

Viewing Inclusive Education for Children with Visual Impairments from the Equity Lens; Relevant Strategies in School and Classroom Contexts

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Abstract:-This conceptual review paper synthesis exiting theories and findings to collates relevant school and classroom strategies in inclusive schooling context that maximises teaching and learning among visually impaired children. The study guided by social justice and equity lenses to education to extract 50 research literature from google scholar search using the Boolean search method. The conclusion drawn from this study is that at the methodological level situating inclusive educational research within the social justice and equity approaches help researchers and practitioners to adopt more inclusive methods that elicit critical and peripheral to create critical and inclusive knowledge. The broad conclusion drawn on from the empirical review is that responsive strategies for promoting inclusive learning among visually impaired students begin with family-school collaboration toward adapting teaching to learners' contexts and peculiar backgrounds. The teaching and learning strategies should marry concrete, participatory and unifying learning experiences. In advancing these strategies teachers must demonstrate positive feelings; adapt to the students' level, maintain positive communication with students, motivate, elicit and sustain student's attention in the learning process. This paper argues for a detailed future longitudinal qualitative study on responsive teaching and learning strategies from variety of cultural and socio-economic contexts. This is crucial in developing better models for maximising learning among the visually impaired in school and classroom contexts.

Keywords: Inclusive Education, Visually Impaired learners, School and Classroom contexts, Learning Strategies.

I. INTRODUCTION

Education is globally recognised as the most sustainable and equal path for individual and societal development and social justice(Hattam et al., 2009). The provision of quality inclusive and accessible basic education for all, irrespective of one's geographical, cultural and socio-economic contexts have become the clarion call in global socio-economic, sustainability and social just discourses(UNESCO, 2015b, UNESCO, 2015a, Anlimachie, 2019; 2016; 2015a). The provision of special needs education is seen as one of the avenues of reaching out to and meeting the needs of the most vulnerable and neglected people, including the visually impaired children. This is crucial if the world would achieve it mantra of 'Leave No One Behind' in line with Sustainable Development Goal (SDG) 4 with the overall goal of providing inclusive quality education and lifelong learning opportunity for all. The global quest for

inclusive education for all places the responsibility on the school, family, community, and nation to account for and maximise the full potential of each member of the society in order to create a sustainable and safe world for the survival of all (Carnoy (1999).

Copies of literature exist on the importance of inclusive education for children with visual impairments. However, there is the need for further studies geared towards the compilation of comprehensive and coherent evidence-based teaching strategies that enhance the education of children with visual impairments, especially in the area of social and academic learning development in the inclusive classroom context. This conceptual review paper seeks to contribute to closing the gap by examining and synthesising existing literature on inclusive education for the visually impaired. This is to lay the basis for future longitudinal qualitative study on responsive teaching and learning strategies for maximising learning among the visually impaired in school and classroom contexts.

II. METHODOLOGY

This theoretical review paper was viewed from the lens of inclusive, social justice and equity approaches to education (Carnoy, 1999; Fraser, 2008 ; Hattam, et al 2009;Tomasevski 2006; 2005). The crust of these approaches is that education strategies and interventions should be targeted and reach out to and hooking the most vulnerable groups in society including the visually impaired in the educational process. By extension the classroom teaching and learning contexts should be conducive to all learners and elicit fair and productive participation of the physically impaired learners in the learning process just like the non-physically impaired learners.

In collating the strategies that are relevant in inclusive school and classroom contexts to maximise learning among the visually impaired children, the following research questions were explored:

1. How should teaching strategies be adapted to pupils with visual impairments?
2. What contextual factors in the classroom influence inclusion and special education for children with visual impairments?

3. How do Individualized Education Plan (IEP) and inclusive education strategies are implemented for the visually impaired?

In arriving at relevant literature for this conceptual review, a search was conducted on google scholar. The Boolean method was used to key in keywords such as methodological approaches to inclusive education research, teaching strategies for the visually impaired, inclusive education classroom context, and inclusive education strategies, and equity and justice base-education. About 50 research literatures were generated for this review.

