

Vision of the Visually Impaired (VI): The Pursuit for Equal Access to Quality Education in ECD Settings

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Abstract: The study examined challenges Early Childhood Development teachers face in their endeavour to be effective instructors in inclusive ECD settings. Children with visual impairments need to enjoy the good intentions of Education for All (EFA) targeted at ensuring provision of equal and quality education to all children notwithstanding their disability. The study focused on the challenges encountered by ECD teachers in adapting the curriculum and employing technologies to ensure that visually impaired children's unique needs are appreciated and realised. Qualitative case design study was employed. In depth interviews and observations were used to collect data from the VI specialist, three children and ECD caregivers. The study assisted in bringing to light how the challenges teachers encounter can be overcome. Teachers in regular classes are not specifically trained to teach VI children. The challenges encountered became opportunities to create strategies to overcome them. Among the strategies a VI inclusive education framework was designed to empower ECD teachers in regular classes with appropriate skills and attitudes to deal with the integral challenges of the VI children.

Key terms: visually impaired learners, assistive technology, daily living skills, adaptive play equipment

I. INTRODUCTION AND BACKGROUND TO THE STUDY

Children with visual impairments can be successfully taught or participate in regular general classrooms (Cox and Dykes, 2001). These children need to enjoy the good intentions of Education for All (EFA) which is a strategy to ensure provision of equal and quality education to all children. Several countries Zimbabwe included agreed at the World Conference on Education for all make primary education accessible to all children (Udoba, 2014). In 2000 world nations met again in Dakar and resolved to ensure all children with emphasis on marginalised children like those with special education needs to have access to and complete a primary education of good quality by 2015(UNESCO, 2000). Provision of equal and quality education can ensure that children with visual impairments develop the same early literacy abilities as their counterparts and master necessary coping skills required to work around their impairments (Cicerchia, 2015).

Visual impairment denotes a significant loss of vision even though one may wear corrective lenses (Carney, Engbretson, Scammell, & Sheppard, 2005). In addition, visual impairment can be defined as a loss of vision that even with correction, negatively affects a learner's educational performance

(Shinali, Mnjokava, and Ruth Thinguri, 2014) . The nature and degree of visual impairment may vary hence terms such as low vision, functional vision and blind are used to describe and categorise levels of vision (Mwakyeja, 2013).

Over the last 30 years, many European countries have made a tremendous shift in their educational approach with regard to visually impaired students. The focus has shifted from special schools towards inclusive education in mainstream schools. However not all schools have adopted this innovation. Duquette, (2008) notes that, generally, about one fourth of students with a visual impairment (VI), attend a specialised school, whereas between a third and half go by turns to mainstream and specialized school systems. Thus mainstreaming evolved from two parallel systems , the general education and special education. Integration involved learners of special education joining the majority in the mainstream (Dixon, 2018)

Most visually impaired students attend regular school systems learning together with students without visual impairments. For the VI children attendance at local main stream is the norm (Foreman, 2011).

In regular schools teaching of children with visual impairment in Zimbabwe embraces the locational integration model in which a specialist teacher based in the resource room assist children with visual impairment in the regular class (Dakwa, 2011). Thus children will be in the regular class and go for assistance in the resource room. Watson (2019) observes that a resource room is a separate setting or classroom where a special education program can be delivered to a student to a student with a disability and for the blind and partially seeing student come for assistance at scheduled intervals from the mainstream. The integration model is based on the assumption that regular classes could be the best means of achieving inclusivity and education for all if unique needs of the learner with disabilities are met. The learners with disabilities in the mainstream will then enjoy the same social and learning outcomes as other class members. However Opie (2018) indicate that its unknown whether regular schools provide an adequately inclusive environment for students with visual impairment.

The system of integration is observed to have positive impact in that by mixing with sighted people, the child with VI develops social strategies acquired for life, which may have a positive influence in the future (Duquette, 2008).For example,

a child will get used to the independent education systems s/he is likely to meet in a high school, college or university. Children who attend mainstream become more autonomous in their travel. They also develop a positive attitude towards integration and are accepted by their peers in all activities involving educational environment (Moulfi, 2004). Integration allows blind children to interact socially in normal situations. Integration can however be successful if there are specialised teachers who are responsible for providing special instruction in skills peculiar to VI learners e.g. braille reading and writing, use of reader services and auditory perceptual training and to prepare specialised materials. In addition appropriate texts or individual transcribed braille should be available (Mani,1998) if integration is to be successful. Addressing needs of children with VI through integration will help them achieve their academic goals.

