learner. This influences the academic outcome.

The implication of this theory to the study is that teachers using the recommended instructional strategies in teaching learners with EBD would facilitate the holistic development of these learners i.e. intellectual, psychomotor and attitudinal or affective growth. Teachers would have therefore played a key role in ensuring that the learners with EBD receive quality education (academic performance) as a basic human right, according to the Kenya Constitution (2010).

1.9.2 Conceptual Framework

The intent of this study is to enquire the extent to which teachers use selected instructional strategies to achieve expected academic objectives when teaching learners with EBD. A conceptual framework is based on Blooms taxonomy theory (1956) that focuses on the domains of learning. An application of proper instructional strategy leads to effective teaching and therefore, the educator achieves the intended objective (holistic growth).



Figure 1.11 EBD Instructional Strategies and Academic Objectives
Source: Formulated by the researcher. This research is based on the work of Bloom's (1956) theory

Conceptual Framework

Independent variable

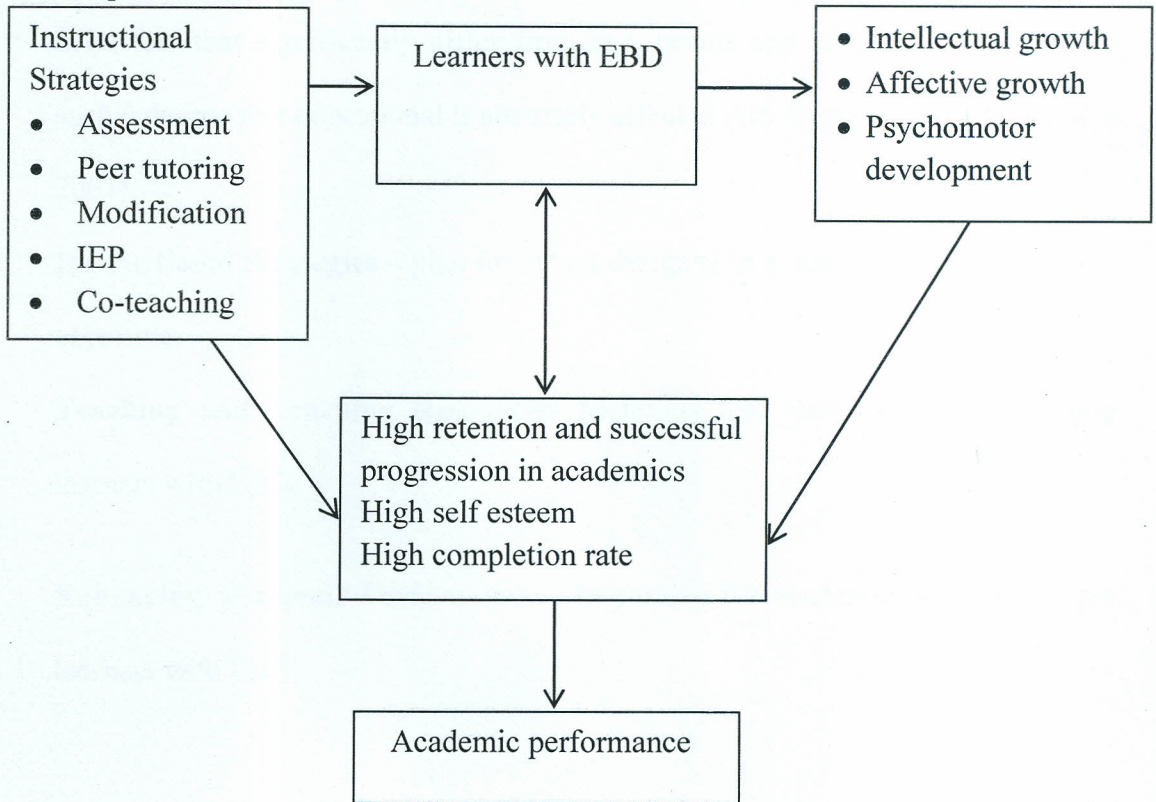


Figure 1.1: Effective Instructional Strategies among learners with EBD

Source: Formulated by the researcher with guidance from supervisors on

the basis of Bloom's (1956) Theory

1.10 Definition of Operational Terms

Emotional and behaviour disorder – A chronic condition characterized by behaviors that significantly differ from age, norms and community standard to such a degree that educational is adversely affected (US Department of Education, 2007).

Instructional Strategies – plan for action designed to achieve a particular goal or objective.

Teaching and Learning Resources- Materials that teachers use in teaching learners with EBD.

Enhancing Academic Performance – Improving the academic outcomes of the learners with EBD.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews the related literature focusing on the objectives of the study. It is divided into the following main sections: instructional strategies enhancing performance of learners with EBD, characteristics of learners with EBD, preferred instructional strategies used by teachers in teaching learners with EBD and resources for teaching learners with EBD.

2.1 Instructional Strategies that Enhance Academic Performance of Learners with EBD

The most effective therapy teachers can offer EBD learners is to make them academically successful and feel as part of a well behaved school. Learners with EBD generally do seem to find learning of any kind very difficult due to their behavior characteristics and perception of their teachers (Kauffman, 2001).

Further, Gargiulo (2009), states that, positive behavior support includes providing effective academic and instruction to learners with EBD. According to Zhang (2007), educators must adapt instruction to help scaffold learners regardless of challenges or abilities to meet requirements and acquire higher levels of skills. He also asserts that high stakes of testing for all learners increases the sense of urgency to integrate instructional practices. This enhances adequate yearly progress; reduce dropout rates and guarantee graduation rate. A number of strategies have been proposed by many scholars to enhance success of learners with EBD. They include the following:

2.1.1 Assessment

Assessment in special education can be defined as a systematic process of gathering relevant information for the purpose of making well-informed decisions (Mukuria & Obiakor, 2004). According to Kauffman (2007) learners with EBD often have difficulty with academic tasks and fail to make adequate progress in school. On going assessment for these students should be implemented to ensure that they are making sufficient progress toward goals and to plan instruction. The assessment of children and youth with EBD must include a variety of methods or instruments such as rating scales, interviews, observation and variety of source form information (Gargiulo, 2009).

Diperna (2006) states that ongoing assessment programs for learners with EBD influences academic learning. In order to provide effective reading instruction, assessment is an essential first step (Vaugh, Bos and Schum, 2009) states that “when we assess students, we are unable to determine what they know and need to know. This information allows us to design instruction that is targeted to the needs of the student”. In this study, the researcher sought to find out whether teachers use assessment as an instructional strategy while teaching learners with EBD.

2.1.2 Peer Tutoring

The power of the peer group can be an effective means of productive positive academic outcomes in learners with EBD (Heward, 2013). Peer tutoring has been used successfully to enhance learning. Class-wide peer tutoring (CWPT) is universal evidence based instruction process documented as effective for students with and without disabilities. CWPT consists of “students who are taught by peers

who are trained and supervised by classroom teachers” (Maheady, Harper & Marrette, 2003).