III. THEORETICAL REVIEW

Equity and justice approaches seek for strategies and methods that facilitate fair learning experiences and social mobility for all learners (Hattam et al, 2019). Tomasevski's (2004) in her four-fold (4-As) schema approach to education argues that education and learning strategies should integrate the interrelated concepts of availability, accessibility, acceptability, and adaptability. OECD (2008) identifies three key areas that are essential in effecting equity to include: how the education system is structured; practice in and out of school; and how resources are allocated. Fraser (2008) spells out three dimensions of justice in education to include redistribution, recognition and participation. Redistribution looks at access to quality education. Recognition entails acknowledging the rights of historically marginalised groups such as people with special needs to be included in education. Participation entails hooking all children and given them fair experiences in the learning process. The writer argues that "overcoming injustice would require the dismantling of any institutionalised structures either cultural, political, social or economic that prevent any group from having parity in participation" (Fraser, 2008, cited in Tikly and Barrat, p.13). Proponents of culturally responsive pedagogy such as Ladson-Billings (1995), Bishop (2008) also explain that classroom practices and strategies that are culturally appropriate strongly help students to affirm identity and develop perspective that challenge inequity that impede their success in school.

IV. LITERATURE REVIEW

The literature review and discussion for this paper were done under the following sub-headings:

- Description of visual impairments;
- Examples of how teaching strategies may be adapted for pupils with visual impairments;
- Contextual factors in the classroom that may influence inclusion and special education for children with visual impairments;
- How Individualized Education Plan (IEP) and inclusive education may be implemented for the visually impaired children and;
- How collaboration between families and school may influence a child with visual impairments speech and language development and functioning.

Description of Visual Impairments

According to Kirk, Gallagher and Coleman (2015) "the legal definition of blindness sets a physical standard of sight at less than 20/200, meaning that one cannot see with vision correction at 20 feet what the typical person sees at 200 feet. A person with low vision would have, after correction, 20/70 to 20/200 vision" (388). The writers further note that individuals with blindness and low vision experience the world around them through their other senses, such as hearing, touching, smelling, and tasting so all these senses become their primary avenues for understanding. Kirk, Gallagher and Coleman (2015, p.387) again contend that "many individuals have visual problems that are correctable, but 3 or 4 people in 10,000, their visual impairments are so severe that they cannot be ameliorated with glasses or contacted lenses".

Individuals who are short-sighted cannot focus on far objects and those who are long-sighted cannot focus on near objects. According to Kirk, Gallagher and Coleman (2015) children who are visually impaired qualify as having a low incidence of impairment or disability and they constitute a very small percentage, about less than one percent of the total school population. In support of percentage of children with visual impairments, DfES (2006d) cited in Frederickson and Cline (2009) states that "children with visual impairments form a small proportion of the overall population of those who have SNE – 1.8 percent of those with SEN statements in England in 2006" (p.540). In the United States for example, National Centre of Education Statistics (2012) explains that it is estimated that twenty-six thousand (26,000) students are with low vision and blindness (cited in Kirk, Gallagher and Coleman 2015). According to Turnbull, Turnbull, Shank, Smith and Leal (2002) students with low vision are generally able to use their visual sense for learning, however they may need to have print magnified contrast enhanced or type font or size changed. They argue that students with functional blindness use Braille to read and write.

Kirk, Gallagher and Coleman (2015) argue that visual impairments can be caused by a wide variety of conditions in children from birth to age five. The writers argue that the potential causes of visual impairment include hereditary conditions, infectious diseases, cancer, injuries, premature birth, and various environmental conditions. According to Schwartz (2010) in order of prevalence, the most common causes of visual impairment for children in the United States are as follows:

- Cortical visual impairment
- Retinopathy of prematurity
- Optic nerve hyperplasia.
- Albinism.
- Optic atrophy, and
- Congenital infectious

Kirk, Gallagher and Coleman (2015) argue that the widely scattered prevalence of the conditions of the causes of visual impairment makes it very difficult to give percentages to

specific causes. However, they contend that genetic disorder retinopathy of prematurity was widely considered to be caused by the over administration of oxygen to premature infants to save the life of a child, but the condition appears to be more complicated and seems to be associated with low birth weight as well. Similarly, in relation to the causes of visual impairments, Frederickson and Cline (2009) argue that causes of problems in the visual system consists of genetic factors like albinism, infectious diseases during pregnancy, and diseases and injury during birth or during childhood. The writers contend that the cause of some eye problems may vary in different cases. They cited an example that a cataract which results in the loss of transparency in the lens of the eye can be inherited or may be caused by infection during pregnancy or could be as a result of accident during childhood.

The writers assert that many problems associated with the eye can now be treated or prevented in the developed countries. They contend for example that through vaccination programmes maternal rubella during pregnancy is a rare disease now. In cortical visual impairment (CVI) the child's problems may not be identified as quickly as possible due to the fact that the eyes of the child are not damaged. This complex condition is not at the moment well understood, and efforts to classify its different forms continue. For example, its present name may come to be replaced by cerebral vision impairment to reflect the findings that the damage is normally in the cerebral areas outside the cortex (Frebel, 2006).