Since mainstream education has not been designed for diversity of learners, the task of ensuring equity in access to education for every learner may pose challenges to regular teachers (Vlachou, 2004). Rok (2011) has found out that one of the major challenges related to access and equality in the provision of education and training for learners with special needs and disability is the lack of guidelines to support integrated education. Supporting integrated education would ensure provision of equal and quality education to visually impaired children. Training teachers on implementing inclusive practices could be done as a way of supporting the integration system (Jordan, 2015). Other supports could be individualised towards students and their unique needs for example providing extended instruction and counselling within and out of the classroom (Jordan, 2015).

Other researchers have also seen that inclusion programmes could be improved with better planning and improved collaboration between teachers (LasGelzheiser & Meyer, 1996). Udoba (2014) noted that special needs teachers had a minimum relationship with regular teachers. The specialist teachers felt that regular teachers were considering themselves to be superior to specialist teachers.

Integration of a student with VI may be a difficult experience for teachers in the mainstream school, as they often do not have sufficient training or qualification in this respect (Duquette, 2008). Because of lack of training, teachers in the mainstream have a tendency to consider that having a VI student in their class entails them to solve abnormal situations (Smith, Kelly, Maushak, Griffin-Shirley, & Lan, 2009). They feel that they cannot adequately provide what special children need within the classrooms (Jordan, 2015). They also have problems in finding time to learn how specialised machines work (Smith et al, 2004). The regular teachers might fail to have time due to large classes or it might be a question of negative attitude emanating from the lack of training. Lack of resources such as aids and support stuffs is another reason for teacher to have negative attitude (Mushoriwa, 2001). As such it becomes necessary to update the teachers' training

though the up- date might not always be possible. The training would update them on the needs of the VI children.

Teachers can have negative understandings about disability emanating from the beliefs that children with disabilities are special children who therefore are in need of special education (Corebett, 2001). (Purdue, 2009) observed that attitudes towards including children with disabilities varied according to the type of disability , teachers' views on meeting the children's needs, concern for other children's learning and the extent to which they can source and adjust the environment to support the child in the regular early childhood care .

Brown and Beamish (2012) established that for specialist and qualified teachers in primary and secondary schools in Queensland fitting enough teaching and supporting time for visually impaired learners was a challenge. Teachers also experienced difficulties as a result of lack of school personnel's lack of awareness of the needs of students with visual impairments. Inadequate specialised teachers and lack of central support or referral system was also found to be difficult.

Curriculum needs of the visually impaired ECD children

Chapman (1989) states that children with visual impairments have additional curricula needs over and above those that children with sight have. Their unique curriculum needs include concept development, communication, mathematics skills, organizational skills, recreation and leisure. Their expanded core curriculum also includes compensatory skills, such as communication modes (Braille, Visual Efficiency and Listening Skills) (Heskett, 2005). The Expanded Core Curriculum is a pre requisite for children with visual impairment that is for those who are blind or those with low vision (Opie, 2018). When in the regular curriculum it therefore becomes important to adapt the curriculum to encompass the afore mentioned needs. Adapting the curriculum is important as it encompass what is essential for them to become productive citizens in an integrated society. The students with blindness will participate in the regular program with the necessary adaptations in the curriculum (Carney 2003, Shinali, Mnjokava, and Thinguri, 2014). Adapting the curriculum is important as it encompass what is essential for them to become productive citizens in an integrated society. In addition for effective learning, individual adaptations to instructional practices and materials are necessary as the degree of visual impairment vary (Carney et al, 2005). The adaptations will thus match the category of the blindness children might have. However Vyrynen (2008) emphasise that basic education's curriculum doesn't address diverse needs of learners. For example, most preschools in African countries such as Namibia and South Africa have not adapted the curriculum to integrate learners with visual impairment (Westling and Fox, 2005). Udoba(2014) observed that specialists teachers were found to have challenges associated with the curriculum lack of flexibility, lack of good classrooms and poor learning environments for learners with

developmental disability. Teachers in Australia were found not to facilitate access to curriculum for learners with VI as a result of existence of barriers to learning. For example the teachers forgot to enlarge print to an appropriate font size (Opie, 2018).