Peer assisted learning strategy (PALS), another form of peer tutoring, based on research proven is best practiced in reading, such as phonological awareness, decoding and comprehension strategies as asserted by Fuchs and Fuchs, (2005). The researcher sought to establish whether peer tutoring enhances learning among learners with EBD in Kandara Sub-County.

2.1.3 Instructional Modifications

Kern, Alexandra and Gresham (2004) assert that that instructional modification refers to methods for differentiating instruction to meet individual learners’ needs. To deter behavioural issues, it is important to focus on modifying the content; teachers’ behaviour; and delivery systems. Instructional adaptations coupled with modification of the learning environment are powerful tools that can help the pupil sustain attention while cultivating a climate that fosters in earning and encourages the child to control his or her behaviour (Mills, 2007). In this study, the researcher sought to find out whether instructional modification strategies were being used to enhance learning among learners with EBD.

2.1.4 Self – Regulated Strategy Development (SRSD)

The self-regulated strategy development (SRSD) model provides an instructional approach designed to improve learners’ strategic behavior, knowledge and motivation. SRSD instruction addresses three major goals. Heward (2013) asserts that, first learners learn to carry out specific composing processes (e.g. planning, drafting, etc). Second, learners develop the knowledge and self-regulatory

procedures (e.g. goal setting, self-monitoring, self-instruction, self-reinforcement) needed to apply the writing strategies and regulate their behavior during writing. Finally, SRCD is designed to enhance specific aspects of motivation, including self-efficacy and effort. SRCD has proven to be versatile tool for improving academic performance (Gargiulo, 2009). The SRCD lessons include six instructional stages for strategy acquisition. Specific strategies included in the SRSD lessons are: helping learners to acquire pre-skills, discussing the strategy, memorizing the strategy, using guided practice and using independent practice (Linda & James, 2008). Specific self-regulation techniques for self-regulation success include; individual speech, self-talk, setting personal goals for strategy acquisition, self monitoring performance and self-reinforcing (Linda & James, 2008).

2.1.5 Mnemonic Strategies

According to Kauffman (2001), mnemonic refers to any memory enhancing strategy. Learners with EBD have difficulties in remembering information. Mnemonic strategies are tools for helping learners recall facts and relationships. Mnemonics have been found to be extremely good in promoting academic achievement among learners with disabilities including those with emotional or behavioural disorders (Gargiulo, 2009). Types on mnemonic strategies include, key word method, constructive elaborations and letter strategies which include both acronyms and acrostics mnemonics involve using pictures and or words to help remember information (Wagner & Davis, 2006). In this study, the researcher intended to find out whether mnemonic strategies are used to enhance learning among learners with EBD.

2.1.6 Content Enhancement

Researchers have found that enhancing the content can help learners with EBD (Kauffman, 2001). This makes modification of curriculum materials more salient and prominent (Heward, 2013). Content enhancement includes graphic organizers, content diagrams, semantic maps, advance organizers, guided notes and study guides (Gargiulo, 2009). Further, Scruggs and Mastropieri (2007) asserts that content enhancement helps learners understand major concepts, ideas and vocabulary in a manner that is conducive to knowledge acquisition, organization, and retrieval. In this study, the researcher sought to find out whether content enhancement is used to enhance learning among learners with EBD.

2.1.7 Curriculum-based measurements (CBM)

Fuchs and Fuchs (2005) suggest that CBM is an appropriate method of monitoring the progress of learners with disabilities who are participation in the general education curriculum.

CBM is a standardized set of observational procedures for repeatedly measuring growth in core reading, writing and arithmetic skills. By incorporating CBM a teacher can ensure there is a close match between the content being presented and the level of learner's achievement (Gargiulo, 2009). The study sought to find out whether teacher use CBM as an instructional strategy to enhance learning among learners with EBD in Kandara Sub-County.

2.1.8 Individualized Instructional Programme (IEP)

Research studies in the area of special needs have suggested that the most effective strategy to meet educational needs for learners with disability is

formulated through IEP (Macfadyen, 2007 & Ndurumo, 1993). Special educators require formulating and implementing the IEP to allow each learner an opportunity to learn at his or her own pace. To ensure learners with EBD are being met and addressed Heward (2013) suggests that teachers continually monitor each learner's progress towards meeting his/her goals as set in the IEP.

2.1.9 Co-Teaching

Co-teaching generally refers to any arrangement in which a special education and general education teacher work together in the same physical environment to provide instruction to a group that includes students with and without disabilities (Scruggs & Mastropieri, 2007). Further, Friend and Cook, (2007) states that a number of co-teaching models have been identified to include: a) one teach, one assist, b) Station teaching, c) Parallel model, d) Alternative teaching model and e) Team teaching model. According to Basso and MacCoy (2007), benefits of co-teaching might include: a) more students enthusiasm and involvement; (b) increased individualized instructions; c) increased opportunity for teacher to meet needs of all students; and d) student held more responsible and ability to use a variety of teaching styles and instructional strategies. The researcher sought to find out if co-teaching is in use in order to assist learners with EBD.

2.1.11 Information Communication Technology (ICT)

Gail, Kevin & Katherine (2008) states that, learners with EBD can benefit considerably from the use of ICT. It provides a non-threatening environment in which to achieve success. For many, using computers presents a calm setting in which they are controlling the pace and level of task. Learners often find computers inherently reinforcing, and educators and families can capitalize on

this by incorporating the use of computers into their intervention plans (Gargiulo, 2009).

Daniel, Gulchak Arizon State University conducted a study of using a mobile hand held computer teach a learners with EBD to self-monitor attention. Recent development in mobile and had held computing provide an alternative to paper-based recording of behavioral performance. Collecting data with handhelds enable learners electronically record their behavior or performance and digitally transfer this data to teachers, spreadsheets and graphs. This form of computing has several advantages over paper and pencil recoding methods. Thus the study intended to investigate whether ICT was being use to enhance learning among learners with EBD in Kandara Sub-County.

2.2 Behavioural Characteristics of Students with EBD

Researches have identified two broad pervasive dimensions of disordered behaviours; externalizing behaviours which involves striking out against others; and internalizing behaviour which involves mental and emotional conflicts, such as depression and anxiety (Kern, Alexandra & Gresham, 2004). Some learners with EBD are abusive, irritable, destructive, bossy, quarrelsome, jealous, defiant – anything but unpleasant. Compared to the normal distribution of intelligence, more learners with EBD fall into the range of slow learners and mild intellectual disability (Kauffman & Landrum, 2009).

Wagner and Davis (2006) states that students with EBD fair much worse than average in terms of grades, grade retention, high school graduation rates, dropouts and absenteeism. These students are less likely to pass classes and experience

higher rates of school dropout than typical students and students with other high incidence disabilities (Wagner & Cometo, 2004).

