

Instructional Strategies in Teaching Literacy Skills to Learners with Cerebral Palsy: A case Study for Special Classes in Kenya

Obinga Sarah A.O and Kochung, E.J.

Department of Special Needs Education,
Maseno University, P. O. Box 333, Maseno, Kenya

Corresponding Author: Kochung, E.J

Abstract

A multiple-case study examined the teaching of literacy skills to pupils with Cerebral Palsy (CP) in special schools in Kenya. Cerebral palsy refers to paralysis of the brain and mainly affects muscle tone, which interferes with voluntary movement and delays in gross and fine motor development. These children are extremely a heterogeneous group and have functional abilities that vary given the unique differences in their conditions, abilities and needs. Characteristics of these children include paralyzed speech muscles and uncoordinated movements. The study focused on pupils experiencing functional motor limitations involving speech and hand use. These pupils have varying degrees of challenges in terms of their learning ability that calls for variations in instructional strategies aimed at addressing their individual needs. The study examined instructional strategies used by teachers and how those strategies are individualized and adapted to suit the special needs of each learner. The study used four teachers and used four classes with physical disabilities but specifically those with CP. Four teachers participated in the study and each teacher was a case. The study used observation method. The finding of this study has indicated that the number of pupils in a class affects and determines instructional strategy used by the teacher. It also revealed that teachers of learners used verbal and non-verbal approaches and applied different or a combination of instructional approaches to address the individual needs of each learner. The study further revealed that most teachers of children with CP individualised their instructional strategy. The study recommends that the government should consider reducing the number of learners in a class particularly those with cerebral palsy and that the training of teachers dealing with CP children should emphasize diversity of learners

Keywords: individualization, instructional strategies, cerebral palsy, literacy skills, special units, Kenya

INTRODUCTION

Reading and writing are literacy skills through which people communicate. Literacy skills are essential in education process since they are important tools for learning other subjects in school. Being literate means being able to read and write and apply that skill in day to day activities. A learner with difficulty in learning literacy skills usually goes through a hurdle to cope with academic tasks in school. Cerebral palsy refers to paralysis of the brain and mainly affects muscle tone, which interferes with voluntary movement and delays in gross and fine motor development (Kirk, Gallagher & Anastasiow 1997).it is also a term that is used to describe a group of disorders of the development of movement and posture, causing activity limitations that are attributed to non-progressive disturbances that occurred in the developing fetal or infant brain. The motor disorders of cerebral palsy are often accompanied by disturbances of sensation, perception, cognition, epilepsy, communication, and by secondary musculoskeletal problems' (Rosenbaum, et al 2007). This voluntary movement is crucial in the performance of tasks that require oral speech and the use of the hands, such as the literacy skills –reading and writing. Children with CP are extremely a

heterogeneous group and have functional abilities that vary given the unique differences in their conditions, abilities and needs. There are those with unintelligible speech characteristics of Cp children include paralyzed speech muscles, uncoordinated movements; sometimes low intellectual functioning or a mixture of almost all the above characteristics (Kirk et al. 1997, Hallahan &Kauffman 1997). It implies therefore, that there is no atypical child with cerebral palsy. According to Smith (1992), cerebral palsy population experience difficulties in areas related to deficits in perceptual functioning, language skills, or learning experiences.

Heller, Fredrick & Diggs (1999) argue that, teaching reading effectively to students who were born with physical disabilities that impede speech and movement is one of the most critical problems in the field of physical disabilities. This means that the individualized adaptations of the instructional strategies need to be considered when teaching learners with cerebral palsy to maximize active, hands-on learning. According to Kirk et al. (1997), children with cerebral palsy who have muscle weaknesses, involuntary movements, and poor coordination of the fingers and hands may require a