Adapting teaching strategies to pupils with visual impairments

Bateman and Bateman (2002) cited in Buli-Holmberg and Alagappa (2016) argue that effective teaching of students with diverse educational needs such as children with visual impairments in the same classroom requires that the teacher should use different instructional methodology, curriculum materials and assessments methods. It is in the direction of this that Kirk, Gallagher and Coleman (2015) argue that Lowenfeld (1973) a pioneer in educating children with visual impairments, proposed three general principles that are still important for adapting instruction for children with visual impairments. They include:

1. Concrete experiences

In this teaching strategy, the writer argues that children with visual impairments often learn mainly through hearing and touch. In view of that when teachers use concrete objects during teaching and learning process that make the children to feel and manipulate helps visually impaired children build an understanding of the world around them. The writer notes that through tactile observation of real objects in natural settings, or models in the case of dangerous objects, students with visual impairments come to understand shape, size, weight, hardness, texture pliability and temperature.

2. Unifying experiences

In relation to this unifying experience the researcher contends that visual experience tends to unify knowledge, allowing individuals to process large amount of information simultaneously. The writer explains that for example a sighted child who goes into a grocery store sees not only shelves and objects but also the relationships of shelves and objects in space, quickly understands the various sections of the store and how they go together. But, children with visual impairments cannot understand these relationships unless teachers allow them the experience of the grocery store.

3. Learning by doing

In line with this strategy, the writer explains that to learn about the environment, children with visual impairments must be motivated to explore that environment because visually impaired children reach out to objects when the objects attract their attention through their other senses, such as touch, smell and hearing. As a result of this, the researcher explains that it is important for teachers to stimulate the children with visual impairments through sounds, texture/touch, and smells to motivate them to explore and engage their environment to help them in their social and learning development.

In assisting in the identification of children with visual impairments in the ordinary classroom by teachers in order to plan the necessary intervention and teaching strategies for them, Kenefick (2002) cited in Frederickson and Cline (2009, pp.544-545) argues that if a child shows any of these signs in the classroom the teacher should refer the child for vision test. The signs suggested by Kenefick (2002) include:

- Physical symptoms such as clouding in the eyes, frequently swollen, sore or inflamed eyes, watery eyes, erratic eye movements, frequent rubbing of the eyes after periods of close work.
- Indicators of problems with eye-hand coordination such as unusual care in climbing or descending stairs or when moving about in an unfamiliar room.
- Indicators of problems with eye-hand coordination such as unusual difficulty in throwing or catching a ball.
- Indicators of strain or effort when examining something visually such as frowning a good deal, screwing the eyes up, squinting at the material, moving the head a good deal or tilting it, holding the material very close to the eyes or a long away from them, becoming fatigued more quickly on a task involving visual attention and concentration.
- Adapting classroom routines to make them more convenient, for example copying from a neighbour rather than the white board.
- Presenting written that is regularly untidy, where writing is not on the line when using lined paper or is poorly spaced perhaps with occasional omissions.

To ensure effective teaching and learning for children with visual impairments in the classroom, Arter, Mason, McCall, McLinden and Stone (1999) argue that in the teaching and the learning process, teachers should assist the children to develop tactile and other sensory skills to complement their vision. They also contend that communication in the classroom for the visually impaired children is very important in their learning development as a result teacher should help the children to develop communication skills include listening, Braille and print reading, spelling, and writing skills within the school and how to develop the skills for using low vision aid. Kirk, Gallagher and Coleman (2015) argue that modern assistive technologies shape instruction and help children with visual impairments to have access to information so teachers should use these technologies in the teaching and the learning process.

Contextual factors in inclusive classroom that influence inclusion education for children with visual impairments

Special education is a kind of educational programme that is designed for children with special educational needs. In line with this Buli-Holmberg and Alagappa (2016) writes that children with special educational needs are individuals who are by the nature of their mental and physical abilities or conditions need a more relevant or appropriate instruction than is usually available in the informal and formal educational structures. Different scholars have propounded different theories in relation to the contextual learning development of the child. In the direction of this Rye (2001, p. 6) explains that: Up until the 1950's conceptions of how children learn were characterized by the perception that children are passive receptors of information from the world around them. They were considered to be "blank slates" that, through experience, would be filled with the impressions and thereby learn about the world around them and their relationship to it. Eventually children would be able to take their knowledge and use it to solve problems and adapt to their environments (Rye, 2001, p. 6).