2.3 Materials for Instructing Learners with EBD

Selected resources can enhance or alter students learning. A student identified with EBD will have an IEP. The modifications and accommodations provided on the students IEP include adapting the length and type of a paper, pencil and using assistive technology. Resources commonly used by teachers include consumable materials, basal readers, textbooks and or programmatic materials and corrective reading items (Englemann, 1999). Instructional materials are an important of learning process. If teachers provide materials and add interest to the lesson, this can help to reinforce learning. The study sought to find out the teaching learning materials used by teachers in teaching learners with EBD in Kandara Sub-County.

2.4 Related Studies on Teaching Learners with EBD

A multi-case study of teachers of students with learners with emotional and behavioral disorders and literacy instructions. Teachers views and practices- was done by Braun (2012) in University of North Florida USA. The study explored two teachers, beliefs and literacy instruction in self-contained classrooms with adolescent identified with EBD. Qualitative analysis was used to investigate the literacy instructional activities the two teachers used and those teachers' beliefs and rationales for using those activities. Strategies used included discussions around class reading, social interaction, contextualized text and self contained classrooms. The study explored views of two teachers' literacy instruction with adolescents with EBD in Self contained rooms. However, its findings may not be generalized as it pays less attention to children with EBD in other settings other

than adolescents in self contained classroom. The current study therefore intended to fill the gap by investigating on instructional strategies enhancing academic performance among learners with EBD in general education classrooms.

Sutherland and Snyder (2007) did a study on effects on reciprocal peer tutoring and self-graphing on reading fluency and classroom behavior of middle school students with EBD. Four out of eight middle school students with EBD participated in this research. The setting for this study was a self contained classroom for students with EBD in a middle school in a medium-size South Eastern US city.

Kardin (2008) conducted a multiple baseline on instructional strategies among learners with EBD. A descriptive survey was used where reciprocal peer tutoring and self-graphing in self contained classrooms in South Carolina University. The limitation of this study was that it examined only two strategies in self contained classrooms. The findings may not be generalized to general education classes. Thus, the urgency to investigate the instructional strategies enhancing academic performance of learners with EBD in general education classrooms in primary schools.

West (2010) in University of North Florida (USA) conducted a study on strategies for use in teaching emotionally disturbed deaf children. It focused on strategies such as programmed instruction, positive reinforcement, social – emotional strategies which include conflict resolution training, use of visual oral feedback and self managing behaviour. The study focused on deaf learners with EBD. The finding of this study may not be generalized to the all learners with EBD. This

creates the need to carry out a study to establish instructional strategies enhancing academic performance among learners with EBD.

Mills (2007) did a study in USA on the role of student teacher relationships in promoting achievement for students with severe emotional and behavioural disorders. This was an instrumental case study which focused on one school, Hill Middle School, an alternative public school serving seventh and eighth grades with severe EBD. Data were obtained through three in depth, semi-structured interviews with teachers and a counselor at Hill Middle school. The study used qualitative research design. Three teachers were selected for the study. In-depth, semi-structured interviews were used. Three participants would not provide enough information to fully understand the role that student- Teacher relationships play in promoting behavioural improvement and academic achievement for students with EBD. The implication here is that further research be done to identify effective instructional strategies by use of establishing instructional strategies.

Further, the study dealt on the role of student teacher relationship in promoting achievement for students with severs EBD and not instruction strategies enhancing academic performance and all categories of learners with EBD. The current study thus intends to establish instructional strategies enhancing academic achievement of learners with EBD.

Mwangi, (2009) examined the effectiveness of special education teachers use selected instructional strategies in teaching learners with Mental Retardation. The strategies used included assessment, IEP, peer tutoring and content modification.

The locale was 22 special units in Nairobi, Kenya. The sample size was 86 (75%) of the 115 special education teachers. The study adapted descriptive design which used questionnaires as research instruments. However, the study was on mental retardation but not on EBD. Thus, its findings cannot be generalized on learners with EBD. In the view of this, the current study seeks to fill the gap of establishing the instructional strategies enhancing academic performance among learners with EBD.

2.5 Summary of the Related Review

It is evident from literature review that learners with EBD have low academic performance. The literature review has also revealed that special education training programs and curricula have been prepared to guide teachers when teaching learners with emotional and behavior disorders. Unless the issues identified in the literature reviewed above are addressed through research, learners with EBD will continue to be disadvantaged for a long time, hence the importance of the proposed study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction and Overview

This chapter presents design, variables, locale of the study, target population, sample and sampling technique research instruments, data collection, data analysis and logistical and ethical considerations.

3.1 Research Design

The study adopted descriptive survey design. Both quantitative and qualitative methods were utilized. Qualitative method allowed study participants to provide responses that reflect their frame of reference and language, and provides richer descriptions that complement the information gleaned by quantitative means (Creswell, 2008). This type of Triangulation method is valuable in that the biases or limitations of one method are compensated by the other (Kothari, 2003). Descriptive survey design in preliminary and exploratory studies allowed researchers to gather information. The descriptive survey was therefore most appropriate for this study; the researcher collected information on the instructional strategies and academic performance without manipulating the variables.

3.1.1 Variables of the Study

3.1.1.1 Independent variable

In this study, the independent variables included instructional strategies that included assessment for instruction, peer tutoring, instructional modifications and co-teaching. Behavioural characteristics among learners with EBD that included; conduct disorders, attention and concentration, withdrawal and functional disorders. Levels of teachers qualifications and teaching and learning resources

3.1.1.2 Dependent variables

In this study the dependent variables included the academic performance of learners with EBD that could be measured using grades, retention rate and transition from one level to the other.

3.2 Location of the Study

The study was carried out in Kandara Sub-County in Murang'a County. The Sub-County is approximately 80 kilometers from the capital city Nairobi. The District is 235.9 square kilometers and altitudes between 1400 to 2075 meters above sea level. Kandara Sub-County was singled out due to its continued poor academic performance in Kenya certificate of primary education and high prevalence of learners with EBD.

3.3 Target Population

The target population was 72 public primary schools in Kandara Sub-County. Kandara Sub-County has five educational zones namely Githumu, Muruka, Ithiru, Kagundu and Gaichajiru. There were a total 72 head teachers, 72 teachers counsellors and 122 class six teachers in the Sub-County at the time of the study.

3.4 Sampling Techniques and Sample Size

3.4.1 Sampling Techniques

The study used cluster sampling method where schools were clustered into five educational zones. This enabled balanced representation of the schools in the sub-Sub-County. Simple random sampling was applied to select three schools from each zone. Purposive sampling was used to select the head teachers because they were directly involved in management and handling behavioral issues. Teacher

counsellors as well as one standard six class teacher in each selected school were selected.

