

Strategies used in inclusive early childhood development classes attached to primary schools in the South Eastern district in Zimbabwe

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Abstract: The paper presents findings on strategies used by teachers in Chiredzi District-Zimbabwe to assist Early Childhood Development learners with special education needs. A mixed methods approach was used to gather data for the study. To gather data questionnaires, interviews, observation schedules and document analysis were used in twenty sampled early childhood development centres attached to primary schools. In the findings teachers were employing a variety of strategies such as differentiated instructions, small groupings of mixed learners, story games and songs to accommodate learners with special education needs. ECD teachers made attempts to modify teaching instructions and learning media in trying to assist learners with learning challenges, still they faced a lot of challenges in the process. Major barriers to inclusive education were large enrolments and lack of teacher competencies to offer expert assistance to learners with special education needs. The study recommends that the government set policies that enforce schools to stick to small teacher-pupil ratios. Furthermore, extensive in-service and pre-service teacher training programmes that empower teachers for inclusivity are a critical requirement.

Key words: Early childhood development 1; Inclusive education 2; Adaptation of curriculum 3; Special education needs 4; Resource mobilisation 5;

I. INTRODUCTION

The key premises of inclusive education on which the paper is located, is on schools' provisioning of quality education for all children, irrespective of their differences. Teachers should disregard learners' abilities, physicality, race, language and communication deficiencies, social class, culture, gender and disability as differentiation factors (Miles and Singal, 2010). Hence, the paper explores systematic challenges encountered as determinant factors of how and what learners should learn as is frequently a norm in inclusive education schools. Ngcobo and Muthukrishna (2011) propose that, inclusive Early Childhood Development (ECD) practitioners should have abilities to accommodate all children, including those from the most disadvantaged families in the learning process as critical in ensuring children's developmental potential. The success of inclusive education programmes depends on provisioning of more time, better resources, and adaptability of teaching methods and accessibility of learning resources that facilitated

Development of children with diverse needs (Padro and Woodrow, 2014).

The context of children with special education needs refers to any child, under the compulsory school age (0-18) years; but has special learning difficulties or some disabilities that call for special educational provisioning. In this paper, children with special education needs refers to children aged 0-8 years (DfE and DH, 2015) who are enrolled in early learning centres attached to primary schools. The context of inclusive education though complex, in this paper it implies to the education programme that supports the needs of learners with learning barriers. It also implies the education is characterised by provisioning of supporting structures which meet the needs of children with learning barriers. The end target is to promote key values of humanity; equality, social justice through equitable distribution of learning resources (UNESCO, 1994). In inclusive education teachers are expected to offer increased opportunities for the participation of all learners in learning processes (UNESCO, 2005). As a paradigm shift inclusive education aims to make teachers and learners comfortable with diversity, while regarding it as a challenge and an enriching learning experience ().

Lesson delivery in inclusive early childhood development programmes call for highly qualified teachers with a potential to create enabling learning environments for all learners, catering for individualised pedagogy. Stakeholders call upon the current education system to offer special education support systems that accommodate learners with special education needs (Gadzikowski, 2015). There must be creation of equitable learning environments, and strategies which are responsive to all learners and which offer these learners equal chances to develop to their full capacity (UNESCO, 2014; Underwood & Killoran, 2012). Learning strategies in inclusive early childhood development programmes should not be a privilege of a few individual learners but rather a right that all learners should enjoy in meaningful education systems. Inclusive education classrooms should be characterised by teachers who support children with special education needs, by designing learning curriculum which is non-discriminatory. The implication is that every teacher assigned to an inclusive class should be keen to modify learning materials; create and utilise learning space so that it

supports children during learning activities (DfE and DE, 2015).

There are far reaching evidence suggesting that inclusive education faces a myriad of challenges caused by the inability of teachers to create learning strategies that accommodate learning and developmental differences (Padro & Woodrow, 2014). Inconventions such as the Convention on the Rights of Persons with Disabilities (CRPD) (2007), the Convention on the Rights of the Child (CRC) (1989) and the Salamanca Statement on Principles, Policy and Practice in Special Needs Education (1994) there is a strong references to the rights of all children to education (UNESCO, 2007). In particular, the Salamanca Framework on Principles, Policy and Practice for Action (1994) there is mention of the need to fight discrimination in schools, and to build an inclusive society to achieve education for all. The conventions call for inclusive education programmes which support barrier-free learning environments, through individualised, child-focused learning opportunities that support children with learning barriers and enable them to reach their potential (UNICEF Innocent Research, 2007).