Teaching Methods

Students with visual impairments require appropriate instruction to develop competencies in the standard curricular areas that all other students are expected to demonstrate. For example competencies in communication arts, mathematics, science, social studies, health and physical education, foreign language, fine arts and practical arts Heskett, (2005). Methods for teaching children with visual impairments are determined by the needs of the child who is blind or who has low vision (Hallahan, 1991). A teacher can utilise learning media assessment to gather information about how a child uses his various senses to get information from the environment. see which options are best for a VI child (Family Connect, 2021)

Some of the pedagogical adjustments to be considered in the regular classroom include, explaining concepts more, having more interactions with the children with visual impairments, simultaneously reading out while writing on the board, and placing students with visual impairments in the front bench with other academically sound students (Lamichhane, 2016). This means most importantly, teachers of VIs need to consider talking through classroom activities, which include, describing non-verbal messages and responses, introducing lessons, transitions, closures to all activities, announcing assignments and naming speakers. This is because students with blindness miss visual cues and written instructions. Opie (2018) observed that teachers in Australia expressed the need to write work on the board for VIs as they would read the work for them. However the students failed to grasp the work because the reading was too fast for them. Considering sitting position, other teachers take great exception to force a child with visual impairment to seat at a certain place one thinks provides him/her with best view of the board (Cicerchia, 2015) Instead, the children with low vision should be allowed to take control of their own learning by identifying the location that is best for them. The idea of letting learners with VI sit in front was observed to be denying them freedom as they the learners themselves felt that they would not choose where to sit and whom to sit with (Khadka, Ryan, Margrain, and Woodhouse, 2012).

Another area to be considered in the visually impaired children's curriculum is concept development. Concept development may be one of the most critical cognitive areas for young visually impaired children, since such concepts will form the basis for all further cognitive growth. In fact, the foundations of intelligence are laid in the first three or four years of life, as such it is essential and perhaps urgent that basic concept development be begun as early as possible for VI children (Lamichhane, 2016). Intelligence measures are heavily concept-based, and absence of concepts can give a

depressed view of a visually impaired child's cognitive ability. Hence the importance of developing concepts in children with VI becomes critical.

Self- help skills

All children both sighted and visually impaired, need to learn self – care skills (Carney et al, 2003). Besides academic development, opportunities for personal development have a profound impact on children who are visually impaired.as they can have a positive self- image, well developed self – care skills leading to their healthy growth (Carney et al, 2003).In personal development a whole of different skills is involved from personal grooming and hygiene to caring for clothes and oneself. These skills encompass daily living skills one would need. Mason et al. (2003) state that daily living skills are the ability to look after oneself and ones' possessions independently. Acquiring these skills would make them quite functional. It is also essential for all children to contribute to the family chores for the purposes of developing self- esteem and learning to function independently. The teaching of these skills requires a systematic and orderly approach. Tasks must be taught through a step-by-step method known as task analysis especially for young children in early childhood.

Assistive technology

Assistive technologies (AT) are tools used to promote access to the general education curriculum for students with disabilities (Johnstone, Altman, Thurlow, Timmons & Kato, 2009). Assistive technology can also be defined as any piece of equipment or item which is used increase, maintain or improve functional capabilities of individuals with disabilities (IDEA, 2004). For students with visual impairments, assistive technologies may include low-technology devices for mobility such as walking canes, or high-tech academic tools such as computer or print magnification devices and screen readers (Cox & Dykes, 2001).Through the use of AT, students with visual impairments are better able to rise to the demands of challenging mainstream settings in schools (Johnstone et al, 2009). Therefore AT can make ECD children be included in classes.

Individuals can have negative understandings about disability emanating from the beliefs that children with disabilities are special children whose special education needs therefore are in need of special education (Corebett, 2001). Attitudes towards including children with disabilities vary according to the type of disability, teachers' views on meeting the children's needs, concern for other children's learning and the extent to which they can source and adjust the environment to support the child in the regular early childhood care .