3.4.2 Sample Size

A total of 15 schools were be sampled. Further, a sample of 15 head teachers, 15 teacher counselors and 15 standard six class teachers participated in the study. This will constitute a sample size of 45 subjects. A minimum of 30 subjects when statistical analysis is to be used is recommended thus, the sample is assumed to be adequate to make generalization on the actual population (Mugenda & Mugenda, 2003).

3.5 Research Instruments

For the purpose of this study, the researcher developed tools for collecting data that included a behavioural checklist, questionnaires and observation schedules.

3.5.1 Behavioral Checklist

Behavioral checklist was filled by the teacher counsellor to ascertain the common behavioural characteristics among learners that may hinder learning. It was divided into two sections. Section one was based on background information while section two sought to inquire the common behavioral characteristics of learners with EBD.

3.5.2 Questionnaire

3.5.2.1 Questionnaire for class teachers

For the purpose of this research, a questionnaire was used to collect information from the class teachers. It was divided into three sections Section one had items which sought the demographic information and teachers qualifications. Section two had items to evaluate the instructional strategies while section three had items

which sought to determine the availability and adequacy of teaching and learning resources for learners with EBD.

3.5.2.2 Questionnaire for headteachers

The headteachers questionnaire was divided into three sections: Section one had items which sought the demographic information. Section two had items to evaluate the behavioural problems among learners in their respective schools and common instructional strategies used by teachers. Section three was capturing information on availability of teaching and learning resources for learners with EBD.

3.5.3 Observation Schedule

The researcher used the observation schedule to find out the availability of teaching and learning resources for learners with EBD.

3.6 Pilot Study

Before the actual study the research instruments were piloted in Ngurwe-ini primary school in Kigumo Sub-County. A total of 8 respondents were used in piloting including 1 headteacher, 5 class teachers and 2 teacher counselors. This was conducted to pretest the clarity of the research instrument. Necessary adjustments were done to improve the research instruments.

3.6.1 Validity

To establish whether the instruments measure what is intended, expert opinion and judgment from university supervisors was sought. This was done through discussions, making relevant comments and suggestions in relation to the research objectives and variables of study to ascertain content validity.

3.6.2 Reliability

To ensure that the instruments gave consistent results, the researcher administered the research instruments to the participants in the pilot school. The researcher used the test-retest technique in testing the reliability of instruments. An interval of 2 weeks was taken between test and re-test. A reliability coefficient was computed using the spearman's coefficient of correlation formula. A correlation coefficient of 0.75 was obtained thus was considered high enough to judge the instrument as reliable.

3.7 Data Collection Techniques

Data was collected from the sampled respondents in the 15 sampled primary schools using behavioral checklists, questionnaires and observation guide. The researcher and his assistant visited each of the sampled schools on different days to administer the instruments. Behavioral checklists were administered to the teacher counselors while questionnaires were administered directly by the researcher and his assistant to the class teachers and headteachers who filled them upon receiving instructions on how to fill them. An observation schedule was used by the researcher to collect data on availability and adequacy of teaching and learning resources.

3.8 Data Analysis

The data was presented, analyzed and discussed according to the information obtained from the checklist, questionnaires, interview schedules and observations guide. Collected data was coded and keyed into the computer for analysis using the statistical package for social sciences (SPSS) ANOVA version 21. Descriptive statistics such as percentage means and frequency counts was used to analyze

quantitative data which was reported in summary form using frequency tables, graphs and pie-charts. Qualitative data was analyzed using content analysis where response was reported in narrative form.

3.9 Logistical and Ethical Consideration

The introduction letter to apply for research permit was sought from the Dean School of post Graduate Studies Kenyatta University. The letter facilitated the acquisition of research permit from the Ministry of Higher Education through National Council of Science and Technology. Appointments through prior visits to respective schools were made at a convenient time.

The researcher ensured confidentiality and anonymity of the information given by the respondents. This was done by using the information without mentioning the specific names or schools where the data were collected from. The researcher also ensured the data collected were to be used for the purpose of this study only.

CHAPTER FOUR

FINDINGS, INTERPRETATION AND DISCUSSIONS

4.0 Introduction

This Chapter presents data and discusses the study findings which are organized in sections that are in tandem with the following study objectives which sought to:

- a. Determine the instructional strategies being used by teachers in teaching learners with EBD in Primary Schools in Kandara Sub-county, Kenya.
- b. Determine the behavioral characteristics that hinder learning among learners with EBD in primary schools in Kandara Sub-county, Kenya.
- c. Investigate the impact of instructional strategies used by teachers for improving academic performance of learners with EBD in primary schools in Kandara Sub-county, Kenya.
- d. Find out the availability of teaching or learning resources used by teachers in teaching learners with EBD in primary schools in Kandara Sub-county, Kenya.

4.1 Demographic Data of Teachers Interviewed

This section presents the information of respondents such as gender, age, level of education and years of experience.

Table 4.1: Gender

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Female	8	61.5	61.5	61.5
Male	5	38.5	38.5	100.0
Total	13	100.0	100.0	

Nearly three thirds teachers interviewed were female which about a third were male.

Table 4.2: Age of teachers

Age	Frequency	Percent	Valid Percent	Cumulative Percent
30-50 years	12	92.3	92.3	92.3
over 50	1	7.7	7.7	100.0
Total	13	100.0	100.0	

Majority of the respondents were aged between 30 and 50 years while those over 50 years were very few.

Table 4.3: Teachers Level of Education

Level of education	Frequency	Percent	Valid Percent	Cumulative Percent
Secondary O level	8	61.5	61.5	61.5
Secondary A level	3	23.1	23.1	84.6
Degree	2	15.4	15.4	100.0
Total	12	100.0	100.0	

Most of the teachers interviewed had attained Secondary O-level as the highest level of academic education with only an eighth having attained degree in education.

Table 4.4: Teachers Highest level of certification

Highest level of certification on	Frequency	Percent	Valid Percent	Cumulative Percent
PI certificate	6	46.2	46.2	46.2
Diploma	5	38.5	38.5	84.6
Degree in education	1	7.7	7.7	92.3
Other degree	1	7.7	7.7	100.0
Total	13	100.0	100.0	

Out of the teachers interviewed, nearly half (46.2%) had PI Certification, nearly a third (38.5%) Diploma, while those with Degree in Education 7.7% and other degrees accounted for a 7.7%.

Table 4.5: Years of experience

Years of experience	Frequency	Percent	Valid Percent	Cumulative Percent
0.5 yrs	2	15.4	15.4	15.4
6-10 yrs	3	23.1	23.1	38.5
11- 15 yrs	2	15.4	15.4	53.3
More than 15 yrs	6	46.2	46.2	100.0
Total	13	100.0	100.0	

Most of the teachers interviewed had more than 15 years of experience accounting for 46.2% of the interviewees. Only 15.4% had less than 5 years of teaching experience.