Teachers should strive to remove environmental, social and psychological barriers which militate against children's development and education as these have tremendous influence on children with special education needs (Hughes, 2003). In the majority of ECD learning environments there are restrictions such as lack of playing space, shortage of specific learning materials, and all these have a bearing on the development of motor muscles and psycho-social needs of the affected child. Efforts should be made by teachers to ensure learning environments are barrier-free and materials are developmentally appropriate to meet children's capabilities.

Uneven learning environments call for skilled and competent teachers who can adapt learning curriculum to the needs of all learners. Teachers should have the capacity to develop special individual intentions; (aims, goals and objectives) that support every learner within the context of inclusive settings (Rosenthal, 2006). In this regard, Chidindi (2012) stresses that inclusive education teachers should consider children's previous capabilities; knowledge, skills and interests in selecting children's learning experiences. Teachers can individualise learning programmes as a cog that support inclusive education experiences (Karten, 2005).

It should be clear that, inclusive education programmes call for the removal of barriers that threaten learners with special learning needs. Curriculum disablements can dislodge children's psychological balance; especially when they fail to perform activities their counterparts perform well (EENET, 2005). There is need for well thought out strategies to remove learning impediments and to support them responsibly (UNESCO, 2005). Failure to remove the barriers impacts on social, emotional and psychological needs of learners, which also impart on their development. To ensure smooth learning, ECD teachers should ensure equal opportunities of participation in physically, socially, and emotionally enriching

activities without forcing learners to go beyond their capacities in the learning process. The availability of developmentally appropriate learning resources is one strategy that should ensure learning environments are responsive to the needs and capacity all children regardless of their diverse learning needs (Global Monitoring Report, 2005).

One noted strategy is the creation of an enabling learning environment, (Speece and Keogh, 1996) who urge teachers to use multiple instructional strategies. In that study, teachers are urged to adapt existing learning modes to suit children's individual needs, knitting them to personalise different learning modes. Responsive learning strategies are crucial in supporting smooth transfer of learning for all learners. Thus, schools are urged to employ a combination of receptive strategies that produce effective solutions for positive learning environments, which cannot be done in a single-strategy approach. Use of strategies that target learning and development of children with developmental challenges, are encouraged in inclusive classes. According to Krog, Stephens and Nel (2014) working with children with special education needs entails that teachers employ a range of teaching methods which include individualised learning methods, small group tasks and the play-way methods. These strategies ensure every learner has an opportunity to participate in the learning process, regardless of different personalities or physical statues. Non-enabling inclusive learning methods which are inflexible may not address the needs and interests of learners (Chhabra, Srivastava & Srivastava, 2009).

Mugweni and Dakwa (2010) noted that some ECD "A" and "B" (preschool) teachers were lacking specific strategies to address learning differences of children with special education needs. For example, teachers lacked confidence during lesson delivery in inclusive classes which was a handicap limiting them to initiate individualised learning methods to support diverse learning needs. Also Musengi and Ndofirepi (2015) observed that some schools exhibited negative treatment of deaf children in special and inclusive schools; where teachers were expected to use special language as a lesson delivery method.

Poor teaching and learning strategies in ECD inclusive education classes was noted in Mashonaland West province-Zimbabwe by Mpofu and Shumba (2007). In their study, teachers were not using differentiated teaching methods which was detrimental to holistic development of children with special education needs. Furthermore, slow learners learned the same content in exactly the same way, at the same pace regardless of developmental differences. In Midlands province, Chidhindi (2007) notes prevalent use of poor teaching strategies with teachers having challenges to teach mentally retarded learners both in most inclusive classes and special classes. From the above observations one concludes there is a widespread of challenges that affect ECD teachers' delivery in inclusive classes and teachers are failing to address the needs of certain groups of children with diverse learning barriers. The second implication is that practicing ECD

teachers at large experienced challenges in designing learning strategies that embrace diversity and promote skill development for learners with special education needs. The literature reviewed has shown that in general, while ECD children with special education needs access educational opportunities, attempts to initiate and implement learning strategies that support the diverse learners in inclusive schools experience contextual challenges.

It is against this backdrop that this paper investigates teaching strategies employed in inclusive ECD classes to support learners with special education needs in Chiredzi-District Masvingo Zimbabwe. The paper was guided by the following research question:

- What strategies are employed by ECD “A” and “B” teachers in inclusive classes attached to primary schools to support learners with special education needs in Chiredzi District-Zimbabwe?