writing aid or alternative system to complete written tasks in school in a neat and timely manner. This implies that the teacher has to be creative in the classroom in making necessary adaptations for each child, depending on the learning styles, as each child might require adaptation that is totally different from others. Efforts put in teaching reading and writing skills to learners with CP is vital. These skills are important in education since they constitute the foundation in understanding all subjects. According to National Dissemination Centre for Children with Disabilities (2004), a child with cerebral palsy requires individualized instruction because such a child can face many challenges in school. These challenges would include performing academic tasks as well as communication and interaction with peers. This study sought to investigate how teachers trained in special needs education individualize their teaching strategies to accommodate learners with cerebral palsy in reading and writing lessons. The assumption is that these are very good teachers trained in special needs education and trainers can learn from them when teaching other teachers or advising other teachers. Suggestions on how best teachers can be assisted, especially those experiencing difficulties supporting these learners in literacy skills were also a priority, to help the learners function in the classrooms. This would pave way for improvements in the training of teachers in special needs education and the education of children with cerebral palsy, which is wanting in Kenya.

The purpose of this study was to establish how literacy skills are taught to learners with cerebral palsy with regards to individualization, adaptations and differentiation of the instructional strategies. Specifically this study intended to; find out whether there were some similarities and variations in the ways teachers organized and taught literacy skills to children with cerebral palsy, individualization of the teaching methods, and materials and activities used by teachers in the teaching literacy skills.

STUDY DESIGN AND METHODOLOGY

The study employed the a descriptive study that involved collection qualitative data since the intention was to study the phenomenon in its natural setting in order to get rich data. The qualitative study was relevant because the research problem sought to investigate the 'how' question and the topic needed an exploration (Creswell, 1998). This was only possible by observing the phenomenon in its natural occurrence. The study aimed at capturing the events in their context. This is in line with Yin (1994) who observes that observation covers events in real time and it is contextual in nature. The study was based on the observation of instructional strategies in reading and writing lessons, with regards to individual adaptations for learners with cerebral palsy. These are learners experiencing functional motor difficulties

involving speech and the use of hands in performing reading and writing tasks in the classroom. There are four special primary schools for learners with Physical disabilities in Kenya. The study was done in three special schools for children with physical disabilities. Three out of these four schools for the physically handicapped children were selected because they met the criteria for the study. The criteria included; housing units for children with cerebral palsy, having teachers trained in special needs education, having learners with cerebral palsy and being physically accessible at all times. The lower primary grade was crucial for this study because it is the foundation stage for the development of reading and writing skills. Grade three was preferred because it is the final grade for lower primary in Kenya, where a learner is expected to acquire all the literacy skills necessary for coping with the tasks in the subsequent grades.

Purposive sampling strategy was used to select the teachers from the four schools. The teachers selected were those who must have taught for at least one year in the unit for CP, the Peto class. The name 'Petö' comes from the founder, Andres Petö (1893-1967), a Hungarian who founded a conductive education, a pedagogical approach that addresses all aspects of development for non-ambulatory children in 1948 (Sutton 2006). Teachers of English language were the most preferred since English is used as the medium of instruction in school (Muthwi 2001). Teachers selected from these four schools had been trained in special needs education and were teaching in grade three in special classes for cerebral palsy children.

METHODS OF DATA COLLECTION

Data for this study was collected through observation and interviews. Observation was conducted through non-participant observation in the classrooms, to cover as much data as possible with minimal interference in the classroom during the reading and writing lessons. Observed data included instructional strategies, the activities initiated; the materials used by both the teacher and the learners with cerebral palsy, and individualized adaptations for learners with cerebral palsy. Each participant was observed two times and a total of 8 lessons were observed and recorded

Data was also collected through informal interviews after each observation session. This method put the respondent at ease and helped to generate information in a tension free atmosphere. Befring (2004) states that, an open dialogue, in the form of a free and flexible conversation is an important approach to getting valid information. Interview helped to clarify certain aspects that arose, and this was meant to obtain in-depth information on the phenomenon in question and to find out more on certain issues observed during the lesson. The interviews involved

getting information on the backgrounds of the learners, professional backgrounds of the teachers, choice of content taught to the learners, the availability and choice of reading and writing materials and, the inclusion or exclusion of the learners with cerebral palsy in the lesson activities.

