

# Strategies Used by Teachers in Instructing Learners and Academic Performance of Learners with Cerebral Palsy at Joyland Special Primary School for the Physically Disabled in Kisumu County, Kenya

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## ABSTRACT

Learners with cerebral palsy experience motor and communication challenges as a result of their condition. As children with cerebral palsy grow into adults, these difficulties persist. The study aimed to analyze how teaching strategies employed by educators influence the academic achievement of learners with cerebral palsy at Joyland Special Primary School for the Physically Disabled in Kisumu County, Kenya. A case study approach was adopted for this research with a target population of 156. Joyland Special Primary School was specifically chosen since it is the largest school in the area for students with disabilities, the majority of whom have cerebral palsy. One head teacher, thirty-two teachers, and sixty-nine students made up the 102 participants in the study sample. Teachers were given questionnaires, the head teacher was interviewed, and students with cerebral palsy participated in focus group discussions as part of the data collection process. The Statistical Package for the Social Sciences (SPSS) was used to code, analyze, and show quantitative data using descriptive statistics including frequencies, tables, and percentages. Thematic and content analysis were utilized to examine the qualitative data. The results uncovered that teachers tended to use strategies they found most convenient, often due to their heavy workload. Learners with cerebral palsy experienced physical strain when participating in subjects like mathematics and sciences, which required manipulation of apparatus and experiments. Consequently, they showed a preference for activities related to daily living and social studies. Subjects such as Kiswahili and English were less favored, partly because some learners faced communication difficulties. Based on these findings, the researcher recommends that the Teachers Service Commission urgently assign more qualified teachers capable of supporting learners with cerebral palsy at Joyland School; conduct ongoing in-service training for teachers in this field; incorporate cerebral palsy-related content into special needs education (SNE) teacher training curricula; redesign classrooms to better accommodate learners with cerebral palsy; and provide assistive technologies and modern wheelchairs. Additionally, the Ministry of Education should ensure that learners with disabilities are not disadvantaged and that adequate support systems are in place.

**Key words:** Instructional Strategies, Academic Performance, Learners with Cerebral Palsy

## INTRODUCTION

One type of physical impairments (PI) is cerebral palsy (CP). It is a medical disorder that typically results in loss of control over one's arms and legs due to brain damage sustained during or after birth. This disorder is caused by brain damage brought on by illness, trauma, or abnormal development prior to, during, or in the very early stages of a child's life. The damaged body parts become harder to move and use as a result (Hewett, 2016). Hallahan and Kauffman (2015) define cerebral palsy as a disorder caused by brain damage that manifests as weakness, lack of motion, incoordination, or other motor dysfunction. The severity of cerebral palsy varies from mild to profound or severe, with cases and symptoms ranging from mild enough to be difficult to identify to so severe that the person is completely weakened. There are many different types of children with CP. Some people have mild CP, some have moderate CP, and yet others have severe CP.

There are about two cases of cerebral palsy for every 1000 live births worldwide. According to the 2018 Surveillance of Cerebral Palsy in Europe (SCPE) study, the frequency is lower in women than in men. Approximately 10,000 newborns and 1200–1500 preschool-aged children in the US are diagnosed with cerebral palsy each year (SCPE report, 2018). This indicates that the prevalence of CP is high and that those who have been diagnosed with it urgently require assistance, especially in getting an education so they can become self-sufficient adults.

According to Lindsay, Wedell, and Drockrell (2020), educating children with Special Needs in Education (SNE) should focus on engaging them with information, experiences, and creative pedagogies. Furthermore, education should play a role in allowing children to engage with different challenges in the world beyond the classroom, so that they might contribute to society and become trustworthy allies. The goal is to help each child achieve an acceptable level of independence. The report also emphasizes equity in learning objectives, by advocating for all children to pursue the same educational aspirations.

According to Brennan (2012), children with exceptionally severe learning difficulties, such as some students with severe cerebral palsy, will only reach the main point through small, well-planned, and consistently built-up increments. What is attained should be evaluated in terms of the individual learner, which may not always be the case. Because they will succeed to some extent and eventually become independent, it is crucial that students with CP receive proper instruction in the classroom.

Studying professional handling of learners with CP and the role of conducive environment respectively, Brennan, 2012 and Morley & Woodland, (2009) underscored the need to have professional teachers attending to learners with CP and providing an enabling learning environment for learners with CP to succeed in learning. Unfortunately, because their learning needs are not satisfied, the majority of these students either drop out completely or fail to advance to the next level of education after either primary or secondary school. They continue to be financially dependent on their family as a result of this situation, which prevents them from receiving vocational training and subsequent job placement.