II. FRAMEWORK

This paper is informed by the social justice theory, which stipulates that there is a lot of social marginalization and a feeling of not belonging experienced by the majority of learners with special education needs in many of the classroom practices. Such practices are painful for the young learners that experience it, as it is damaging to their psychosocial wellbeing (Lindbäck, Lunneblad, & Sernhede, 2016). The social justice framework calls for early childhood education systems that address the increasingly complexities of social discriminatory strategies perpetuated by teachers and communities which they subject learners to (Ramsey, 2009). The social justice framework further claims that inclusive early childhood development programmes require critical consciousness characterised by proactive strategies that support all-inclusive education structures, not only in teaching and learning, but also in supporting children’s psychological mind-sets. This calls for the establishment of appropriate strategies from teachers and school management that demonstrate competencies and the passion to accommodate learners with diverse learning needs.

The theoretical frameworks supports conventions on the rights of every child to fair treatment in education, as this is a right and not a privilege of the few. Regardless of the platforms as stated earlier on young children with special education needs, lack access to quality education owing to educational, environmental and societal injustices. There searchers utilised the framework as a lens through which they investigated strategies employed in inclusive classrooms to promote healthy learning for learners with special education needs.

III. METHODS

The researchers employed a post-positivism paradigm. Specifically researchers employed a mixed-research approach because they had some interests in some aspects of

quantification (positivism) while at the same time they were also engrossed in interpretivist concerns around issues of subjectivity (Maree, 2010), on strategies that promote learners with special education needs. The mixed method approach allowed researchers to develop insights into practical strategies employed in inclusive ECD settings to promote effective teaching. Use of the post-positivism paradigm opened the door to multiple methods and different worldviews as well as to different forms of data collection and analysis procedures. Through use of mixed methods approaches, views from a wide range of participants who understood the phenomenon of how children with special education needs learn were solicited.

Design

A concurrent triangulation mixed method design, was employed to collect both quantitative and qualitative data at the same time, hoping to integrate the overall information in the interpretation of the overall results (Creswell, 2014). The use of the concurrent design provided a broader and deeper picture of the strategies used by ECD teachers in inclusive ECD classes in Chiredzi district-Zimbabwe to promote learners with special education needs.

Research instruments

For this paper, researchers used semi-structured questionnaires which were administered to school heads, and ECD teachers. Furthermore, they used face-to-face interviews, administered to the school heads and ECD teachers in charge. The quotes elicited from the teachers in the open-ended questions in the Questionnaires were captured and denoted with Tr<participant number> and ITr<participant number> signifying quotes from interviewees. Similarly, IH<participant number> was used to capture quotes from the interviewed head of schools. Finally, FGD<participant number> was used to capture quotes from the interviews from Focus group discussions. The first-hand data on exact strategies teachers employed in inclusive classes, was solicited using the observation schedules and document analysis procedures. The data collected via the questionnaires were coded and entered under The Statistical Package for the Social Sciences (SPSS). The analysis took the form of univariate analysis such as frequency counts, percentages, and the calculation of appropriate indicators (Maree, 2010). It also took the form of multivariate analysis to identify relationships between variables. Researchers clustered qualitative data into common themes characterised by similar relationship; by tallying and ranking responses to uncover the main issues that emerged. The issues arising from the interviews, the questionnaires, observations and the document analysis, were triangulated and put together as findings for the study.

Research tools were pilot tested and triangulated as validity and reliability (trustworthiness and credibility) check-ups (Lincoln, Lynham and Guba, 2011). Furthermore, member checking was used to verify if the gathered data was interpreted correctly (Onwuegbuzie and Combs, 2010),

IV. RESULTS

Quality and impartial learning in ECD settings requires teachers who are well trained, supported with well-resourced learning environments to allow learners to initiate activities (Chinhara, 2015). Productive education in inclusive ECD programmes implies that the ECD centres are safe for all learners including those with developmental delays to allow collaborative learning efforts of all learners. It was in this light, that researchers wanted to know whether learning environments were safe to offer effective learning of learners with special education needs.