It could be inferred from this behavioural perspective of the learning development of the child that it does not take into consideration the social factors in the child's environment that can influence the learning development of the child. From cognitive perspective, the writer argues that in the 1950's and 60's a new concept emerged, the ideas of Jean Piaget (1952) and Maria Montessorie (1968) for example contributed to a revolution in the understanding of children's cognitive development. According to this theory, in line with the children's learning about the world around them, it is assumed that children actively select, organize, comprehend and process their experiences with their surroundings. Notwithstanding this, Rye (2001, p.7) argues that in the cognitive theory "children's experimentation with the material world was still given the greatest emphasis, while their social development was more or less taken for granted – it would come as they grew and learned to master their relationship with their environment".

Other social learning theorists see the learning development of the child as an interplay between the child's own characteristics that is the biological features that influence the child's learning development and the social environment in which the learning development of the child takes place. One of the key proponents of this theory is Bronfenbrenner. For the purposes of this paper the social environment of the visual impaired child such as the teacher, parents, the peers and the school among others play a very crucial role for inclusion and learning development of the child with visual impairments in the classroom.

According to Reynolds (1995) the school, the classroom as well as the family and the community are very influential in the learning development of pupils. He however explains that the influence of school factors is very instrumental to make the difference between educational success and failure for many children. In line with this Rutter and Maughn (2002) argue that a good school leadership provides strategic vision, staff participation with a shared vision and goals, appropriate rewards for collegial collaborative working, attendance to staff needs and rewards and effective home-school partnership coupled with fair discipline as well as involvement of pupils with taking responsibility and feedback enhance the social and learning development of pupils.

Similarly, Frederickson and Cline (2009) write that the most important key stakeholders in education are children, families and school in view of that any effort to develop any integrated approach towards special educational needs, it is important to take into account the perspectives of each of these stakeholders. But, unfortunately, the leadership in the majority of schools do not include teachers, parents and pupils in major decision making which adversely affects the learning and social development of the children. According to Perez-Pereira and Conti- Ramsden (1999) the environment around the visually impaired children plays a particularly critical role in the social and learning development of the children. In the direction of this since the teacher factor influences the inclusion and the social and learning development of the visual impaired child in the classroom, Rye (2001) suggests these eight guiding principles to ensure teacher-student positive interactions:

1. Demonstration of positive feelings

Rye argues that teachers should show that they are interested in the students' as individuals and that they have the responsibility of caring for them, cooperate with them and ready to help them to both enjoy and learn in school.

2. Adapt to the students

In adaptation to the students the writer notes that teachers should endeavour to adapt their ways of working with and relating to students to address and acknowledge the students' initiatives and individual ways of learning as much as possible.

3. *Talk to the students*

Rye asserts that for teachers to have positive interaction with the students, it is important that teachers should let their instruction relate to what they are interested in and invite them to take part in dialogues on the content of the themes that they present so that they become personally involved.

4. *Give praise and acknowledgement*

Praises and acknowledgement are very important to ensure positive interaction between the teacher and the students. In view of this Rye contends that teachers should give praise and acknowledgement to each student, and to the class, when the students try to cooperate, and follow the teacher's instruction, and work to the best of their abilities.

5. *Help the students focus their attention*

According to Rye teachers should try as much as possible to make sure that they have the children's full attention when they teach, advice, or otherwise work with them because shared attention and experience are prerequisite for communication.

6. *Give meaning to the students' experiences*

Rye advises that teachers should make sure that their instruction are meaningful not just with respect to what they talk about, demonstrate, and explain, but also by showing their personal involvement in the subject because in this way, they will be able to contribute to the students' understanding that some things are more important than others. Example values, norms and traditions.

7. *Elaborate and explain*

Rye argues that teachers should help the students to relate the content of what they are working on to other subjects and academic activities because this gives insights, helps form associations, helps the students achieve a more holistic experience of reality and curiosity and motivation for learning.

8. *Help the students achieve self-discipline*

Rye contends that teachers should help the students adapt personally and academically to the school's environment and activities by clearly planning activities, and having personal, predictable and ways of reacting. The researcher argues that predictability is better than continual reprimands and prohibitions.