According to Cope and Anderson (2014), factors affecting the quality of education for students with physical disabilities in mainstream schools "units" in England and Wales were reported to indicate that many students were not progressing intellectually. If integration had been a top priority for the special and regular staff and more consideration had been given to how this could be accomplished from the planning stage onwards, a far higher percentage of the unit learners would have performed better if they had spent substantially more time with their classmates.

In another study, Morley and Woodland (2009) investigated the impact of a favourable environment on cognitive development in slum children from the Cali society in Columbia. The research results were contrasted with the circumstances of Cali society's affluent offspring. The study established that Cali slum children who received proper nutrition, medical attention, and an engaging environment grew and developed intellectually in a manner comparable to that of the wealthy. Morley and Woodland came to the conclusion that a child needs a stimulating and caring environment in order to thrive socially, emotionally, and intellectually; sufficient physical growth alone is insufficient.

Preterm birth, malaria, HIV/AIDS, and socioeconomic hardship are among the key risk factors linked to cerebral palsy, according to study (Levin, 2006). Levin's study focuses on the care, education, and training of South African children with cerebral palsy. Interventionists must acquire adaptive skills and knowledge that are particular to local factors and contextually relevant in order to establish meaningful practice for and with children and families impacted by cerebral palsy. When this happens, interventionists can encourage more family flexibility and assist kids in better meeting their family's requirements. Additionally, the definition of cerebral palsy must reflect the person's environment.

Teachers educating learners with SNE face numerous constraints during their day-to-day work. These constraints may be similar or vary depending on the type of SN cases they deal with. A research by Lindsay et al. (2013) regarding the "Instructors' obstacles of involving children with ASD in ordinary classrooms" established various findings. Their study was qualitative and purposively sampled 13 educators who were experienced in teaching learners with ASD. The respondents were drawn from two cities Canada and Ontario. Using in-depth interviews,

teachers were requested to highlight constraints they faced. Teachers noted that they faced difficulties when applying best practices of inclusion. This was because learners had constraints in comprehending and instructors had constraints in managing behaviour of students with ASD so as to develop social and communicational skills which could assist them in developing peer relationships. These findings were consistent with previous researches which showed that instructors experienced difficulty in integrating learners with ASD into normal classes, (Wilmhurst & Brue, 2010).

Teachers reported difficulties in tailoring lessons for some learners while engaging all others. Teachers noted socio-structural difficulties at school. Teaching was challenging due to a lack of resources for instruction and learning, a lack of training, and school bureaucracy. It was challenging to establish an inclusive learning environment due to a lack of knowledge and/or familiarity among educators, parents, and students. One of the biggest obstacles to creating an inclusive atmosphere has been identified as parents' lack of involvement in their children's education.

Three of the thirteen speech therapists in the East African region are located in Kenya (East African Speech Therapy Conference, 2008). According to the previously published statistics, the number of physiotherapists and speech therapists is insufficient to manage the enormous number of kids with cerebral palsy. None of the aforementioned physiotherapists work in educational institutions that serve students with cerebral palsy.

Mwendwa (2010) in her research established that Kenya lacked speech therapists. There were poor rehabilitation services offered in the country. The provision of educational and health services was offered only in Nairobi by Cerebral Palsy Society of Kenya (CPSK). CPSK had only two physiotherapists and three occupational therapists yet it has a large mandate which made it unable to operate outside Nairobi. CPSK did not have SNE teachers at its clinic nor did it seek for such services. The only wonder would be how CPSK has been of help to the schools with learners with CP if it does not have services of SNE teachers recruited. CPSK lacked relevant knowledge on CP. Parents, teachers and workers at CPSK did not possess requisite knowledge on CP. Lack of finances made the programs of CPSK limited in Nairobi area yet there exist other cases outside Nairobi. Research on CP and implementation of such findings is still lacking.

Elsewhere, Kamau (2015) established that those schools that have learners with CP, especially in Kiambu county, experienced financial constraints in running the schools. Government grants were insufficient. Instructional materials like books, adaptive devices and materials, and computers were not adequate. Teachers had 35 minute lessons in which they could not teach the class as well as help individual learners with CP. Poor handwriting and learner differences make it difficult in composition marking and syllabus completion for teachers in Kiambu teaching learners with CP (Kamau, 2015).