Data for the study was analysed based on four themes; individualization of the instructional strategies in reading and writing lessons, comparison of the results of all the four cases summarized in a single matrix, comparison across one or more cases and comparison across two or more cases.

RESULTS AND DISCUSSIONS

Data for this study was analyzed in terms of; classroom settings, instructional strategies, learning activities and use of materials. For the purpose of confidentiality and anonymity, the four teachers who are the cases in the study are referred to by as teacher (1), teacher (2), teacher (3) and teacher (4). The learners with cerebral palsy in the classes used in this study are presented using constructed names. In Teacher (1) class they are called, Odemba, Gracie and Mary; in Teacher (2) class, Brown, Sophia and Jenny; in Teacher (3) class, Babu Quinn, and Dodo; and in Teacher (4) class, Chidi, Brian, and Brad.

Background of participants

All the four teachers studied had a background in special needs education, meaning that they all possessed the required skills and knowledge in teaching learners with cerebral palsy. They all had learners with cerebral palsy in their classes. Teacher (1) taught in a special school for learners with physical disabilities, while teacher (2) taught in a special school for learners with physical disabilities with an inclusive model. Both of them taught grade three pupils. Teacher (3) taught in a special school for learners with cerebral palsy. She taught the literacy class, and; Teacher (4) taught in a special unit for those with CP but housed in a special school for learners with physical disabilities under inclusive model. It is a single unit.

Classroom settings

Teacher (1) class consisted of forty (40) learners with varied types of physical disabilities. Ten learners had cerebral palsy. Six out of the ten learners with cerebral palsy used wheelchairs. Odemba and Gracie had both problems with speech and hand use while Mary had problems with speech.

Teacher (2) class was an inclusive classroom of learners with and without physical disabilities. In the lessons observed, there were a total of twenty five (25) learners in this class. Three learners had cerebral palsy. Sophia, one of the learners with cerebral palsy used a wheel chair and had speech problems, Brown had paralysis of the upper limbs and unclear speech, he uses his feet to write, and Jenny also had speech

problems. Brown and Jenny were not wheelchair users.

Teacher (3) class had a total of ten (10) learners with cerebral palsy. Quinn had no speech but could control her fine motor, Dodo had no speech and had difficulties with hand use, Babu and Betty had unclear speech and difficulties with fine motor abilities.

Teacher (4) class had had a total of twelve (12) learners with mild to severe cerebral palsy. One learner, Chidi, had difficulty in both speech and hand use but used a wheelchair. Brad and Brian had speech and hand- motor difficulty but did not use wheelchairs. There were also learners with intellectual difficulties.

INSTRUCTIONAL STRATEGIES

T1 In presenting the reading lesson, the teacher used familiar events and instances to introduce new words in the passage about to be read from the English course book. For instance, in the second reading lesson, the teacher asked the class, "If someone asked you what you have been doing when you come from a shamba (garden) what will you say." "I have been digging", they answered in chorus. The teacher involved the class in repeated reading in the first reading lesson. He also read a passage aloud as learners followed along in their English text books. He then read the first lines in the passage and the whole class read the alternating lines as a group. In the second reading lesson they read the passage together. The teacher did much of the talking and learners listened with just a few participating in answering oral questions in chorus form. The learners with cerebral palsy were not involved in much of the lesson. Odemba was involved in answering an oral question in the first reading lesson. Gracie was only accommodated during activity time. Mary was given a chance to read aloud. Discussion of Teacher One's individualization of the instructional strategies in reading and writing lessons