Table 4.6: Experience in teaching learners with EBD

Years of experience	Frequency	Percent	Valid Percent	Cumulative Percent
0.5 yrs	2	15.4	15.4	15.4
6-10 yrs	4	30.8	30.8	46.2
11- 15 yrs	2	15.4	15.4	61.5
More than 15 yrs	5	38.5	38.5	100.0
Total	13	100.0	100.0	

A majority of those interviewed came had more than 15years' experience in teaching learners with EBD accounting for 38.5% of the interviewees.

4.2 Instructional strategies being used by teachers in teaching learners with EBD

The study sought to find out the instructional strategies use by teachers in teaching learners with EBD. The results are given in Table 4.7.

Table 4.7: Instructional Strategies

Instructional Strategies	Strongly disagree	Disagree	Agree	Strongly agree	Total
	%	%	%	%	%
Assessment for instruction		8.3	58.3	33.3	100.0
Peer-tutoring		38.5	53.8	7.7	100.0
Instructional modification	8.3	16.7	50.0	25.0	100.0
Self-regulated strategy development	8.3	33.3	41.7	16.7	100.0
Mnemonic strategies	7.7	15.4	53.8	23.1	100.0
Content enhancement		15.4	30.8	53.8	100.0
Individualized Education Program	16.7		75.0	8.3	100.0
Information communication and technology	33.3	33.3	16.7	16.7	100.0
Co-teaching	8.3	16.7	66.7	8.3	100.0
Self-monitoring strategies	8.3	16.7	25.0	50.0	100.0
Group work	15.4	7.7	46.2	30.8	100.0

It was established that most teachers agreed that they use assessment for instruction when teaching learners with EBD (58.3+33.3=91.6%). Other strategies identified to be employed by most of the teachers include: Peer-tutoring (61.5%), Instructional modification (75%), Self-regulated strategy development (58.4%), Mnemonic strategies (76.9%), Content enhancement (86.4%), Individualized Education Program (83.3), Co-teaching (75%), Self-monitoring strategies (75%) and Group work (76.9%). The least adopted strategy is the use of Information communication and technology accounting for only 33.4%.

Good instruction is the foundation for effective behavior management in the classroom. Teachers must guard against the tendency to avoid disruptive behavior by providing academic instructions that may provide higher chances of success. (Sutherland & Snyder, 2007). This is in agreement with Zhang (2007) that educators must adapt instruction to help Scaffold learners regardless of challenges

or abilities to meet requirements and acquire higher levels of skills. The instructional strategies include: assessment, Peer tutoring (Maheady, Harper & Marrette, 2003), Instructional modification (Lewis & Doorlag, 2006), Co-teaching (Scruggs & Mastropieri, 2007) and Information communication Technology (Gail, Kevin & Katherine, 2008). This implies that there are instructional strategies that can be used by teachers when teaching learners with EBD.

4.3 Behavioral characteristics that hinder learning among learners with EBD

The study sought to determine the behavioral characteristics that hinder learning among learners with EBD. The results given in tables 4.8, 4.9, 4.10 and 4.11 respectively.

Table 4.8: Behavioral characteristics

Behavioral characteristics	not common	common	Total
	%	%	%
Conduct disorders	92.3	7.7	100.0
Attention & concentration	53.8	46.2	100.0
Hyperactivity attention deficit	46.2	53.8	100.0
Withdrawal	69.2	30.8	100.0
Function disorders	92.3	7.7	100.0

It was found that the most common behavioral characteristics that hinder learning among learners with EBD are related with hyperactivity attention deficit with 53.8%. It was also noted that Attention & concentration; and withdrawal were also common behaviors among the EBD students with 46.2% and 30.8% of the respondents agreeing to this.

Table 4.9: Attention and concentration

Behavioral characteristics	not common	common	very common	Total
	%	%	%	%
Can't sit still	38.5	38.5	23.1	100.0
Is highly distracted by everything	23.1	46.2	30.8	100.0
Has short attention span		76.9	23.1	100.0
Show lack of interest	15.4	46.2	38.5	100.0

With relation to attention and concentration behavior, it was established that most EBD learners have a short attention span with more than 98% (76.9+23.1) of the respondents citing it to be most common in their schools.

Table 4.10: Hyperactivity attention deficit

Behavioral characteristics	Not common	common	very common	Total
	%	%	%	%
Rushes work	9.1	54.5	36.4	100.0
Seems to be talking all the time	41.7	41.7	16.7	100.0
Constantly seeks attention of others	16.7	66.7	16.7	100.0
Cant ignore environmental influences	16.7	58.3	25.0	100.0
Is impulsive	45.5	45.5	9.1	100.0
Excessive climbs on things	50.0	25.0	25.0	100.0
Needs consistent supervisor	8.3	58.3	33.3	100.0
Interrupts others		58.3	41.7	100.0
Has frequent temper tantrums	41.7	58.3		100.0

In relation to hyperactivity attention deficit behavior, it was established that most learners with EBD interrupt others and need consistent supervisory with 100%

(58.3+41.7) and 91.6% (58.3+33.3) of the respondents respectively citing it to be common in their schools.

Table 4.11: Withdrawal characteristics

Behaviour characteristics	Not common	Common	Very common	Total
Seems tired	23.1	69.2	7.7	100.0
Avoids instruction with others	61.5	30.8	7.7	100.0
Is passive	46.2	38.5	15.4	100.0
Doesn't have self-confidence	7.7	46.2	46.2	100.0
Is shy, timid and fearful	7.7	53.8	38.5	100.0

In relation to withdrawal behavior, it was established that most learners with EBD do not have self-confidence and are shy, timid and fearful with each of them accounting for 92.4% of the respondents citing it to be at least common in their schools. Learners with emotional and behavioural disorders (EBD) exhibit both learning and behavioural problems making it challenging for classroom teachers to provide effective instruction. It is in agreement with Polloway, Patton & Serna (2008) that disruptive behavior hinder learning.

Heward (2013) argues that disruptive and defiant behavior interrupts instruction and limits participation in classroom activities and assignment completion. As a result of this lack of engagement with the curriculum, learners with EBD also have learning disabilities and or language delay, which compound their difficulties in mastering academic skills and content. This implies that there are

behavioral characteristics that hinder learning among learners with EBD in Kandara Sub-County.

4.4 Level of Education Qualification of Teachers Teaching Learners with EBD

Table 4.12: Level of education qualification of teachers teaching learners with EBD

Level of qualification	Frequency	Percent	Valid Percent	Cumulative Percent
Secondary O level	8	61.5	61.5	61.5
Secondary A level	3	23.1	23.1	84.6
Degree	2	15.4	15.4	100.0
Total	13	100.0	100.0	

Most of the teachers interviewed 61.5% had attained Secondary O-level as the highest level of academic education with only 15.4% having a degree qualification.