The Kenya population and housing census, (2019) report shows that 1.92(43.4%) million people living with disability are children aged between 0-14years. 0.93 (21.0%) million people are in the age bracket of 15-24 years, (13.5%) million people are in the age bracket of 24-34 years, 0.68 (15.4%) million people are in the age bracket of 35-54 years while those in the age bracket of above 55 years are 0.30(6.7%) million people. This report shows that majority of the population affected by disability is the school going age of below 14 years. Majority of these learners are supposed to be in primary school. A child with CP develops into an adult with CP, according to Werner (1999). In order to enable persons with CP live as independently as possible, it is crucial to provide them with the assistance they need.

## **Statement of the Problem**

Every learner with CP has different demands. After completing primary or secondary school, the majority of these students do not continue on to the next level of education. Children with cerebral palsy are stigmatized because of the widespread belief that they are less clever than children without the condition.

According to research conducted in Kenya by Mwendwa (2010), Kanana (2015), Ogolla, Wamocho, and Otube (2018), students with CP continue to perform poorly academically because of issues with the school's human and material resources. The majority of these students are unlikely to gain fully from education and will continue to drop out due to poor academic performance if specialised training is not given to them. The majority of students with CP in integrated schools learnt from their peers, according to Cope and Anderson (2010). Studies

done on the learners' learning environment have put emphasis on the need for medical care and adequate food was necessary for learning to take place. However, such studies failed to state if learning was meaningful in the stated schools.

Reviewed Studies, particularly from the findings emanating from the studies done by Kamau (2015), Lindsay *et.al.*(2013), Wilmhurst & Brue (2010) and Mwendwa (2010), showed that, teachers who educate learners with CP faced constraints that included insufficient government grants, inadequate instructional materials such as books, adaptive devices, adaptive materials and computers. Other constraints included, insufficient lesson time which made them unable to teach learners with CP and the normal class concurrently and poor handwritings of learners and learner differences which made composition marking and syllabus completion for learners with CP difficult.

Although there are studies on students with cerebral palsy in Kenya, previous scholars evaluated and carried out investigations in Nairobi and Kiambu. Certain instructional restrictions like teachers' professional credentials, availability to teaching materials, and the teaching tactics employed and their impact on students' academic achievement, have not been thoroughly examined in prior study. The study was done in Kenya's Kisumu County. Its main objective was to evaluate the effects of these instructional constraints on the academic performance of pupils with cerebral palsy at Joyland Special Primary School for the Physically Disabled in Kisumu County.

## RESEARCH METHODOLOGY

### Research Design

The study embraced a case study design. This was used to define a unit in details holistically and contextually. A case study design is an empirical research that examines the modern phenomenon in its natural environment. It makes use of a variety of investigative tools and depends on multiple sources of evidence (Cousin, 2005). Because of the specific learning constraints faced by learners with CP, instructional constraints influencing their academic performance need researching. Because it elicited opinions, information, and justifications regarding the instructional limitations affecting the academic attainment of learners with cerebral palsy at Joyland Special Primary School for the Physically Disabled, Kisumu County, Kenya, the quality of the case study design was appropriate.

### Location of the Study

Joyland Special Primary School for the Physically Disabled was the site of the study. Since Joyland Special Primary School was the largest special primary school for students with disabilities in the county and the majority of its students were CP, this study was carried out there. Additionally, the majority of the county's primary schools referred students with disabilities to the school.

### Target Population

A total of 156 students from Kisumu City's Joyland Special Primary School made up the target population. This included 123 students with CP, 32 teachers, and one head teacher. Ninety of the 123 students with CP had significant cerebral palsy, and thirty-three had mild cerebral palsy.

### Sampling Techniques and Sample Size

Purposive and stratified random sampling procedures were utilized in the research. The sample size was 102 participants. This consisted of 1 head teacher, 32 teachers and 69 learners with CP.

**Table 1: Sample size selection**

	Population Targeted	Sample Population
Head teacher	1	1
Teachers	32	32
Learners with CP	123	69
<b>Total</b>	<b>156</b>	<b>102</b>



## Research Instruments

The researcher used questionnaires; interview guides, focus group discussion, observation schedule and document analysis in order to obtain data. Questionnaires were administered to teachers. Both closed-ended and open-ended questions were involved in the survey with sections A, B, C and D. Section A had only closed ended question items which sought background information. Interview guides were for headteachers,

Focus Group Discussion Guide was utilized to gather information from learners in a relaxed familiar environment. With help of the teachers who were handling the learners, the researcher conducted the discussion. Specific information on how learners are treated by their parents and teachers, visits by their parents, and how they perceived learning at the school was sought. The researcher made direct observations of the classrooms, pavements, desks, chalkboards, and instructional materials utilised by students with CP. In addition, the researcher got the chance to watch a few of the classes and engage with students and instructors as she personally identified the limitations of education.

