# Instructional Strategies Enhancing Academic Perfomance Among Learners With Emotional And Behaviour Disorders In Primary Schools, Murang'a County, Kenya

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Abstract: In this article, the authors present a summary of findings of a study conducted in partial fulfillment of the requirements for a master's thesis in special needs education. The study sought to make an inquiry of instructional strategies used by teachers to enhance academic performance among learners with Emotional and Behaviour Disorders (EBD) in primary schools, Muranga County, Kenya. A descriptive survey design was used for the study in regular primary schools. The target population included the head teachers, Teacher cousellers and class six teachers. The sample size comprised 15 headteachers, 15 teachers-counselors and 15 class teachers to make a total of 45 subjects from the target population of 266.An 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 12. The study findings revealed that, instructional strategies enhanced learning, while behavior characteristics hinder learning among learners with EBD. Majority of the teachers interviewed had O-Level certificate as their highest academic level while a few had diploma and degrees.

Most schools used textbooks as a major resource while ICT has not been integrated. The study recommended that schools should embrace use of ICT as an instructional strategy when teaching learners with EBD.

Keywords: Instructional strategies, Learners, Emotional Behaviour Disorders, Primary schools

# I. INTRODUCTION

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 special needs education 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 is 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 Muranga County. Ineffective instructional strategies may not result to higher academic achievement and improved behavior.

Special Needs Education 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

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been high prevalence of learners with EBD and low academic performance in Muranga County.

In Kenya, the Ministry of Education commissioned the special education task force to investigate the challenges facing individuals with special needs and to make recommendations. The findings published in 2003, reported that learners with EBD are usually educated in rehabilitation centres. The centres are not well structured to maximize there 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. 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).

A number of strategies have been proposed by many scholars to enhance success of learners with EBD. They include the following:

#### **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. Ongoing 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 authors sought to find out whether teachers use assessment as an instructional strategy while teaching learners with EBD.

# PEER GROUP TEACHING

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 authors sought to establish whether peer tutoring enhances learning among learners with EBD in Muranga County.

## INSTRUCTIONAL MODIFICATION

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 authors sought to find out whether instructional modification strategies were being used to enhance learning among learners with EBD.

#### SELF-REGULATED STRATEGY DEVELOPMENT

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. setting, self-monitoring, self-instruction, 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).

# 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

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mnemonics involve using pictures and or words to help remember information (Wagner & Davis, 2006). In this study, the authors intended to find out whether mnemonic strategies are used to enhance learning among learners with EBD.

Authors 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 authors sought to find out whether content enhancement is used to enhance learning among learners with EBD.

## CURRICULUM BASED MODEL (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 Muranga County.

## THE 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 ad addressed Heward (2013) suggests that teachers continually monitor each learner's progress towards meeting his/her goals as set in the IEP.

## **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 authors sought to find out if coteaching is in use in order to assist learners with EBD.

#### USE OF 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 Muranga County.

## II. PURPOSE

The purpose of the study was to investigate the instructional strategies enhancing academic performance among learners with EBD in primary schools, Murang'a County, Kenya. The study was guided by four objectives stated as follows:-

- ✓ Determine the instructional strategies being used by teachers in teaching learners with EBD in Primary Schools in Muranga County, Kenya;
- ✓ Determine the behavioral characteristics that hinder learning among learners with EBD in primary schools in Muranga County, Kenya;
- ✓ Investigate the impact of instructional strategies used by teachers for improving academic performance of learners with EBD in primary schools in Muranga County, Kenya;
- ✓ Find out the availability of teaching ad learning resources used by teachers in teaching learners with EBD in primary schools in Muranga County, Kenya.

For purposes of this article, specific findings of objectives one and two will be presented. These findings are significant in the sense that teachers may elect to use them 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 Muranga County. The research findings may further give important feedback to curriculum developers and Education Planners.

#### III. METHOD

The study adopted descriptive survey design while both quantitative and qualitative methods were used. Qualitative method allowed study participants to provide responses that reflected their frame of reference and language, and provided richer descriptions that complemented 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). The authors collected information on the instructional strategies and academic performance without manipulating the variables.

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

A total of 15 schools was selected. Further, a sample of 15 head teachers, 15 teacher counselors and 15 standard six class teachers participated in the study. This constituted a sample size of 45 participants. A minimum of 30 participants when statistical analysis is to be used is recommended. Thus, the sample was assumed to be adequate to make generalization on the actual population (Mugenda & Mugenda, 2003). For the purpose of this study, the authors developed tools for collecting data that included a behavioural checklist, questionnaires and observation schedules. 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.

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

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. The acquisition of research permit from the Ministry of Higher Education through National Council of Science and Technology facilitated the study. Appointments through prior visits to respective schools were made at a convenient time. The authors 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 authors also ensured the data collected were to be used for the purpose of this study only. Research data were then collected from the sampled respondents in the 15 sampled primary schools using behavioral checklists, questionnaires and observation guide. Behavioral checklists administered to the teacher counselors while questionnaires were administered directly by the authors and research assistant to the class teachers and headteachers who filled them upon receiving instructions. An observation schedule was used by the authors to collect data on availability and adequacy of teaching and learning resources.

## IV. RESULTS AND DISCUSSION

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 12. 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.

The demographic information from participants revealed that nearly three thirds teachers interviewed were female while about a third were male. Majority of the respondents were aged between 30 and 50 years while those over 50 years were very few. 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.

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

As indicated earlier, this article presents findings limited to the first and second objectives of the study. In objective one, the study sought to find out the instructional strategies used by teachers in teaching learners with EBD. The results are given in Table 4.1.

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

Table 4.1: Instructional Strategies

The study established that most teachers agreed that they use assessment for instruction when teaching learners with EBD. 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), Coteaching (75%), Self-monitoring strategies (75%) and Group work (76.9%). The least adopted strategy was 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 & Snydner, 2007). This is consistent with Zhang (2007) who maintains 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.

In objective two, the study sought to determine the behavioral characteristics that hinder learning among learners with EBD. The results are presented in tables 4.2.

Behavioral	not	commo	Total
characteristics	common	n	
	%	%	%
Conduct disorders	92.3	. 7.7	100.0
Attention and	53.8	46.2	100.0
concentration			
Hyperactivity attention	46.2	53.8	100.0
deficit			

Withdrawal	69.2	30.8	100.0
Function disorders	92.3	7.7	100.0

Table 4.2: Behavioral characteristics

The study established 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 and concentration; and withdrawal were also common behaviors among the EBD students with 46.2% and 30.8% of the respondents in agreement. With regards to attention and concentration behavior, it was established that most EBD learners have a short attention span with more than 98% of the respondents citing it to be most common in their schools.

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. 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. This 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\s skills and content. This implies that there are behavioral characteristics that hinder learning among learners with EBD in Muranga County.

# V. CONCLUSIONS

Based on the findings that teachers use various instructional strategies when teaching learners with EBD, the authors concluded that there are instructional strategies which if effectively applied, can enhance academic performance of learners with EBD. 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, the authors further concluded that there are behavioural characteristics that may hinder learning among learners with EBD in Muranga County.

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