Table 4.13: Highest level of certification

Highest level of certification	Frequency	Percent	Valid Percent	Cumulative Percent
PI cert	6	46.2	46.2	46.2
diploma	5	38.5	38.5	84.6
degree in education	1	7.7	7.7	92.3
Other degree	1	7.7	7.7	100.0
Total	13	100.0	100.0	

Table 4.13 indicates that, 46.2%, 38.5%, 7.7% and 7.7% of the teachers interviewed had PI certification, Diploma, Degree in Education and other degree respectively as their highest level of certification in their pre-service teacher ^ training.

4.4.1 Correlations

Table 4.14: Highest level of education

Correlations		EBD experience	Performance of learners with EBD	Years of experience
EBD experience	Pearson Correlation	1	.300	1.000"
	Sig. (2-tailed)		.700	.000
Performance of learner with EBD	Pearson Correlation	.300	1	.300
	Sig. (2-tailed)	.700		.700
Years of experience	Pearson Correlation	1.000"	.300	1
	Sig. (2-tailed)	.000	.700	

To examine if there exist a relationship between EDS students performance and years of teaching experience Pearson Correlation coefficient was determined. It was established that there exist a weak positive correlation between learner's performance with EBD and years of teaching (0.3). This indicates that the more experienced a teacher is in teaching these learners the more the performance among learners with EBD.

It was also established that there exist a perfect correlation between performance with learners with EBD and the number of years of teaching experience. This

implies that the longer a teacher has taught irrespective of the type of learners the better the performance.

In order to establish whether there exist a significant difference between learners with EBD and "normal" learners, we used the (Analysis of Variance) ANOVA and the learners t test.

One-way ANOVA

Table 4.15: Learners performance

ANOVA

Performance of learners with EBD

Students	Sum of	df	Mean	F	Sig.
Performance	Squares		Square		
Between Groups	7626.125	1	7626.125	6.358	.045
Within Groups	7196.750	6	1199.458		
Total	14822.875	7			

ANOVA was used to establish whether there is equality of variance among the two groups of students to facilitate the computation of the learners test. From the table above, we obtained a p-value of 0.045 which is less than 5% level of significance thus conclude that the variation of learners with EBD performance and that of "normal" students are the same.

T-Test

Table 4.16: Group statistics

Learners	N	Mean	Std. Deviation	Std. Error
Performance				Mean
EBD learners	4	166.2500	44.97685	22.48842
Learners performance				
"Normal" learners	4	228.0000	19.39072	9.69536
Performance				
performance				

From table 4.16 above, it was established that the average performance of EBD learners was 166.25 and that of "normal" learners was 228 with a variation of 44.98 and 19.39 respectively. In order to establish whether there exist a significant difference in the average score performance among the two groups, a two-independent sample t test was carried and the following results obtained.

Table 4.17: Independent Samples Test

Independent Samples Test	Learners test for equality of variables	t-test for equality of means				
		F	Sig.	t	Df	Sig. (2-tailed)
Performance of learners with EBD	Equal variables assumed	2.169	.191	-2.522	6	.045
	Equal variables not assumed			-2.522	4.078	.064

Based on ANOVA, we will assume equal variances and thus take the resulting t test value of -2.522 which yielded a corresponding p value of 0.045. Since the p-value obtained is less than 5% level of significance we can conclude that there is a significant difference between the average score in performance of learners with EBD and that of "normal" learners. Most learners with EBD perform one or more

years below grade level academically. This corresponds with the findings in this study. It is further supported by Kauffman and Landrum (2009) that the strong correlation between EBD problems and low academic achievement is a reciprocal relationship. Academic failure is a well-documented characteristic of children with emotional and behavioural disorders (EBD) (Webby, Falk, Barton-Arwood, Lane & Cooley, 2003).

The academic achievement of learners with emotional and behavioural disorders is significantly lower in comparison to their typically achieving peers (Webby, Falk, Barton-Arwood, Lane & Cooley, 2003). This population of students likely experience less overall school success than any other sub-group of students with or without disabilities (Kauffman & Landrum, 2009).

4.5 Teaching and learning resources available when teaching learners with EBD

In this objective, the researcher sought to find out the availability of teaching and learning resources available when teaching learners with EBD. The results are presented in table 4.18.

Table 4.18: Teaching and learning resources

Teaching and learning resources	available & adequate	available but not adequate	not adequate	Missing	Total
	%	%	%	%	%
Textbooks	53.8	46.2			100.0
Charts	15.4	69.2	15.4		100.0
Models	15.4	46.2	38.5		100.0
Audio-visual -aids		23.1	76.9		100.0
Computer-aided resources			92.3	7.7	100.0
Realia (real objects)	69.2	15.4	15.4		100.0
Assistive technology		15.4	69.2	15.4	100.0

It was established that real objects and textbooks are the most readily available teaching resources among the schools accounting for 69.2% and 53.8% respectively. The least adequate are Computer-aided resources (92.3%), Audio-visual -aids (76.9%) and Assistive technology (69.2%).

This concurred with Engleman (1999) who stated that instructional materials are important in the learning process and that resources commonly used by teachers include consumables materials, textbooks or programmatic materials and corrective reading items. White, Palmer and Huffman (2003) also assert that appropriate teaching resources are effective reinforcers for learners with emotional problems. This implies that computer aided resources; audio visual aids and assistive technology are not readily available when teaching learners with EBD in Kandara sub-county.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This Chapter discusses summary of findings, conclusions, recommendations and suggestions for further research.

5.1 Summary of Findings

The study was conducted in fifteen (15) public primary schools in Kandara sub-county, Murang'a County Kenya. The purpose of the study was to establish the instructional strategies used by teachers to enhance academic performance among learners with EBD in the sub- County. The main findings established by this study were that:

5.1.1 Instructional strategies when teaching learners with EBD

Majority of the respondents agreed that they use the following instructional strategies when teaching learners with EBD: Assessment for instruction; peer-tutoring, instructional modification, mnemonic strategies, content enhancement, individualized education programme, co-teaching, self-monitoring strategies and group work. About half of respondents agreed that they use self-regulated strategies while only a third adopted information, communication and technology.

5.1.2 Behavioural characteristics that hinder learning among learners with EBD

The most common behavioural characteristics that hinder learning among EBD learners in Kandara Sub-county included behavior related with hyperactivity,

attention deficit attention, concentration, withdrawal, lack of self-confidence, shyness, timid and fearfulness.

5.1.3 The level of Qualification of Teachers

The levels of qualification of teacher teaching learners with EBD were as follows: nearly two thirds of teachers interviewed had attained secondary education, nearly one sixth had degree education, a third with diploma education and nearly half had PI certification.

5.1.4 Teaching and Learning Resources

It was established that real objects and textbooks were the most readily available teaching learners with EBD. The least available teaching resources are computer aided resources, audio-visual aids and assistive technology.