Discussion. The teacher addressed the learners as a group and only in few cases did he address individual learners. This made other learners passive in the learning process. Rogoff (2003) suggests for organizing lessons according to the child's need, rather than organizing instruction according to adult plans. He did not take into consideration their unique individual needs. His methods seemed to treat the learners as a homogenous group. The nature of the reinforcement he accorded the learners seemed to hamper their participation in the learning process. During the reading lessons, this teacher read aloud to the class. It has been established that reading aloud to the class and the class following the reading by looking at the text being read is one way of helping learners in reading skills (Burns et al 1999, Heller 2005). This was observed in the two reading lessons

in Teacher (1) class. He also paused and asked oral questions in the middle of reading, which according to Heller (2005), is a good way of finding out learners' comprehension of a text. However, he did not distribute questions to individual learners across the class. This meant that only a section of the class took active part in the lessons while the rest assumed a passive role. Mendéz et al. (2008) contend that teaching in the zone of proximal development requires sensitivity to students' current abilities and their potential development. He seemed to be using the basal approach, for he strictly based his teaching in the course book.

Some of learners in Teacher (1) class never participated in any activity in all the observed lessons. Best and Bigge (2005) observe that learners should be included in the learning process to eliminate segregation or exclusion in the learning process. This was evident in this class among learners with CP on wheelchairs as neither were they assigned reading, writing tasks nor questions or materials during the reading and writing lessons. Though the teacher reasoned that they were "non readers", this showed that they had labeled them and ended up neglecting them in the learning process and no individualized adaptation was planned and used with them.

Best and Bigge (2005) advocate for differentiating task difficulties that arise from either motor or cognitive challenges. Only two learners were assigned different activities. An example was observed when Odemba and Gracie were assigned different tasks during the writing lessons. However, the nature of the tasks that Gracie and Odemba were engaged in did not seem to pose any challenge. For instance, in the writing tasks, they were engaged in writing few letters of the alphabet, letter A, B, C, which they had already mastered writing. This made it appear as if they remained at the same level and were not challenged to move to the next zone.

He accorded physical assistance to Gracie during one of the writing lessons when he held her wrist to write. This was an example of physical prompting. Best and Bigge (2005) observe that "over assisting" student is not unnatural because it is easier and faster to assist rather than watch the student struggle. This assistance was necessary because Gracie could not steady her hand during the writing activity. This assistance supports (Kirk et al. 1997) who states that, children with cerebral palsy who have muscle weaknesses, involuntary movements, and poor coordination of the fingers and hands may require a writing aid or alternative system to complete written assignments. This teacher did not adapt any writing material like a thick pencil or wound a tape around the pencil as he said he usually did, but this was not observed to be happening. Vygotsky asserts that, children must learn

through physical and social interaction with an object in order to be able to conceptualize and express ideas about it (Dixon-Krauss 1996). The teacher used pictures in the pupils' books and no additional teaching aid or concrete objects. This made his lesson appear teacher – centered. He did a lot of talking as the learners listened and answered oral questions with no materials to manipulate.

T2 Learners were engaged in the sounding of new English words containing the short vowel sound /i/, blending of consonants <sh > to teach the sound /ʃ/ and <ch> to teach the sound /tʃ/ in the first reading lesson and the long vowel sound- /ai/, in the second reading lesson. Examples of the words used to reinforce the sound /i:/ were, 'deep' 'sleep', 'meet', the sound /ʃ/ and /tʃ/ were 'sheep', 'church' and the sound /ai/ were, 'light', 'right', 'fight', 'sigh', among others. According to the teacher, the reading lessons were simplified by having the content adapted from the previous passages read in the English course book for standard (grade) three, which he identified to be problematic for the learners.

In the first writing lesson, the learners were instructed on how to write correctly. The teacher said to the class, "There must be good spacing between the words. If you are writing a sentence, you must start with a capital letter". The teacher also stressed the shapes of letters and the punctuation marks. In the second writing lesson, dictation of sentences was done and learners wrote in their exercise books. Examples were, 'this line is straight', and 'a pencil is lighter than a book'. The learners read aloud individually and as a class; they corrected words and sentences on the chalkboard. The sentences comprised of the words with the sounds taught the previous reading lesson.