Document analysis provided insight information the researcher sought on the enrolment of learners in the school, learner's performance in KCPE and internal examinations, the curriculum used, the ministry of education policies, data on teachers in the school, sources of funding in the school and academic attainment of learners in the school.

## Validity

To make sure that the research instruments in this study contained all the necessary items, content validity was used. Experts from the department of Early Childhood & Special Needs Education looked at the research tools. These helped determine whether the text was relevant. This is in line with the study of Black, (2010). As a result, the research items for the study were rigorously reviewed, and changes, additions, and deletions were made depending on the comments. Additionally, primary school teachers were consulted because they are aware of what is suitable for primary school children at various educational levels. The items were then changed by the

## Reliability

According to Bryman, (2000), reliability is the degree to which a measuring device can be relied upon to produce consistent, stable data after multiple administrations. The questionnaires were validated using a pilot study. Based on the outcomes of the initial trial and subsequent evaluations, the items in the pilot were either enhanced or eliminated. The pilot study's primary goal was to verify that the instruments could collect the necessary data. During the pilot phase, the reliability of the questionnaires was assessed using the test-retest approach.

Using Pearson's Product Moment Correlation Coefficient Formula, a coefficient of association was calculated at a degree of 0.5 for reliability. The reliability coefficient was found to be 0.76. The questionnaires were found to be dependable enough to be used for data gathering.

## Data Analysis

Using descriptive statistical techniques, the quantitative data gathered through the surveys was coded, examined, and presented. To tabulate the data, tables, frequencies, and percentages were used. The SPSS software was used to carry out this. Focus group discussions, open-ended questionnaire responses, and interviews yielded information that was categorized into various themes, each of which was given a unique collection of resources. The material gathered from observations and documents was examined using topic and content analysis for the examination of qualitative data. Means and percentages were used to display the quantitative data obtained from the document analysis.

## Ethical Considerations

Participants were informed of the study's goals so that they could decide whether or not to participate. They were made aware that their involvement in the study was entirely voluntary and that they might withdraw at any moment if they felt uncomfortable and were informed that the information was only utilized for academic purposes. For learners with CP, permission for taking part was sought from their parents through the head teacher

and the school parents' representative after they keenly studied the various other permission documents the researcher had obtained from relevant authorities. Respondents were given guarantees that the data they submitted would be kept confidential and used exclusively for the study. During the study, photos of students with CP were either taken while they were facing away from the camera or were blurred to hide their faces.

## **PRESENTATION OF FINDINGS, INTERPRETATION AND DISCUSSION**

### **Strategies Used by Teachers to Adapt Instruction for Learners with Cerebral Palsy**

The objective was to investigate how instructors' methods of instruction affect the academic achievement of students with cerebral palsy at Joyland Special Primary School for the Physically Disabled in Kisumu County, Kenya.

Teachers were asked to list their most popular teaching strategies in order of how frequently they were utilized. Discussion, demonstration, question and answer, role play, experimentation, peer teaching, look and say method and total communication were stated.

In discussion, learners were allowed to freely discuss learned concepts both in the presence and absence of the teachers to arrive at answers of questions asked by the teachers. This method was most applicable in regular classes.

Demonstration, role play, look and say method as well as total communication were commonly used to instruct learners with cerebral palsy. Through direct observation, the researcher witnessed demonstration, look and say method and total communication being used with the CP class.

Learners in classes showed mixed reactions when the teacher was teaching. Some showed eagerness to learn, others seemed unaware of what was going on. Some were sleeping while others were quiet. The class was composed of a heterogeneous group of students who all seemed to be at different levels of learning.

When teachers were asked to state methods of teaching starting with the most commonly used method, various methods were listed. Discussion, demonstration, question and answer, role play, experimentation, peer teaching, look and say method and total communication were stated.