5.1.5 Correlations

The study established that there existed a weak positive correlation between performance of learners with EBD and years of teaching such learners. There also existed a perfect correlation between EBD learners' performance and the number of years of experience.

5.2 Conclusions

This study has resulted in four (4) main conclusions as follows. Firstly, based on the findings that teachers use various instructional strategies when teaching learners with EBD, it can be concluded that there are instructional strategies which if effectively applied, can enhance academic performance of learners with EBD, as well as lead social adjustment of such learners.

Secondly based on the findings that the most common behavioural characteristics among learners with EBD are related to hyperactivity attention deficit, concentration, withdrawal, shyness and fear, it can be conclude that there are behavioural characteristics that may hinder learning among learners with EBD in Kandara sub-county.

Thirdly, based on finding that out the respondents interviewed, half had PI training, a third Diploma and very few with degree in education, it is logical to conclude that the number of teachers trained in special education is minimal; and that Educational needs of children with behavioural and emotional disorders may not be adequately addressed.

Fourthly, based on the finding that majority of teachers interviewed use real objects and textbooks when teaching learners with EBD; and that computer aided resources, audio-visuals aids and assistive technology are not readily available; it can be concluded that learners with EBD are denied the valuable opportunity to benefit from the use of ICT in this technological based world. The learners lack exposure to computer aided resources, audio-visual aids and assistive technology.

5.3 Recommendations

5.3.1 Policy recommendation

The following recommendations were made based on the findings of the study:

- i) The Ministry of Education should encourage teachers to embrace the various instructional strategies that enhance academic performance among learners with EBD. They should make an effort to engage often substantively when providing instruction to learners with EBD

- ii) As stipulated by the SNE policy in Kenya, assessment for instruction is important in determining the academic outcomes among learners with EBD. Therefore teachers should be trained on various behavioral assessment strategies.
- iii) Schools should embrace use of ICT as an instructional strategy when teaching learners with EBD. This may enhance use of computer aided instruction in this era of ICT.
- iv) Due to the importance of instructional materials in the learning process learners with EBD should be exposed to a lot of these resources to cater for their behavior and reinforce learning among them.
- v) Early identification of learners with EBD should be enhanced because it may facilitate early intervention as requirement of the Ministry of Education Act 2010.

5.4 Recommendations for Further Research

The following recommendations were given as possible problems for future further research:

- i) A comparative study should be carried out in other sub-counties to establish the strategies that teachers use in teaching learners with EBD.
- ii) A study should be carried out to establish instructional strategies used by teachers for other categories of learners with special needs such as those with visual or physical challenges.

iii) A similar study should be carried out in special, private and secondary schools as this study focused on public primary schools.

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APPENDICES

APPENDIX A

A CHECKLIST ON BEHAVIOURAL CHARACTERISTICS OF LEARNERS THAT MAY HINDER LEARNING

1. BACKGROUND INFORMATION

- 1.1 Start Time End time
- 1.2 Date of the interview (DD/MM/YYYY) / /
- 1.3 Teachers name(Optional)..... Class
- 1.4 Name of School
- 1.5 Zone

2. A CHECKLIST

Rate if the following are common in learners in your school/class

1 = Not Common

2 = Common

3 = very Common

a) Conduct disorders	Rank	d) Withdrawal	Rank
• Flights, hits others		• Seems tired	
• Easily frustrated		• Avoids instructions with others	
• Steal		• Is passive	
• Truancy		• Doesn't have self confidence	
• Runs Way from home		• Is shy, timid and fearful	
• Abuses persistently		e) Function disorders	Rank
• Blames others		• Obesity	
• Bossy		• Eating inedible objects (Habitually)	
b)Attention and concentration	Rank	• Refusal to eat	
• Cant sit still		• Elimination disorders	
• Is highly distracted by everything		f) Severe EBD	Rank
• Has short attention span		• Illogical thinking	
• Show lack of interest		• Delusions	
c) Hyperactivity attention deficit	Rank	• Hallucinations	
• Rushes work		• Self injurious behaviour	
• Seems to be talking all the time			
• Constantly seeks attention of others			
• Cant ignore environmental influences			
• Is impulsive			
• Excessive climbs on things			
• Needs consistent supervisor			
• Interrupts others			
• Has frequent temper tantrums			

APPENDIX B

QUESTIONNAIRE FOR CLASS TEACHERS

1. BACKGROUND INFORMATION

- 1.1 Start Time End time
- 1.2 Date of the interview (DD/MM/YYYY...../...../.....)
- 1.3 Teachers name (Optional)..... Class.....
- 1.4 Name of school
- 1.5 Zone

2. INTRODUCTION

Good morning/Afternoon/Evening

My name isI am a master of education student at Kenyatta University. Professionally, I am a teacher. My research is 'analysis of instructional strategies, enhancing academic performance among learners with emotional & behavioral disorders in primary schools'.

In order to gather data for the research, I have prepared a questionnaire for guidance teacher/teacher/head-teacher. I kindly- request your assistance in this academic endeavor by filling in the questionnaire.

I would like to emphasize that your responses are extremely valuable to me and I would greatly appreciate your answering all questions. I assure you as a professional colleague, that the data collected here will be held with utmost confidentiality.

3. SECTION A: DEMOGRAPHIC INFORMATION

3.1 Indicates sex of teacher: Female Male

3.2 How old are you

Under 30 years 30 – 50 years Over 50 years

3.3 What is the highest level of academic education you have attained?

Secondary school (O level) Secondary education (A level)

Bachelors degree or higher (Than bachelor of education)

Others (specify)

3.4 What is the highest level of certification of your pre-service teacher training?

3.5 How many complete years (including this year 2013) years have you been in a teaching position or role?

0 -5 6 -10

11 – 15 More than 15

3.6 How many complete (Including this year 2013) have you taught learners with emotional and bevioural disorders?

0 -6 6 -10

11 – 15 More than 15

4. SECTION B: INSTRUCTIONAL STRATEGIES FOR TEACHING

LEARNERS WITH EBD

Please indicate your opinion about each statement by writing the appropriate response

Key = 4 Strongly agree (SA) 3= Agree (A) 2= Disagree (D) 1 = Strongly disagree (SD)

4.1 Instructional strategies enhance academic performance among learners with EBD

4.2 I regularly use the following instructional strategies when teaching learners with EBD

		Key (1,2,3 or 4)
(i)	Assessment for instruction	
(ii)	Peer tutoring	
(iii)	Instructional modification	
(iv)	Self regulated strategy development	
(v)	Mnemonic strategies	
(vi)	Self monitoring strategies	
(vii)	Content enhancement	
(viii)	Individualized Education Program (IEP)	
(ix)	Group work	
(x)	Information communication technology (ICT)	
(xi)	Co teaching	

4.3 Learners with EBD have characteristics that hinder academic performance

5. SECTION C: AVAILABILITY AND ADEQUACY OF TEACHING/ LEARNING RESOURCES

5.1 Please indicate if your school has the following teaching resources (Tick Appropriately)

(Adequately teaching and learning resources refer to whether the resources are enough in reference to recommended ratio for learners with EBD i.e. Ratio of 1:2)

1=Available and adequate, 2=Available but not adequate, 3= Not adequate

Resources	Rank
Textbooks	
Charts	
Models	
Audio visual aids	
Computer aided resources	
Realia (Real objects)	
Assistive Technology	
Any other (Specify).....	