Discussion. Regarding the reading method used by teacher (2), he used phonics method in teaching reading and learners with speech difficulties were involved in sounding the vowels and reading the words with those vowel sounds. He also taught writing of short sentences through dictation and use of filling in blanks using the same methods and same content for all the learners. This approach does not support Best and Bigge (2005) who argues for differentiation and adaptation of the teaching methods. This would have been necessary in this class given the heterogeneity of the learners, however, it was not employed.

In using phonics method, a child is exposed to individual components of words, the phonemes and graphemes (Wikipedia 2008), for instance, This teacher taught single vowel sound /i/, blending of consonant sounds 'sh' /tʃ/ and 'ch' /ʃ/ in words, 'sheep', 'church'. The teacher adapted the content for the reading lessons by identifying sounds that pupils found difficulty reading from their English text books

in previous lessons, and then taught phonetically. This is in line with Burns, Griffin and Snow (1999) that students should be taught phonemic awareness the alphabetic principle and given practice in letter recognition, oral blending and segmentation. He gave them practice in writing the sentences and words involving sounds learnt in previous reading lessons. This is in view of what Vygotsky believed in that, 'good instruction is aimed at the learner's zone of proximal development' (Vygotsky 1986 cited in Dixon-Krauss 1996, p. 14).

The teaching progressed at the learners' pace. For instance, he was heard several times telling the class to give some pupils time. It meant that he took into consideration the individual differences at this point. Teacher Two engaged all the learners in similar learning activities in both reading and writing lessons except one learner who had a different content in one of the writing lessons. It was also necessary to treat the lessons differently with varied activities and content depending on different functional abilities of the learners. Scaffolding as a mediating strategy must be at the level of the learner's zone of proximal development and able to alleviate the needs of the child already identified (Verity 2004). An example was the individualized activity that took place in arranged lessons every Thursday afternoon outside class hours in the library, where Teacher (2) trained Brown on typing using a computer, however in the classroom, the teacher attended to the learners during the learning process.

According to Vygotsky (1978), children learn through physical and social interaction with an object in order to be able to conceptualize and express ideas about it; In doing so, their thinking transforms from concrete to abstract (Dixon-Krauss 1996). This was observed to be happening in Teacher Two's class. This teacher made good use of the teaching aids, such as charts and flashcards in teaching both reading and writing lessons, making the lessons realistic and interesting to the learners.

T3. In the first lesson, the teacher displayed flash cards with letters one by one and asked individual learners to identify them. She did the same with items and pictures whose names corresponded with the letter displayed. The teacher also used songs to reinforce the concepts taught, for instance in the first lesson, in teaching the concept of colour so that the learners could discriminate against two displayed colours, she sang together with the learners, "Choose colour choose, choose colour choose, do you like a blue colour do you like a yellow colour, choose colour choose", while displaying different colours in turn to the class and they identify them one by one. An 'ABCD song' was also sung to recite the letters of the alphabet in the second lesson. When teaching language, teacher (3) chose words that were familiar

in the learners' everyday lives. This was an example of whole- language approach because the learners were engaged in reading word without following the phonics rules. They were looking and identifying letters A, B, C, and D, on flash cards, and words presented. The use of non-verbal approach was observed when the teacher was working with Quinn during the identification and naming of colours. Pointing at different colours on a chart and Quinn responding by use of body language.

Discussion. Aspects of individualizing and differentiation of activities according to learners' functioning abilities was observed. Best and Bigge (2005) advocate for differentiating task difficulties that arise from either motor or cognitive challenges. The activities initiated were as per the individual abilities of the learners. The activities were related to the main theme of the lessons, only adapted to suit each child's needs and abilities. For instance, Babu was to arrange bottle tops along the outline of the letter 'A' drawn with a piece of chalk on his slate. Three learners wrote letter 'A' repeatedly with a pencil in the lines drawn wide apart in their exercise books. Dodo was to sort and arrange in alphabetical order blocks of letters on his tray slate. This was differentiation as Westwood (2004) states that differentiation involves using of strategies to accommodate individual differences among students. The learners who could write in exercise books had ordinary single ruled exercise books. The teacher drew lines widely spaced in learners' exercise books using a pen and a ruler to give suitable space for writing. This was adaptation done to individual learners on the materials in task performance. Slates and pieces of chalk were also in use as well as crayons for those with weak grasps. This observation supports (Kirk et al. 1997 and Heller 2005) who states that some learners with CP may require adaptations on the materials and equipment used in writing.