Demonstration, role play, look and say method as well as total communication were commonly used to instruct learners with cerebral palsy. Through direct observation, the researcher witnessed demonstration, look and say method and total communication methods being used in the CP class. Teachers preferred these methods as they found them effective. Instead of being learner-centred, these approaches were more teacher-centered. The research's outcomes were comparable to those of Kanana's (2015) study, "Instructional Constraints Facing Learners with Cerebral Palsy in Selected Schools in Machakos and Kiambu Counties, Kenya," which discovered that teachers in these counties used teacher-centered approaches rather than the highly advised child-centered and conductive approaches when instructing students with CP.

The study evidence supporting the instructional tactics teachers use in class may not be known to them. Teachers must use interventions for which there is solid research supporting their efficacy. In other words, they must apply fundamental proof-based techniques. Learners in the classes the researcher attended showed mixed reactions when the teacher was teaching. Some showed eagerness to learn, others seemed not aware of what was going on. Some were sleeping while others were quiet. Although it is not easy to consider evidence-based strategies when a teacher goes to class, some effort is required. When considering the use of some instructional tactics, teachers should be aware that they will have strong evidence bases and be regarded as evidence-based practices. Different strategies, such as conductive learning, reciprocal teaching, and direct instruction, can all be considered research-based and have some proof of their effectiveness. Others are offering to settle conflicts without first building a strong foundation of proof.

Clearly, having a solid foundation in research is not the only factor to be taken into account when selecting instructional tactics. Educational intercessions additionally should have the option to be executed inside the current setting and reasonable real factors of schools and are exceptionally reliant on proficient insight based on

the broad experience of teaching (Cook & Cook, 2011). This incorporates using interventions for facilitating the learning of scholarly abilities like reading, composing, and arithmetic, just as the more extensive communication, social, and professional abilities vital for independent living. It additionally incorporates utilizing interventions for overseeing social troubles at individual, small-gathering, and class-wide levels.

It was obvious from the remarks made by the teachers who were interviewed that educating students with CP included additional responsibility and work. In addition to being instructors, the teachers also had to fulfil the tasks of mothers, teacher assistants, counsellors, nurses, and therapists.

Some of the teachers stated throughout the interviews that special education was stigmatized. According to these educators, the stigma was visible from every perspective, especially those of students and colleagues in mainstream education and society at large. Respondent 2, one of the respondents, stated:

“Other educators think I'm special. We who teach in special classrooms are truly denigrated by various professors. Even the Ministry of Education doesn't truly care about us. We don't receive a pat on the back for the daily effort we put in, nor do we receive promotions like our colleagues who teach regular students.”

Teachers who taught learners with CP complained of lack of teacher aides in their classrooms. They were forced to help their learners in class by ensuring that they sit well and are strapped in their chairs; those who could not hold pencils and use books were also assisted by the teacher. This challenge made teaching learners with CP tiresome and boring to most teachers.

From the results of this research it was noted that most students with CP could not hear and could not speak well. The teacher has to assume the role of speech therapist by trying to correct their pronunciation and speech. Since some of the learners do not hear well, and the teacher is not a trained speech therapist, teaching remains to be the most challenging task on the side of the teacher.

In an interview with the head teacher, he noted that some of the students do not have the ability to go for a long call. These students have to be timed and a special pipe used to drain waste. This was the same observation made by the teachers handling CP classes. Although the matron is the one responsible for ensuring she gets the children with such problems from class, this disrupts teaching since the teacher needs to create time to make up for the lost lesson every time.

With the curriculum that is rigid, teaching of CP classes is structured in such a way that a lesson takes 35 minutes like other classes for regular learners. At Joyland Special Primary School, teachers had 35 minutes lessons in which they were not able to teach the class as well as help individual learners with CP. As cited in Kamau (2015) poor handwriting and learner differences make it difficult for composition marking and syllabus completion for teachers in Kiambu. Teaching and syllabus completion was equally a difficult challenge for teachers at Joyland Special Primary School.

Through the interviews, a portion of teachers noted that there was stigma devoted to special education. The stigma came from other people's viewpoints, especially those of students and co-workers in mainstream education and society at large. Teachers who are in a school where ordinary students are will want to interact freely with other teachers and students. These teachers have been isolated, they work for longer hours than other teachers, and they do not meet or socialize. Teaching learners with CP seems to lack definite working times. This is a challenge that puts undue pressure on the mental health of the teachers educating learners with CP.

Parents of learners with CP have taken leave of their parental roles and leave teachers to assume their roles as noted by most of the participants. It was observed that parents gave visiting days a lot of attention but were quick to bring their children to school when classes started. When schools were closed, some parents chose not to pick up their kids. In one instance, a youngster was left behind in school for more than five years, according to the head of the institution. The majority of educators believed that parents anticipated the reopening of schools rather than their closure. From a focus group discussion with learners with CP, most of the learners stated that they were rarely visited by their parents. Visits by parents, in most cases, took place when the parents were called to school because of the learners' illness.