Table1: Whether there is safety for learners with special education needs in inclusive ECD classes

Whether ECD “A” and “B” learning environments were safe for learners with special education needs	Teacher		School head	
	F	%	F	%
Yes	20	65	10	53
No	11	35	9	47

Twenty (65%) teachers and 53% school heads concurred ECD centres were safe for learners with special education needs. Eleven (35%) teachers and 47% school heads noted that learners with special education needs were affected by congested learning space due to large class sizes, which restricted their freedom to learn and participate in group activities. In response, Tr. 5 said “it is not easy to engage learners with special education needs in large inclusive classes, without use of appropriate teaching strategies. The observation was, that the majority of schools were not safe because of large class sizes. ITr4 suggested that, one of the strategy to ensure safety in ECD centres was strict monitoring of learners during learning activities. ITr1, ITr3, ITr4 and ITr5 substantiated saying: we do collaborative teaching, and team up, to ensure there is safety for learners with special education needs.

Teachers employed collaborative teaching strategies in their schools which offered a sense of belonging to learners with special education needs. Collaborative teaching and learning strategies issues of psychosocial often experienced in inclusive classes. Collaborative learning methods are critical to learning, as children with special education needs work together on tasks, copy performed skills and share ideas from their counterparts, which offers a sense of belonging.

The researcher further investigated how collaborative learning strategies assisted ECD “A” and “B” learners as shown on Figure 1.

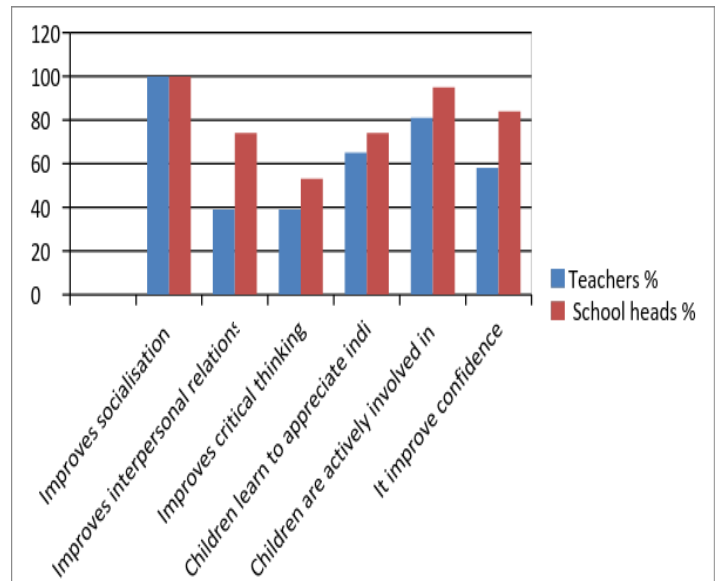


Figure 1: Advantages of collaborative learning in inclusive classes

As shown on Figure 1 100% ECD teachers concurred with 100% school heads that teachers used collaborative learning strategies to improve children’s socialisation skills. Meanwhile, 39% ECD teachers and 75% school heads agreed collaborative learning strategies improved children’s interactive skills. On that Tr.3, said: *through collaborative learning, children relate to each other, thereby feeling a sense of belonging in spite of their physical, mental and any other form of diversities.*

In figure 1 also, twelve (39%) teachers and 45% school heads said ECD teachers used collaborative teaching strategies to nurture critical thinking skills among their learners. Tr. 6 teachers use group work to help learners *discuss and sharpen-up their reasoning skills. They challenge each other’s thinking processes, as they pause questions to each other.* Meanwhile, 80% teachers and 89% school heads indicated collaborative learning strategies were good during learning activities as the learners share and demonstrate their knowledge while others observe what they would be doing. Figure 1 further shows, 58% teachers and 81% school heads advanced that collaborative learning methods was critical for nurturing confidence when children are praised upon producing correct answers. The responses were summed by ITR5 who said: *when we use collaborative teaching and learning, every learner gets involved in the learning process, which is good.* From the responses participants were pleased with the benefits of collaborative teaching and learning as a strategy, as it supported learners’ holistic development, which fulfils the mandatory philosophy of inclusive ECD learning programmes. Nonetheless, large class sizes stalled such benefits. Maybe, teachers can improve the benefits by making reasonable planning.

Researchers further investigated teaching methods ECD teachers used in inclusive ECD classes as shown in Figure 2.