T4 Instruction to the learners involved use of questioning, explanation and demonstrations by the teacher in teaching the new words and writing them down in the two lessons. The look and say method was used. The teacher mimicked a sound when introducing a new word. In one of the lessons observed she imitated the cry of a baby to introduce the word 'baby'. The teacher used both verbal and non-verbal instructions in her lessons. In the second lesson, writing of letter 'd' in the air was demonstrated by both the teacher and the learners. The teacher asked the class, "How do we write letter 'd'? Brian is told to write letter 'd' in the air. He tries and does it correctly and teacher says it is correct. With the back turned to the class, the teacher raised her hand in the air and demonstrated writing of letter 'd' in stages as she said aloud in Kiswahili, "Kutoka juu kuja chini, kushoto, kwa ubweni, kwenda kulia, fungua ubweni na urudi chini" (From up, down, to the

left in a circle, close the circle and come down) with the learners following. She then repeated the same activity and said in English. Oral participation was for the whole class as a group as well as individuals in naming of familiar words beginning with letters 'b', 'c', and 'd' (bag, bus, cow, cup, cat, dog, donkey). Pictures were used to facilitate the reading. The teacher took into consideration the individual differences in the classroom by teaching at the learners' pace and made sure each learner was involved in the lesson. This was observed in the way she accorded the individual learners opportunity to answer oral questions. It was also observed in one of the writing lessons when one of the learners (Chidi) said he was tired and the teacher excused him. This was an example of taking into consideration the functional abilities of the learners, which are said to vary.

Discussion. As indicated in the results, teacher (4) took into consideration the individual differences in the classroom by teaching at the learners' pace and made sure each learner was involved in the lesson. This was observed in the way she accorded the individual learners opportunity to answer oral questions. It was also observed in one of the writing lessons when one of the learners (Chidi) said he was tired and the teacher excused him. This was an example of taking into consideration the functional abilities of the learners, which are said to vary. Teacher Four assigned pupils' different activities related to their abilities. For instance, some of the learners repeatedly wrote the word 'cow' in their exercise books while others colored the picture of a cup, to reinforce the new words learnt, beginning with letter 'c'. Learners also engaged in group activities and some peers were observed working together with learners with speech difficulties, an example is one who displayed flash cards to Chidi to read. This is in line with Best and Bigge (2005) on differentiating task difficulties that arise from either motor or cognitive challenges of the learners. This practice is supported by Haskell and Barret (1993) and Kirk (1998) who state that adaptations are essential in a number of areas including; actual content of lessons, skills being taught, and teaching materials.

Individualized assistance, which is essential with the learners with functional motor impairments, was accorded by the teacher. An example was when she held Chidi's pencil to steady it as he wrote, when Chidi requested her to do so. This was an example of scaffolding that according to Verity (2005), is a crucial form of strategic mediation and that, like all mediation, it should be offered to a learner depending on his needs. It is also argued that learning takes place better through social interaction between the child and the care giver which helps a child to move to a potential performance level, as in the concept of the zone of proximal development (Vygotsky 1978,

Klein 2001, Dixon-Krauss 2001). This potential performance level includes all the activities and functions that a learner can perform only with someone else' help (Schütz 2004 cited in Offord 2005), which Teacher (4) was seen to be according her learners.

During the writing activities, one learner (Brian) tried to write and his book kept on sliding, interfering with his task performance. Best and Bigge (2005) observe that motor deficits of cerebral palsy must not be allowed to interfere with meaningful participation in educational experiences. The teacher should have provided the learner with a masking tape to stop it from sliding during the writing task.