Most parents abandon their children in school, perhaps due to the stigma and frustration the disability has brought to the family. Some parents may not be aware of what to do with children with CP. That may be why they feel relieved when schools open and they take their children to school. Parents, instructors, and employees at CPSK lacked the necessary knowledge about CP (Mwendwa, 2010). Parents of children with functional disabilities are now under a tremendous amount of responsibility. They should be familiar with functional disabilities in order to ask for the child's assistance when it will be most helpful. In general, parents must complete the required training, provide care, and address any real issues related to the impairment. This is difficult and tedious work for the parents as it requires more time.

Majority of parents who had their children at Joyland may not have been aware of the conditions of their children before they were referred to the school. Most referral cases were from ordinary schools or schools with special units. Teachers had the responsibility to ensure that every learner receives all the necessary help they need. This had burdened the teacher who had to assume the role of the nurse and physiotherapist every time as opposed to her trained role of teaching.

### Academic Performance of Learners with CP

The research aimed to explore how instructional limitations affected the academic achievement of students with cerebral palsy at Joyland Special Primary School for the Physically Disabled in Kisumu County, Kenya. The researcher first provides information on the students with CP's academic achievement. The data presentation begins with presentation of information on the entry behaviour of learners with CP.

### Information on Learners entry Behaviour

The researcher sought information on the admission of learners at Joyland Special Primary School. This information would enable the researcher understand the nature of learners who were admitted in the school. The school admitted both regular learners and learners with disabilities. Regular learners were taught in normal primary classes. Learners with disabilities were taught in separate classes based on the nature of their disabilities. Learners with cerebral palsy were taught in the special classes which the school calls *peto classes*, while pre-vocational and vocational learners were also taught separately. Learners with cerebral palsy admitted directly to school were subjected to a medical examination as directed by the school. The medical certificate (see appendix ix) could then qualify some of the applicants for admission. Some learners got admitted through referrals which were made to the school from time to time (see appendix xiv). Severe cases of CP were not admitted in the school as the school lacked the ability to handle such cases.

### Learners Performance in KCPE

Table 1 presents learners performance in KCPE for the year 2016 and 2017

**Table 1: KCPE Subject Mean scores for CP Class 8**

Subject/Year	Entr	Eng	Kisw	Math	Scie	Sst	Classmean
2016	8	28.24	40.34	19.91	27.68	42.20	31.67
2017	7	29.82	48.12	18.24	20.60	40.82	31.52

The findings stated that in the year 2016 and 2017, the candidature of learners with CP were 8 and 7 respectively. When their means were computed, English had a mean of 29.82 in 2017 having improved by 1.58 from the previous year. Kiswahili recorded a mean of 48.12 in 2017 up from 40.34 in 2016. Mathematics had a mean of 18.24 in 2017 a drop by 1.67 in 2016, Science had a mean of 20.60 being a drop of 7.07 from the previous year. Social Studies in 2017 had a mean of 40.82 having dropped by 1.38. The results for the two years showed an overall mean of 31.52 in 2017 and 31.67 in 2016 which was below the average mean of 50%. The performance in English, Mathematics and Science was poor while the best performed subjects were Kiswahili and Social Studies with a mean of above 40% in the two consecutive years.



## Class 8 Performance in Internal Examinations

Table 2 presents learners performance in internal examinations

**Table 2: Subject Mean scores for CP Class 8 End of Term Exams 2018**

Subject	Entr	Eng	Kisw	Math	Scie	Sst	Classmean
Term1	11	32.41	43.27	24.97	37.78	45.23	36.73
Term2	11	28.96	51.32	22.54	21.80	53.12	35.55

The table states that the learner's performance in internal examinations administered by the teachers. In term 1, 2018, all the subjects English (32.41), Kiswahili (43.27), Mathematics (24.97) Science (37.78) and Social Studies (45.23) recorded a mean of below 50%. Social Studies and Kiswahili were the only subjects that recorded a mean of above 40%. This implies that English, Mathematics and Science subjects gave learners a challenge.