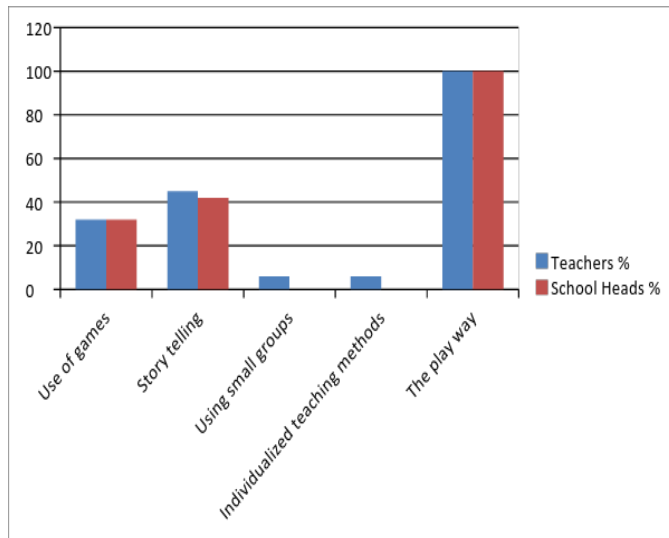


Figure 2: Teaching methods ECD teachers utilised to support learners with special education needs in inclusive classes

In Figure 2, 32% ECD teachers and 32% school heads agreed games were used as a teaching strategy. Tr. 6 says that *games develop all aspects of children's development (including; socialisation, thinking, physical, social, and emotional and creativity)*. In addition, 45% teachers and 40% school heads concurred stories were also used as a teaching strategy in inclusive classes. It was noted by ITr 5 that: *teachers used stories to develop children's socialisation and logical thinking skills*. 6% teachers further stated that ECD teachers organised learners in small groups to promote learning in inclusive classes. Furthermore, 6% teachers said individualised teaching strategies were used. In Fig 2, 100% participants stated that ECD teachers used the play-way method in inclusive ECD classes. Figure 2 shows that the majority of teachers and school heads concurred ECD teachers were hardly in favour of individualised teaching methods. For instance the response from IHI2 was that, *large class sizes was an inhibition to individualised learning strategies*.

From the responses the majority of ECD teachers used the one size fit all teaching methods, which did not benefit learners with special education needs, as the individualised methods best fit inclusive classes. The response from, IHI 9 was: *The use of the play way is both strategical and responsive to every young learner as the young learners enjoy games and stories*. Meanwhile, ITr 3 said: *games, songs and stories overall support development of young learners. However, teachers rarely utilise these methods because classes are too large and teachers do not have the expertise*.

Notwithstanding, there was consensus that the common learning strategy utilised in inclusive ECD classes was the play-way. There was also consensus that, learners with special education interact actively when teachers use the play-way methods. Overall, participants concurred ECD teachers were making efforts to redesign strategies that promoted active participation of all learners. However, the major challenge was large class sizes, lack of learning resources and congested

learning space. Such barriers impacted negatively to individualised teaching strategies. The researchers further investigated teaching techniques teachers employed in ECD classes.

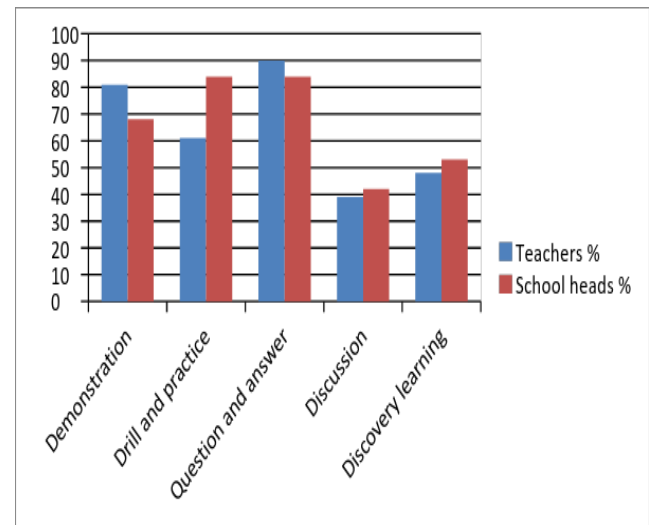


Figure 3: Teaching techniques employed in inclusive ECD classes

Figure 3 shows ECD teachers employed several teaching strategies. A combination of teaching strategies were used to support diversity of learners. The most technique used teaching technique was the demonstration method. Figure 3, showed 81% teachers and 68% school heads concurred to the use of the demonstration technique. On that issue, Tr1 said: *Particular skills require teachers to demonstrate the skills to learners as young learners learn by imitating actions mostly*. Further to that Tr3 said: *when teaching reading, Expressive Artsskills, teachers need to demonstrate the correct way to perform the skills*. Meanwhile, 61% teachers concurred with 84% school heads that teachers used the drill and practice method especially to learn new tasks. To that assertion, IH2 said: *learners need to learn skills several times, and ample time to practice and reproduce the skills. There is no any other method that caters for diversity in ECD classes other than the hands-on approaches*. It was important to note that teachers allow learners to practice the skills rather than to just tell them. Furthermore, 90% teachers and 84% school heads concurred ECD teachers employed the question and answer method in inclusive classes. Tr.7, stated that, *the question and answer was the most used teaching as a learning strategy in most ECD large classes*.