Theoretical Framework

Bronfenbrenners' ecological systems theory informs the study. Bronfenbrenners' theory includes a nested system of environments illustrated as a series of concentric circles. The five systems comprise the microsystem, meso system,

ecosystem macro system and the chrono system. Each of the five systems of the theory has an influence on the learner, (Anderson & Boyle, 2014; Kamenopoulou, 2016). (Geldenhuis & Wevers, 2013) noted ecological aspects within the systems that influence the implementation of inclusive education in the mainstream primary schools. The regular class is perceived as a micro system with components which interact and influence inclusion. The microsystem for example, represents people and activities that the learner interacts with on a face to face basis such as peer or teacher relationship (Anderson & Boyle, 2014). Within the micro system (Geldenhuis & Wevers, 2013) revealed that IE is hindered by inappropriately trained educators who are just trained to teach in a normal class situation. The study had to address challenges regular teachers face in the endeavour to include VI learners in a regular class as a microsystem. In general the application of the theory could lead to discovery of processes and conditions that enable a truly inclusive education to be provided for all in the systems. Inclusion is essential to the successful education of learners with visual impairment. Successful inclusion is depended on commitments in removing barriers to the participation of everyone as equally valued and unique individuals (Eid, 2018). In fact, adoption of the systems theory enabled the research to explore the factors external and internal to the child who interacted and influenced exclusion and inclusion of VI learners (Kamenopoulou, 2016).

The primary purpose of the study was to investigate challenges encountered by ECD teachers teaching visually impaired learners in inclusive settings. It was also necessary to establish the extent to which the VI children's learning needs are realised in inclusive ECD settings.

II. STATEMENT OF PURPOSE

The primary purpose of the study was to investigate challenges encountered by ECD teachers teaching visually impaired learners in inclusive settings. Inclusion is essential to the successful education of learners with visual impairment. ECD children with VI are found in mainstream settings, embracing integration. The ability of teachers to include VI children in regular classes is uncertain. It became necessary to establish the extent to which the VI children's learning needs are realised in inclusive ECD settings.

III. AIM

The study aimed to unravel challenges of implementing inclusive education for VI children.

IV. OBJECTIVES

The study was set to:

- Establish the categories of VI learners found in inclusive ECD centres.
- Examine the extent to which curriculum needs of the VI children are being met.

- Analyse challenges that are faced by teachers in teaching children with visual impairments.
- Explore strategies that can be employed to alleviate the challenges teachers face in including VI children.

V. METHOD

The study adopted a qualitative approach. Since each approach is consistent with a certain paradigm, this study selected interpretivism paradigm. The interpretivist researcher tends to rely upon the "participants' views of the situation being studied" (Creswell, 2003, p.8). Interpretivist research methods include focus groups, interviews, research diaries, that is, particular methods that allow for as many variables to be recorded as possible (Vine, 2009). The study also utilised qualitative case where one particular school with VI learners in Gweru district was selected. The case explored the way visual impaired learners accessed quality education in the teaching and learning process. Data was collected through in depth interviews and observation. Purposeful sampling strategy assisted in intentional selection of the sample that has experience with the central phenomenon of visual impairment being explored. Three ECD children (grade one) with VI in particular, the specialist teacher, three grade one teachers in regular classes formed the sample. For anonymity, the name of the school, teachers and children shall not be disclosed.

VI. DATA ANALYSIS METHOD

Data from the study were thematically analysed. Thematic analysis is regarded as a technique of recognising, analysing and reporting patterns within data (Braun & Clarke, 2006). After the transcription of the interviews, the data were read thoroughly, and then categories were identified and conceptualised. Thus careful reading and critical reflection of segments of participants' interview transcripts and field notes from observations allowed generation of themes. Ensuing verbatim transcription of interviews insights capturing matters on exclusion, teacher qualities, curriculum needs and challenges faced by VI children were coded and focused on more deeply to identify thematic meanings. Content analysis was performed using all texts from the transcripts and field notes (Zabeli, & Gjelaj, 2020). Thematic analysis employing an indicative coding strategy allows the researcher to generate themes and descriptors after analysing interviews as the main text of the study (Cresswell, 2014). The coding process involved sorting and categorizing data to capture the emergent themes (Cresswell, 2013). This enhanced the representation of the researcher's analytic thinking and interpretations of data (Ackah- Jnr & Udah, 2021). The study employed member checking to enhance the accuracy and interpretations of the research findings (Cresswell, 2013).

Data related to identified themes was then presented to tell a story of the data in relation to the research questions (Braun & Clarke; Sage Research Methods Datasets, 2019). The results include participant and researcher voice though they are

moderated with literature (Ackah- Jnr and Udah, 2021). Extracts are carefully selected to capture participants' views.