In term 2 2018, the performance of CP class 8 pupils was as follows: English (28.96), Kiswahili (51.32), Mathematics (22.54), Science (21.80) and Social Studies (53.12). Based on this performance, Kiswahili and Social Studies were the subjects that recorded above average performance. English, Mathematics and Science performed poorly with English deviating by -3.45 from the term1 mean score, Mathematics deviated with -2.43 while Science dropped by 15.80. This performance showed that learners had difficulties in English, Mathematics and Science subjects.

## Learners Evaluations

Table 3 presents data on learner agreement and disagreement on various statements concerning evaluation in the classroom.

**Table 3: Learners Evaluations**

Item	Agree	Undecided	Disagree
The student feels there is too much homework to finish	45(50.0%)	12(13.3%)	33(36.7%)
Students are given more time to finish their work during exams	54(60.0%)	23(25.6%)	13(14.4%)
In the event that a student is unable to complete the assignment, teachers adjust it.	53(58.9%)	5(5.5%)	32(35.6%)
In class, teachers don't tend to ask students many questions.	61(67.9%)	7(7.8%)	12(13.3%)

The table indicates that 45(50.0%) of the learners were in agreement that they felt that the work given to them in the examinations was too much. 12 (13.3%) were undecided while 33(36.7%) disagreed that they felt that the work given was too much. On being added more time during examinations to complete the given tasks, 54(60.0%) agreed, 23(25.6%) were undecided while 13(14.4%) disagreed. Table 4.4a also presents that 53(58.9%) agreed that teachers modified the work they gave them in case a learner was unable to do it, 5 (5.5%) remained undecided while 32(35.6%) of the respondents disagreed. As to whether the teachers asked them a lot of questions in class, 61(67.7%) agreed, 7(7.8%) were undecided while 12(13.3%) disagreed.

The outcomes from table showed that most learners 45 (50.0%) believed that the work given to them was too much to complete. Given their nature, learners with CP experience physical strain when doing some tasks, as a result they may perceive some tasks as too much. Concerning being added more time to complete tasks, majority 54(60.0%) agreed. This implies that most of the learners were slow and required more time to complete the examination. Additionally, the teacher modified work given to learners in case they were unable to do it as suggested by majority of learners 53 (58.9%). This implied that learners were unique the teacher had to modify the question to the level of their understanding for them to attempt it. On the teacher asking a lot of questions in the class, majority of the respondents 61(67.9%) agreed. This implied that the need to keep learners engaged in

the classroom demanded that the teacher asks many questions. Also, since learners had different learning abilities, each learner was to be assessed differently by the teacher.

The United CP Foundation (2007), which contends that a kid with CP should be included in all activities to avoid making him or her different, supports these findings. Give him/her several chances to speak up in class and make sure to mention him/her by name. They should be allowed time to respond, especially if they are utilizing electronics, it further says. In order to avoid yes/no answers like head nodding or shaking, open-ended questions should be used instead. Teachers are encouraged to modify projects that need a lot of writing, ask for the assistance of a tutor or student mentor, show a great deal of patience and emotional support, and inspire a child with CP by making positive academic remarks (Special Children.about.com).

### Learners Favourite Subjects

According to the teaching schedule, students chose Mathematics, Sciences, English, Social Studies, Kiswahili, CRE, and ADL as their favorite subjects. The outcomes matched Table 4.

**Table 4: Learners favourite subjects**

Subject	F	%	Rank (1-most favourite – 5 less favourite)
Maths	6	6.7	5
Science	7	7.8	5
English	8	8.9	5
Kiswahili	13	14.4	3
Social studies	15	16.7	2
CRE	11	12.2	4
ADL	30	33.3	1

Most of the learners 30(33.3%) liked ADL followed by Social Studies 15 (16.7%) and then Kiswahili 13 (14.4%), Mathematics at 6 (6.7%), Science 7(7.8%) and English 8(8.9%) were less liked as they were ranked 5 while CRE 11(12.2%) was ranked 4. From these results, learners liked ADL perhaps because they applied these tasks in their everyday life. For them, basic ADLs like eating, dressing, moving into and out of a chair or bed, bathing or showering, and using the restroom were significant. The presence of a school matron may have helped in making learners love these activities.

Mathematics and Science were least liked partly because some learners were unable to manipulate construction apparatus due to their jerky movements. Due to physical strains these learners with CP experienced, it was difficult for them to perform some learning tasks. The poor performance had been witnessed in earlier KCPE results. English had a mean of 29.82 in 2017 while in 2016 it had a mean of 28.24. Mathematics had a mean of 18.24 in 2017, a drop by 1.67 in 2016. Science had a mean of 20.60 in 2017 being a drop of 7.07 from the previous year.