Meanwhile, 39% teachers and 42% school heads mentioned that ECD teachers use the discussion method sometimes. One such answer came from, IH4 who said: *the discussion method help learners during small group activities*. In addition, 48% teachers and 53% school heads agreed that ECD teachers use the discovery method. ITr.15 said: *During science and social studies lessons teachers use the discovery method through engaging in nature walks, which allow earners to have first-hand experiences with scientific wonders of nature. In this way we nurture young scientists*. The responses showed that

school heads and ECD “A” and “B” teachers employed a variety of teaching strategies, all responsive to the learners’ diversity. From an academic point of view, the teaching methods were complementary to each other in the teachers’ efforts to develop children holistically. However, the lecture method which was regularly used might be having disadvantages to the young learners’ development, as evidenced by empirical studies which suggest the lecture method on its own does not benefit learners with special education needs. It is documented that strategies in inclusive ECD classes that support learners holistically are child-centred instructional methods that promote hands-on activities.

Researchers also investigated instructional strategies used by teachers to support learners with language and communication barriers in inclusive classes. Language and communication in early childhood development classes is a critical issue as it forms key to cognitive development. There is Zimbabwe national language policy, which makes it mandatory for ECD teachers to the use minority languages where such learners are dominant. The implication is that teachers should use the languages spoken by the children in their ethnic communities.

Instructional language used in ECD classes

The Zimbabwean Education Act on Language Policy (1987), as amended in 2004, stipulates that infant/foundation (including pre-school) classes be taught in the mother tongue. The language policy further states that English can only become a language of instruction for those children up-to grade 4, particularly where English is a second language (Mugweni and Ganga, 2010). Also in South Africa, the official position of the Department of Basic Education on the language of instruction, is that Grade R learners be taught in their home language (Department of Basic Education, 1997). The language policy is borrowed from the philosophy of John Amos Comenius, one of the naturalist philosophers, who emphasises on the use of the mother-tongue. Global policies on language states that ECD learners be taught through their mother language; a language that gives the learners meaning to their experiences and which links them with their home experiences. However, teachers fail to use children’s home language and use English or other official languages throughout the day, which is detrimental to learners’ communication skills. In pre-schools where learners from minority ethnical languages observations have seen that teachers often use alien languages that they (teachers) understand better, thus disregarding the learners’ own languages. The philosopher John Amos Comenius did not value use of unfamiliar languages in teaching young children arguing that it did not promote intellectual development, especially for learners with special education needs.

In the above context, researchers explored instructional language strategies employed in inclusive ECD classes to support learners from minority ethnical languages. To this effect, IHI 2’ response was; in our school, *ECD “A” and “B” teachers are Shona speaking, but surprisingly they do not*

know how to speak Shangani as a language of communication. This is regardless that the learners are Shangani, and they hardly speak and understand ChiShona. We hold professional development workshops at school level, to assist teachers to understand Shangani language. Given the scenario in the school, enforcing language policy is a critical issue for ECD school administrations, teachers and learners.

On the use of the instructional language in inclusive ECD classes, FGD 1 and FGD 2 concurred that: *We use English language to enable learners to respond to English instructions.* Furthermore, ITr1 said: *To promote language and communication, ECD teachers display pictures of artefacts used in children’s homes as a way to link what they learn and what they see, talk and hear in their homes.*

Teachers employed different strategies to enhance language and communication for ECD learners. If teachers use different medium of instruction, from children’s language it can lead to developmental delays in language as well as in skill acquisition (Manyike and Lemmer, 2012). This is in line with John Amos Comenius whose ECD philosophy advocates for the use of the mother language, local made pictures and artefacts to build a strong early language foundation.

The interest of researchers also was to investigate intervention strategies ECD teachers made on learning materials to ensure they improve development of skills of learners with special education needs. Appropriateness of learning materials can assist development of the necessary knowledge and skills, when learners engage in activities. This is only necessary when the learning materials are designed to support the learning needs of each learner.