VII. RESULTS

The study sought to investigate challenges faced by teachers when teaching children with visual impairments, the extent to the curriculum meet the needs of the visually impaired children and the strategies to be employed to alleviate the challenges met in including VI children.

Categories of VI children in regular classes

The study found out that categories of children with visual impairments at the setting ranged from low vision to total blindness. The visually impaired grade one children were one boy and two girls aged seven. One girl had total blindness whilst the other two had low vision. The boy was a day school pupil whilst the other two stayed in the boarding facility offered at the school.

The extent to which VI learners' curriculum needs are met

In order to meet the needs of the VI the school has a specialised teacher for these children.

The specialised is stationed in the reception class. The specialist teacher indicated that the school utilised the integrated approach in teaching children with visual impairment (VI). Utilisation of the approach is such that the VI students are taught basic and reading skills in the reception class by the specialist teacher initially before they are integrated into the mainstream. Thus the three ECD children were introduced to the alphabet and numbers through braille and the stylus and slate assistive devices. The specialist teacher explained that when the children master the skills, they join their counter parts in the regular class for the other subjects of the curriculum. Over and above the subjects of the regular curriculum, the visually impaired children were exposed to additional or unique curriculum needs which include daily living skills, communication, listening and organizational skills. The specialist teacher indicated that she had the responsibility of teaching the visually impaired additional needs of the curriculum. For example the VI children were responsible for sweeping and cleaning their own classroom. Commenting on performance of these skills, the specialist teacher said,

"They are able to do everything just like others; they can do even better than others."

The VI children were found doing all subjects of the curriculum in the regular class. They however continued to visit the reception class for the reading and writing exercises. Thus the centre practiced the integration model which involved VI children learning together with able bodied children in the main stream. The regular class teachers send their VI children to the reception class after teaching each and every subject to get assistance with their reading and writing tasks from the specialist teacher. The children got a lot of assistance from the specialist a teacher in a one is to one

tutoring situation. Most of the VI children's exercises showed excellent performance and specialised teacher confirmed the performance. This was evidence of good work from both the specialist teacher (braille skills) and the general classroom teachers for content mastery. The teachers' good effort was all meant to make the VI children access education just like their counterparts.

It was observed that quite a lot of effort in securing resources had been made to make visually impaired children access quality education. The centre has assistive technology such as Perkins braille machine, stylus pen and slates. They also have talking calculators and white cans in abundance. It was reported that all these devices were acquired through some donations from non- governmental organisations. The VI children were observed using the Perkins braille, stylus and slate quite well and the teacher would offer assistance where necessary. In addition, the reception class had adaptations on teaching and learning media. For example, the charts and models of maps had raised parts and brailed words hence the media was inclusive allowing children to access content being taught. The reception class therefore was quite conducive for acquisition of the necessary skills and content.

Although some assistive devices had been acquired, the specialist teacher felt that they were not enough. One Perkins braille machine would not suffice for all the children with visual impairments. It was noticed that the VI children would take turns to use the machine when in the reception class at the same time. The beginners would then make use of the stylus and slate. However the specialist teacher reported that the use of the stylus and slate posed challenges for these children as it is painful to use. The resource room teacher actually said, "finger flicking when using the stylus pen is very painful and tiresome." Instead, the specialist teacher said that the embosser could have been the most appropriate technology but unfortunately they did not have one in this time and age. Lack of adequate and appropriate assistive technology affected access of the quality of education by the VI learners.

For the VI children to access education like others, the specialised teacher mentioned that regular teachers needed to utilise methods that would include all children. She mentioned that teachers in general classes needed to utilise children's sense of hearing during teaching and learning situations. At one time one regular teacher was observed utilising the discussion method after having written illustrations on the chalkboard. When asked whether the discussion method was ideal for VI child in her class. She had this to say;

"Perhaps that's where the VI child might benefit".

During the session children were tasked to discuss a previously written exercise which was written in exercise books. The visually impaired child had to collect her brailed exercise book from the reception class in order to discuss with her group members. Participation in the exercise involved group members sharing what they understood from the

exercise. The VI child contributed meaningfully but was given the last chance to contribute by the group leader. Likewise during feedback from groups, the teacher lastly nominated the VI child to give a contribution which was done correctly. This proved that using an appropriate method would enable the child to access education just like able bodied children although being considered last every time could affect the child's self-esteem.