The outcomes in table 4.4b also agreed with the researcher's observation findings during the classroom session where some learners were less interested, others were sleeping while others were unable to perform tasks given by the teacher on their own. Since some learners had constraints in speaking, the teacher had to assume the role of speech therapist. In the process, learning of English as a second language was difficult for the learners. Kiswahili, on the other hand, although not a favourite, as a first language to most of the learners, was easy to interact with and learn.

The results of this study concurred with Kamau's (2009) assertion that the acquisition of fundamental reading and numeracy skills was not considered a significant goal of special education. Learners were allowed to learn at their pace which could take many years to grasp what could have taken a shorter time in regular schools.

## SUMMARY OF STUDY FINDINGS

The study revealed that demonstration, role play, look and say method as well as total communication were commonly used to instruct learners with cerebral palsy. Through direct observation, the researcher witnessed

demonstration, look and say method and total communication methods being used in the CP class. Teachers preferred these methods as they found them effective. It's possible that educators are unaware of the research supporting the teaching methods they employ in the classroom. Teachers must use treatments that have solid research supporting their viability. In other words, they must primarily employ evidence-based procedures.

Learners in the classes the researcher attended showed mixed reactions when the teacher was teaching. Some showed eagerness to learn, others seemed unaware of what was going on. Some were sleeping while others were quiet.

On the academic performance of learners with CP in Joyland Special Primary School, the findings of the study showed that most of the learners - 45 (50.0%) Table 4.4a, expressed that the work given to them was too much to complete. They 54(60.0%) require more time to complete given tasks. Tasks had to be modified so that learners 53(58.9%) who were unable to do them could attempt. The teacher had to ask many questions in the classroom targeting individual learners 61(67.9%) due to their learning differences.

KCPE performance in English, Mathematics and Science for learners with CP remains poor. Table 4.3a shows that English had a mean of 29.82 in 2017 while in 2016 it had a mean of 28.24. Mathematics had a mean of 18.24 in 2017, a drop by 1.67 in 2016, Science had a mean of 20.60 in 2017 being a drop of 7.07 from the previous year. According to the teaching schedule, students' favourite courses were Mathematics, Science, Social Studies, English, Kiswahili, CRE, and ADL. They preferred ADL the best, possibly because they employ these duties in their daily lives. For them, basic ADLs like eating, dressing, moving into and out of a chair or bed, bathing or showering, and using the restroom had significance. The presence of a school matron may have helped in making learners love these activities. Mathematics and Science were least liked partly because some learners were unable to manipulate construction apparatus due to their jerky movements. Due to physical strains learners with CP experience, it was difficult for them to perform some learning tasks.

## CONCLUSIONS

Teachers preferred demonstration, role play, look and say method as well as total communication to instruct learners with cerebral palsy since they found them effective. It is possible that educators are unaware of the studies supporting the teaching methods they employ in the classroom. Teachers must use treatments that have solid research supporting their viability. In other words, they must primarily employ evidence-based procedures.

Teachers handling learners with CP are likely to be isolated due to the nature of their work. This leads to stigma which affects their morale in school. Learners with CP require great attention from the teachers. Unlike their counterparts in regular learning environment, they require more time to complete tasks in examinations. They need to have tasks simplified to their understanding and individual attention of the learners needs to be enhanced during teaching and evaluation. Additionally, learners with CP experienced physical strain when learning Mathematics and Science which required manipulation of apparatus and experimentation. As a result, they liked ADL and Social Studies more than Kiswahili and English languages since some of the learners had problems in communication.

## RECOMMENDATION

The Ministry of Education in collaboration with KICD and KISE should design a suitable curriculum for CP so that teachers can be prepared at every level of college training on how to handle learners with CP. For teachers already in the field, refresher courses and seminars should be organized for them so that they can be well equipped to handle learners with CP.

Assistive technology is very essential in teaching learners with special needs, especially learners with CP. The school administration should provide all relevant assistive technology to the learners and the teachers. If resources are available, teachers will change their attitude towards teaching. Teaching will become entertaining and enjoyable as opposed to frustrating and tiresome.

The school should be renovated and redesigned to be friendly to the learners with CP. The pavements should be made passable and sheltered. Rails and ramps should be fixed on pavements for easy mobility. Wheelchairs

should be improved in their design; modern wheelchairs which can move around by themselves are ideal for the school as opposed to manually- driven wheelchairs.

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