APPENDIX C

QUESTIONNAIRE FOR HEAD TEACHERS

1. BACKGROUND INFORMATION

- 1.1 Start Time End time
- 1.2 Date of the interview (DD/MM/YYYY...../...../.....)
- 1.3 Teachers name (Optional)..... Class.....
- 1.4 Name of school
- 1.5 Zone

2. INTRODUCTION

Good morning/Afternoon/Evening

My name is Stephen Muhoro, I am a masters of education student at Kenyatta university. Professionally, I am a teacher. My research is 'analysis of instructional strategies, enhancing academic performance among learners with emotional & behavioral disorders in primary schools'.

In order to gather data for the research, I have prepared a questionnaire for guidance teacher/teacher/head-teacher. I kindly request your assistance in this academic endeavour by filling in the questionnaire.

I would like to emphasize that your responses are extremely valuable to me and I would greatly appreciate your answering all. question. I assure you as a professional colleague, that the data collected here will be held with utmost confidentiality.

3. SECTION A: DEMOGRAPHIC INFORMATION

3.1 Indicates sex of teacher: Female Male

3.2 How old are you

Under 30 years 30 – 50 years Over 50 years

3.3 What is the highest level of academic education you have attained?

Secondary school (O level) Secondary education (A level)

Bachelors degree or higher (Than bachelor of education)

Others (specify)

3.4 What is the highest level of certification of your pre-service teacher training?

3.5 How many complete years (including this year 2013) years have you been in a teaching position or role?

0 -5 6 -10

11 – 15 More than 15

3.6 How many of those years have you been a head teacher?

3.7 How many years have you been in this school?

3.8 (A) Do you have any training on special education? 1 =yes, 2 = No

(B) If yes, what is the highest level?

0 -2 = Certificate; Diploma; Degree; 05 = PGDE

96 = Other (Specify).....

4. SECTION B: SCHOOL AND TEACHERS INFORMATION

4.1 a) In your school are there teachers trained in special needs education? 1=Yes, 2=No

b) If yes, how many

4.2 What are the most emotional and behaviour problems among the learners in your school?

Emotional and behavioural problems	Mentioned	Rank (1,2,3)
Conduct disorders		
Attention and concentration		
Hyperactivity attention deficit		
Withdrawal		
Function disorders		
Severe EBD e.g. Illogical thinking, delusions		

4.3 Which are the most common instructional strategies used by teachers when teaching learners with emotional and behavioural disorders

		Mentioned	Rank (1,2,3)
(i)	Assessment for instruction		
(ii)	Peer tutoring		
(iii)	Instructional modification		
(iv)	Self regulated strategy development		
(v)	Mnemonic strategies		
(vi)	Self monitoring strategies		
(vii)	Content enhancement		

(viii)	Individualized Education Program (IEP)		
(ix)	Group work		
(x)	Information communication technology (ICT)		
(xi)	Co teaching		

4.4 Please indicate if your school has the following teaching resources for teaching learners with EBD? (Adequate teaching and learning resources refer to whether the resources are enough in reference to recommended ratio for learners with EBD i.e. Ratio of 1:2).

1= Available and adequate; 2= Available but adequate; 3= Not adequate

Resources	Rank
Textbooks	
Charts	
Models	
Audio visual aids	
Computer aided resources	
Realia (Real objects)	
Assistive Technology	
Any other (Specify).....	

4.5 Do you encourage collaborative teaching in your schools?.....

4.6 What are the major challenges that the department of guidance and counseling face in handling learners with EBD (Probe)?

APPENDIX D

OBSERVATION SCHEDULE

1. BACKGROUND INFORMATION

- 1.1 Start Time End time
- 1.2 Date of the interview (DD/MM/YYYY...../...../.....)
- 1.3 Teachers name (Optional)..... Class.....
- 1.4 Name of school
- 1.5 Zone

1. Observation by the researcher

- 1.1 Do the teachers use
 - (a) On-site teaching/learning resources 1=Yes, 2=No
 - (b) Off-site teaching/learning resources 1 =Yes, 2=No
 - 1.2 Are the teaching/learning resources for the class? 1=Yes, 2=No
 - 1.3 Do the resources capture the attention of the learners? 1=Yes, 2=No
 - 1.4 Do the learners interact with the resources freely? 1=Yes, 2=No
 - 1.5 How do the teacher modify content and resources
- Availability and adequacy of teaching/learning resources

5.1 Please indicate if your school has the following teaching resources (Tick appropriately)

(Adequate teaching and learning resources refer to whether the resources are enough in reference to recommend ratio for learners with EBD i.e. ratio 1:2)

1=Available and adequate

2= Available but not adequate

3= Not adequate

Resources	Rank
Textbooks	
Charts	
Models	
Audio visual aids	
Computer aided resources	
Realia (Real objects)	
Assistive Technology	
Any other (Specify).....	

6. Performance of learners with Emotional and behavioural disorder

6.1 Please indicate as accurate as possible the average grade for earners with emotional and behavioral disorders in your class (Class 6 EBD pupils aggregate average marks)/500.

6.2 Average of other learners (Class 6 other learners average marks) /500.

APENDIX E
AUTHORIZATION LETTER



**NATIONAL COMMISSION FOR SCIENCE,
TECHNOLOGY AND INNOVATION**

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When replying please quote

Date:

Our Ref: **NACOSTI/RCD/14/013/1709**

8th October, 2013

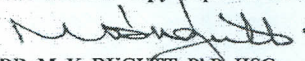
Stephen Gachoka Muhoro
Kenyatta University
P.O.Box 43844-00100
Nairobi.

RE: RESEARCH AUTHORIZATION

Following your application dated *16th September, 2013* for authority to carry out research on *"Analysis of instructional strategies enhancing academic performance among learners with emotional and behavioural disorders in primary schools, Kandara District, Murang'a County, Kenya."* I am pleased to inform you that you have been authorized to undertake research in **Murang'a County** for a period ending **31st December, 2014**.

You are advised to report to **the County Commissioner and the County Director of Education, Murang'a County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.


DR. M. K. RUGUTT, PhD, HSC.
DEPUTY COMMISSION SECRETARY
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Copy to:

The County Commissioner
The County Director of Education
Murang'a County.

National Commission for Science, Technology and Innovation is ISO 2008: 9001 Certified