Challenges faced by teachers in teaching VI children in regular classes

In the process of letting VI children access essential skills and content in the specific areas of the curriculum, some challenges that affected the process were identified.

The VI children were affected by some approaches general teachers employed during the teaching and learning process. The specialist teacher stated that the regular teachers use the demonstration method which does not benefit the VI children. When asked on methods they use to teach VI children all the regular teachers said they employed the same methods for the whole class. This showed no consideration of the VIs. The teachers in the regular classes therefore lacked knowledge on the use of appropriate methods which would also include VI children.

Because of inappropriate methods, it was observed that the regular classrooms were challenging environments for the VI children as what transpired there was mainly meant for those with sight. It was noted that the demonstrations they used and illustrations on some points on the chalkboard for clarification were denying access to the VI children.

The regular teachers for example wrote work on the board for children to read and do exercises. This is not inclusive practice as the children with visual impairment would not see the work. Other children were observed reading work on the chalkboard for a VI child in another class. Although the VI child was assisted it would have been ideal for the teacher to write on the board whilst talking so that the visually impaired child would benefit. The specialist teacher mentioned that the regular teachers could also make use of tape recorders in such instances since the VI children have a sharp sense of hearing. However a tape recorder is a device that they did not have at the centre.

The researcher also observed that the regular teachers professed lack of knowledge on the use of the Individual Education Plan (IEP) where they would indicate curriculum modifications the VI children would need. One of the general teachers had this to say:

"...I am not aware of such a record book and its purpose. I only have the plan book where I plan work to be done by all children..."

Time was observed to be another challenge which affected inclusion of VI children at the identified ECD centre. It was noted that the visually impaired children's movements

between the reception class and the general classroom affected their learning process. The children attended lessons for all the subject areas of the curriculum in the mainstream but occasionally returned to the reception class for writing and reading exercises for the learnt lessons. Regular classroom teachers reported that the VI children failed to complete tasks most of the times because of these movements. It was observed that a lot of time was taken when going back to the reception class and working on the assigned writing or reading tasks. Meanwhile the rest of the class would have started on the next subject in the absence of the VI learners. One of the regular class teacher said that the child will miss out on what others would have done which is a challenge. This seems to indicate that these children would then need more time to finish their work. One of the regular teachers had this to say:

"I will not have time to attend to the child since I have a class forty five children to attend to."

The specialist teacher also mentioned that she also did not have enough time to assist these children especially beginners since they spend too much time in the regular class. The challenge could be indicative of lack of collaboration between the specialist teacher and general teachers. The specialist teacher reported that she would however make use of free times and lunch hour to assist the learners.

Lack of clarity on some of the roles of the regular teachers proved to be a challenge in the pursuit of including VI children. The study revealed that after attending lessons in the regular class VI children needed to go back to the reception class with reading or writing tasks. The researcher observed that the children had to rely on classmates to copy the work for them since they could not access the work from the chalkboard. However, the specialist teacher expected the work to have been written by the regular teachers instead, as peers could copy the work wrongly. Contrary to that, one regular teacher expressed that she expected the specialist teacher to collect the tasks beforehand. The regular teacher reiterated that she did not have time to copy work for the child as she had a large class. She felt that instead the specialist teacher was the one with the 'mandate' to get the work for their children. Ideally the regular teacher could have given the specialist teacher the work to be done by the child or could have it tape recorded. The situation shows that roles of the specialist and the regular teachers were not clearly defined. The issue of attitude seemed to take centre stage as well. Concerning the attitude of the regular teachers, the specialist teacher said

'they are not into it; hence they do not appreciate the problems encountered by visually impaired children.'

Lack of appreciation of the VIs' problems by the teachers in the regular classrooms therefore tended to affect their accessing of quality education.

In addition, all the general classrooms lacked instructional media and technology which would assist the VI children to learn just like other children. Charts displayed in the classrooms were meant for the sighted learners as they did not have any adaptations. The teachers professed lack of knowledge concerning construction of inclusive media which the researcher observed in the reception room. When asked whether they could use assistive technology one of the teachers had this to say:

“The specialist teacher is the one who should use them as she trained specifically for that. She is better equipped to handle these learners. Ndivo vanoziva zवानoda. (They know what they want) ”

The regular teachers generally lacked capacity to use assistive devices for example, the braille machine. In the absence of the specialist teacher, the three teachers would not assist the VI impaired learners because of lack of skills to use assistive technology.