The study concluded that teachers were developing strategies to support individual ECD learners with special learning needs in inclusive settings. However, some teachers were incapacitated as schools had shortages of resources and while classes were large to offer meaningful teaching. In the majority of ECD classes specific efforts were being made to improve the education of learners that lived with moderate disabilities, the slow learners, but at the expense of gifted learners. Most of the learning activities and learning materials were designed for learners with limited disabilities, yet in some classes there were learners with severe learning challenges. There was need for strategies that ensured safety measures during outdoor play activities, especially to promote development of learners with special education needs.

V. DISCUSSION

From the findings teachers were adapting strategies to improve early learning experiences for learners with special education needs. Notwithstanding, teachers encountered challenges in their effort to implement the strategies. This section of the discussion will follow sub-themes that stemmed from the study findings.

i. The play way leaning strategies

Teachers strived to adapt the ECD curriculum, making it fit the individual needs of learners. There were improved teaching methods as evidenced by the results, which showed that efforts were made to cater for individual needs of ECD “A” and “B” learners with special education needs. The adapted methods used by ECD teachers embraced diversity, and ensured learner responsiveness. Early childhood development teachers used the play-way teaching as a teaching strategy. Unlike the lecture method, the play way method allowed learners to be relaxed in the process of learning. By its nature, the play way method is important for children’s holistic development, and it brings out individuality of the learner. To bring this individuality, learners were appropriately guided and supported by use of appropriate learning resources, which allowed learners to benefit through personal engagement and making personal discoveries during learning activities which allowed individual initiatives.

Use of minor games, which necessitated holistic engrossment of learners in activities allowed wholesale development of the learners; from gross motor, fine-motor to mental involvement. There was also use of story-songs methods which embraced the play-way method. This method was motivational to the young learners as they recited the newly taught words and imitated the actions of the songs, which also improved the young learners’ concentration in the activities. In line with the above teaching strategies, Gafu and Badea(2011) said the use of games, song-stories and other play-way methods are important in developing children holistically (social, physical, emotional, creativity and language). Furthermore, use of games and song-stories as learning strategies enhanced interaction among learners and teachers, given the repeated involvement of both parties in children’s learning. In line with the use of games, stories and action songs, the social justice theories, stresses on teaching methods that are non-discriminatory, and which appeal to diversity of learners. In the study, the use of games and action-songs and stories provided opportunities for diversity, thereby meeting the needs of learners with unique learning styles as noted in an early study by Chinbara (2016).

ii. Activity-based strategy

Early childhood development teachers used activity-based strategies such as discovery-learning, especially in scientific and social studies lessons. Notwithstanding, the strategy is critical in nurturing young scientists and in developing critical thinkers, problem solvers and young learners, adore and care for nature. The strategy allow learners to interact and question what they experience in nature with regards to scientific experiences. The strategy encouraged learners to use different senses, stressing on different learning styles. In science learning, ECD teachers used nature explorations, which allowed young learners to appreciate and live in harmony with nature (Kearney & Dalziel, 2010). Consistent use of nature walks, nurtures scientific endeavour at a tender age (Alur and Bach, 2009).In emphasising the criticality of the activity

based method Kearney & Dalziel, (2010); said the approach helps learners to articulate, manipulate specimens in science learning activities, which empower them as young scientists. Nature walks which participants cited as an example, as a scientific strategy nurtures such skills as: prediction, analysis, investigation, and questioning of the world around them. All these skills improve children’s cognition, reasoning and critical thinking. Furthermore, as a learning strategy, activity-based strategies enable learners to experience learning in some peculiar ways, ad also very critical in diversity classes, as it accommodates individual differences in learning processes.

iii. Collaborative learning strategies

Collaborative teaching and learning strategies were utilised in most schools as shown by the responses. This strategy allowed learners to learn together in small groups. The strategy necessitated learners’ understanding of individual differences through working together and appreciating each other’s efforts. Collaborative learning strategies enhanced development of fine and gross motor skills as well as, listening, concentration, social skills and thinking skills. The learning strategy improved children’s confidence as they participate in group activities. This strategy is supported by outcome of The Salamanca Statement (1994), which instructed schools to use strategies which supported inclusion, by planning lessons that support learning differences based on learners’ diversified learning needs. One critical advantage of using collaborative learning methods is that learners with special education needs develop a sense belonging when learners are accommodated by their counterparts.

iv. Differentiation teaching methods

In some schools, teaching methods were guided by differentiation teaching strategies. These teaching strategies emphasised on verified teaching strategies targeting individual learners basing on different learning challenges, which they had. Differentiation learning programmes were far from each other and were hindered by inadequate learning materials to support learners in the different activities. As suggested by Alur and Bach (2009) inclusive classes require a variety of child-centred teaching strategies, which target individual learners. For their success, there is need for adequate child-sized learning materials (Montessori).