Cross Analysis of the Strategy Used By Four Teachers

The four teachers taught classes with different numbers of learners. T1 had a class with the largest number consisting of forty pupils with varied physical disabilities compared to other three teachers' classes. T2 taught ten pupils, T4, had twelve and T2 had twenty five learners. This varied in number perhaps, explains why T1 could not accord individual assistance effectively to the learners due to the demand of the large class and instead made his teaching appear teacher- centered. Though the other three teachers had fewer learners as opposed to T1, the teacher-pupil ratio was still large for implementation of effective individualization in the learning process.

Analysis of the approaches used by each teacher indicated that, T1 used whole-word and basal reader, T2 basal and Phonics, T3 used a combination of whole word and non-verbal and T4 used 'whole word' and 'look and say' methods. The three teachers (T2, T3, and T4) when teaching proceeded by the learner's pace, while T1 went by the pace of fast learners in the class. This situation may be attributed to the large number of children in teacher (1) class.

The most significant feature was on the reinforcement of learners' efforts (rewards and reprimands), which was observed to be very strong on the negative aspect in Teacher (1) class. It created a tense learning atmosphere. The other three teachers (2, 3, & 4), had classes with relaxed emotional learning atmospheres. Such kind of warm classroom environment is essential for learners with motor difficulties since they encourage participation of all learners. This learning environment is supported by Rye (2005) who says that the child requires welcoming environment and encouragement in the learning process. Even though Verity (2005) asserts that, mediation should not be meant to 'transmit' the expert's knowledge but to provide a starting place for the learner to begin to engage with the task, it is difficult for effective mediation to occur in such a

scenario particularly like with T1 who had forty pupils with varied physical disabilities.

The results in this study also indicated that it was only T1 and T4 who accorded physical assistance to learners with difficulty in hand use, during the writing activity. However, T4 and T3 classes were rich in displayed materials and these were the petó classes that gave an impression of rich learning atmosphere. The learning material has been found to be an active agent within the zone of proximal development (Brown 1993 in John-Steiner & Mahn 1996), which the teachers can utilize to help learners attain their potential in the acquisition of the literacy skills. T1 and T2 had learners who were labeled. In T1 class the six learners with cerebral palsy on wheel chairs were known as “non-readers”, while T2 class had learners who were referred to as “non-starters”.

CONCLUSIONS

The study shows that teaching literacy skills to learners with cerebral palsy is quite demanding requires more than just formal qualification as a trained teacher in the area of special needs education. It also requires commitment and creativity in making learning and the learning environment meaningful and child friendly. The study found out significant differences in the individualization of the instructional strategies as revealed by the approaches (methods), learning materials, and the learning activities used by each teacher in the literacy classes.

This study has revealed that the number of pupils in a class affects and determines instructional strategy used by the teacher. This has been demonstrated by the outcome of this study where T2, T3 and T4 were able to use varied individualised strategies with CP learners while T1 who had many learners was unable to focus on individuals due to large number in class. The teachers of learners used verbal and non-verbal approaches in their instructional strategies as demonstrated through the use of facial expression and prompting when teachers want learners to perform a task. This study has also demonstrated that teachers of learners with CP apply their professional knowledge by using a different or a combination of instructional approaches to address the individual needs of each learner. Such approaches included; whole-word, look and say, basal reader and Phonics. That the use of such varied approaches helps learners to move at their individual levels.

The study has further revealed that with exception of T (1), all the other teachers individualised their instructional strategy depending on the literacy skill being taught and the learner’s needs. The study has also revealed that all teachers accompanied their instructional strategies with reinforcements which included both rewards and reprimands.

This study recommends that, there is need for the government to consider appropriate class size and the teacher- child ratio in classes and schools with cerebral palsy. It further recommends that institutions training teachers of children with CP should emphasize on the aspect of the diversity of learners. There should also be close monitoring in the way teachers support learners with cerebral palsy so that these learners get to benefit from the instructional programs set for them.

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