In all, the researcher observed that the regular teachers could not create conducive environments for the VI children.

The study noted the conspicuous absence of one of the VI learner in attending lessons. The learner did not have any boarding facilities like other children; hence he stayed at a nearby village. Though both the specialist teacher and the regular teacher laid the blame on the guardians for the absence, lack of a conducive environment in the regular classroom could have been a contributing factor. The specialist teacher reiterated that performance of the VI child was therefore affected by the child’s conspicuous absenteeism. In addition it was noted the particular child could not do home- work as he did not have any equipment at home. When asked whether the guardians had been contacted, the regular teacher said that she had not yet done so, revealing that lack of cooperation between the teacher and guardian existed.

VIII. DISCUSSION

The study sought to find out the challenges ECD teachers face in including VI learners in the main stream. The extent to which VI children could access equal education in the mainstream was also examined. It emerged that though lot of effort was made by the specialist teachers in assisting VI children to gain the basic skills to access the education as their counterparts, regular teachers experience challenges in their endeavour to include these children.

The integration model which was employed at the centre was an attempt to make the VI children access all subject areas of the curriculum. The specialist teacher had inducted these children into the important life skills meant to boost their self-esteem and to enable them leave independently. Life skills enhance children’s ability to look after oneself and one’s possessions independently. It was also observed that the blind children asked their counterparts to copy work for them which shows that they had developed a good relationship with the

sighted peers. Duquette (2008) suggests that the system of integration has positive impact for children with VI as they develop social strategies needed for life through mixing with sighted peers.

Some teachers were observed to utilise the discussion method which allowed the VI children to participate in given tasks. Hallahan (1991) stated that methods in the education of learners with visual impairments are determined by the needs of the child who is blind or low vision. As a pedagogical adjustment to cater for the child with visual impairment, one of the regular teachers had to place the VI child in the front bench as was observed by, Lamichhane (2016). Placing students with visual impairments in the front bench with other academically sound students was reported as one of the basic pedagogical adjustments made in the classroom Lamichhane (2016).

Educators are therefore supposed to adapt methods to accommodate children with VI in the learning process. All the regular teachers with VI learners were found not to adapt most of their methods to include children with visual impairments. As a result the VI children had some challenges in accessing equal education with their counterparts most of the times. For example the regular teacher who utilised the discussion method, the group tasks for discussion did not have braille to cater for the blind child. Besides, the teacher did not have the skills to use a braille machine. The same observation was made by Penda et al (2015) who noted that teachers had difficulties with preparation of work into braille for learners with visual impairment. Therefore just like in Penda et al (2015) individual attention was not administered to the learner with visual impairment during the group discussion.

The study established that demonstration was another method utilised by teachers in regular classes. When demonstrating, it would be beneficial to sighted children only. Penda et al. (2015) in their study indicated that teachers faced challenges when teaching learners with visual impairment in that, they had difficulties in making them understand the demonstrations.

Use of assistive devices to equip VI learners with the necessary basic skills was essential just as Altman (2009) noted that assistive technologies are tools used to promote access to the general education curriculum for students with disabilities. However, the specialist teacher expressed that shortage and unavailability of enough assistive devices hindered their effectiveness in teaching children with visual impairment. It was noted that they only had one braille machine and did not have modern braille computers. Scholl (1987) emphasized the need to have Braille computers for children with low vision.

It emerged from the study that some regular teachers were not aware of their role in assisting visually impaired learners in the integrated mode. These teachers indicated it was the specialist teacher who was trained to handle the visually impaired students whilst they were not. Teachers in regular

classes also demonstrated lack of knowledge in handling visually impaired children. As a result accessing knowledge by visually impaired children in regular classrooms was affected. Duquette (2008) also assert that integration of a student with VI may be a difficult experience for teachers in the mainstream school, as they often do not have sufficient training or qualification in that respect. Dakwa (2011) agree as he made some indications in his study that teachers in the regular classrooms need to be sensitised and educated on the needs of children with visual impairment. This would make the VI children benefit whilst in the regular class. Failing to understand their role in assisting VI children, could have been necessitated by lack guide lines. This is similar to Rok (2011) who found out that one of the major challenges related to access and equality in the provision of education and training for learners with special needs is the lack of guidelines to support integrated education.