v. Networking with other teachers

The results revealed ECD “A” and “B” teachers networked with other teachers, to monitor learning programmes. As noted by Ngcobo and Muthukrishna, (2011) supporting inclusive education systems require paradigm shifts in the way professionals understand, and conceptualise diversity. Hence, in the current study, there was local collaboration of teachers to support learners’ collaborative learning tasks. Furthermore, there were locally arranged in-service programmes to assist teachers with appropriate local language and specific locally ECD games. Networking assisted teachers to blend their own teaching strategies with those experienced

in children's homes, which strengthened networking and collaboration efforts to teach and care for young learners. In this contexts, the fulcra of inclusive early childhood development programmes hinge on successful networking and collaboration of teachers and families (EADSNE, 2003). Manyike (2013) argues that at early childhood development level, academic success is mostly achieved by children who acquire academic language proficiency in their first language. Networking was a critical strategy which ensures success of early stimulation pre-academic skills.

Barriers to effective strategies

I. Teacher competences

The study revealed that ECD teachers lacked the skills and competences to adapt teaching methods that were use friendly to learners with special education needs. Wall (2011), said the teachers' delivery abilities are critical to assist learners develop appropriate skills, without compromising their innate proficiencies. If teachers are well qualified and competent enough, they can help children learn any skill by appropriately guiding them (Stainback & Stainback, 1996). The key to successfully helping of learners in inclusive classes is close supervision and guidance provided in every learning activity that learners engage in (Tindall, MacDonald, Carroll & Moody, 2014). Adequate supervision and guidance toward children with special education needs can only be offered by well qualified and competent teachers (Onwu & Soffels, 2008). Without the competence of teachers, children with special education needs would not benefit no matter what teaching strategy is employed in inclusive classrooms. The social justice theory emphasises for appropriate guidance which is not subjective and prejudiced on the basis of individual differences.

II. Large classes

Large class enrolments impact to learning strategies teachers initiated to assist learners with special education needs. Large class enrolments congested learning spaces, resulting in restrictions for creativity during learning tasks. Large class sizes affected collaborative and learning strategies. By their nature ECD activities allow for formative assessment of every learner, and close monitoring of skills. Kearns and Shevlin (2014) say for ECD teachers to support learners with special education needs, delivery of instruction should be flexible to appeal to the learning desires of individual learners, and this can only be possible in small classes (Ramnarain, 2008).

III. Dearth of learning materials

Most schools did not have adequate learning materials, for specific use with learners with special education needs. Shortages of learning materials meant teachers could not frequently and effectively use individualised teaching methods. The social justice theory supports individualised programmes for learners with diverse learning needs; as the learners require to work individually according to their unique personalities. Teachers are therefore, encouraged to source for

specific learning materials that support learners with special education needs.

IV. Inflexible teaching time-tables

Success of inclusive education programmes especially for early childhood development classes requires the flexibility class-time-tables, which support the fact that children learn differently. Without the modification of time-tables certain differentiated learning strategies will not be successful (Wall, 2011; Rose, Shevline, Winter and O' Raw (2010). Participants who rarely use differentiated learning methods argue that the strategy is time consuming and cannot be accommodated in the 30 minute block lesson. Inflexible time-tables assume that all learners learn at the same pace and understand concepts in the same way, which might not be so for inclusive classes.

VI. CONCLUSION

In this study, teachers developed intervention strategies which targeted improvement of learners with special education needs in ECD "A" and "B" classes. There was modification of curricula to a certain extent, and use of child-centred strategies. The major barriers were that learning materials were not modified to support individual learners. The other nagging issue in inclusive schools was the inability of teachers to modify time-tables. The practice did not support ECD learners with special education needs as the time-tables worked on the misleading assumption that learners learn exactly in the same way. Rigidity of time-tables does not accommodate individual differences of learners. In most schools curriculum remained rigid with teachers using the one size fit all mantra; leaving learners with special education needs behind, regardless of the policies in place. This article concludes that ECD "A" and "B" teachers adapted teaching strategies to benefit children with special education needs.

VII. RECOMMENDATION

Researchers are making the following recommendations I the face of the results of the study:

- There should be mechanism to reduce large class sizes to ensure provision of adequate learning space, as a matter of urgency in all ECD classes.
- There must be partnership between inclusive schools ad organisations that produce specific learning materials which support learners with special education needs.

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