IX. CONCLUSIONS, IMPLEMENTATIONS AND RECOMMENDATIONS

The study sought to examine the extent to which VI children’s needs were met in inclusive ECD set ups. Accessing education by the VI learners was greatly facilitated by specialist teachers in the reception room. The study revealed that the VI children got a lot of assistance from the specialist teacher on braille skills. Due to the assistance the VI children’s performance could surpass some of their peers’ in the regular classrooms. Therefore the study got it that the specialist teacher was quite knowledgeable and passionate in working with the visually impaired. However the contrary took place in the regular classes. The VI children accessed equal education to a lesser extent as regular teachers were not knowledgeable on the needs of the visually impaired.

In soliciting information on the challenges ECD teachers face in allowing visually impaired children access education in inclusive settings, it became clear that teachers in regular classes did not adapt the curriculum to meet the needs of the VI students as they employed methods suitable for the able bodied children mostly.

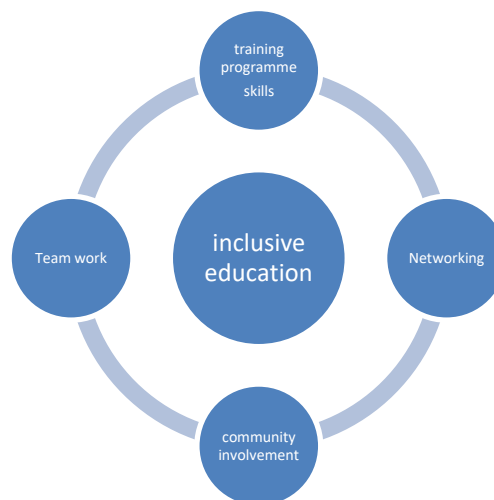
Implementations

In view of the findings, the following implementations are suggested: Challenges encountered by regular teachers became opportunities to create intervention strategies to realise inclusion of VI learners in ECD inclusive settings. Among the strategies an inclusive education framework is suggested. The framework encompass:

- A training programme for teachers on needs of VI children comprising
 - Teaching approaches that include VI children
 - Equipping ECD teachers with skills in the use of assistive devices and
 - Construction of inclusive teaching and learning media

- Team Work were:
 - Teachers need to work hand in glove with the specialist teacher
 - There is parental involvement
 - a strong involvement of the parents is critical so that they do not facilitate VI children’s absenteeism. Parents also determine the success of inclusive education.
 - Awareness campaigns in the community on the needs of VI children.
- Net working
 - The school could step up networking with various organisations which can assist in the acquisition of assistive devices.

The following diagram represents a summary of the Inclusive Education framework.



Constructed by the author

Recommendations

- Teacher education programmes should take on board inclusive education as a subject to prepare pre-service students to teach VI children in ECD settings.
- The study revealed that the role of the regular ECD teachers in assisting the visual impaired was not quite clear as they expected the specialist teacher to copy or collect work the child would write or read whilst in the reception room. The study recommends that there be a policy framework at the school to guide the teachers’ operations in order to avoid other children to copy work for their VI counterparts.as they would make unnecessary mistakes.

Limitations

The study offered important insights into inclusive practices regarding VI learners including current issues thus challenges

as well as opportunities for the future. However as with any study, limitations also exist. It is imperative to acknowledge the inherent bias that is inevitable in qualitative research whereby interview data is generated from a defined number of participants (Lipponen & Yin, 2021). Where pertinent in the process of reporting, the interview data is substantiated with citations from academic literature, policy document to triangulate the data and offer a more comprehensive view of the issues that have been raised from the study (Lipponen & Yin, 2021). Validity of qualitative research is often referred to as trustworthiness or credibility. Trustworthiness was established through sharing of themes with the informants. Triangulation and member checks were thus employed to establish validity in this qualitative study (Tobin & Begley, 2004).

It can be noted that children with special needs have been accommodated in special schools for a long time. Including children with special needs in regular classrooms is a relatively new concept for most teachers currently. It becomes necessary therefore to hold in-service training for qualified ECD teachers and to improve on teacher education curriculum to include the inclusive education component.

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