To ensure inclusion and the learning development of the visually impaired children in the classroom, peers play a very significant role. Salleh and Zainal (2010) argue that visually impaired children who are not able to master social skills and show a good social behaviour will suffer isolation and segregation from their sighted counterparts in the inclusive classroom context. In view of this Rye (2001, p.29) argues that "one of the most important requirements for children to thrive in school, learn and develop socially and

emotionally, is that they feel secure and enjoy being in the classroom. Enjoying school depends however, not only on a positive teacher-student interaction, but also largely on the quality of the student-student interaction". It is in the direction of this that Rye (2001) again has suggested these eight guiding principles to guide teachers to facilitate effective student-student interaction in the classroom.

1. *Demonstrate positive feelings*

According to Rye (2001) teachers should assist students to demonstrate positive feelings towards one another by providing positive comments and acknowledgement when students demonstrate positive and accepting feelings for one another. The writer further states that teachers should get students to work to achieve pleasant emotional climate in the classroom through group discussions, dramatization, playing games, discussion of appropriate films among others and also talk about what it is like to express or experience negative feelings or rejection.

2. *Help the students adjust to one another*

The writer suggests again that to facilitate effective student-student interaction in the classroom, teachers should help children to adjust to one another's needs and circumstances in everyday interaction by discussing in groups what is meant by adjusting to one another. The researcher pointed out that teachers can assist children to understand and raise children's awareness of this concept of adjustment through dramatization and illustration through appropriate films.

3. *Help the students talk about shared experiences*

According to Rye teachers should arrange it so that students can talk to one another about what is being taught and what they experience together through small groups. Rye suggests that when some students are more active than others, the teacher should become a moderator and make sure that the quiet and shy students are allowed to express their opinions and experiences and teachers to assist the students to learn to talk to one another and accept that there is more than one way to perceive something or express oneself.

4. *Encouraging the students to express acceptance, praise, and recognition*

Rye also suggests to teachers to talk to students about the importance of giving one another encouragement and expressing recognition in their interaction because it is important for students to learn to communicate when something is positive and deserves praise.

5. *Help the students focus their attention on shared activities*

Again, the researcher notes that teachers should help students to direct their attention to what they are doing with someone else or in a group and to help students to listen to one another and try to understand what others are trying to communicate.

6. *Help the students share their experiences with each other in a meaningful way*

According to Rye teachers should encourage students to verbalize what they have experienced or want to share with the group, as well as to share their feelings about their experience. The writer suggests that students can use dramatization or role play, for example, to help make the various ways of expressing verbal and emotional meaning come to life.

7. *Help the students express and explain their experiences and opinions to one another*

Rye suggests that teachers should assist students to expand the range of ways in which they communicate by talking about their interests and relating these interests to other people, other places, and other periods of time.

8. *Help the students to develop self-discipline*

Finally, Rye (2001) advises teachers to discuss with students the significance of following ground rules and routines when they are in the classroom and other areas in the school and also to let the students as a class, in groups, or in pairs plan how they will solve problems together, who will do what, when various activities will take place, and how they will achieve a common result. The researcher further suggests that teachers should let the students as a group take part in deciding how they want to work together and relate to each other.

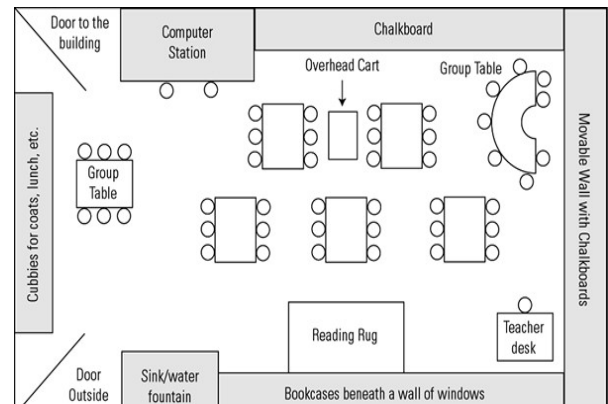
One major challenge in the inclusive context is that most teachers are not able to put inclusive ideas into practice in the school and classroom contexts due to inadequate professional training, lack of confidence and appropriate knowledge and skills. In his study Agbenyega (2007) argues that in the ordinary classroom most teachers have not received adequate training to effectively teach children with special educational needs like visually impaired children. Agbenyega (2007) notes that “the beliefs, negative attitude and concerned expressed by teachers...may be explained due to lack of professional preparedness, available resources, and lack of sufficient orientation of specialist assistance” (p. 53). Frederickson and Cline (2009) argue that:

Most school-related problems are therefore regarded as being curriculum-induced. It must be acknowledged that attributing learning failure to factors such as poor classroom organisation, ineffective teaching strategies or inadequate match between task requirement and learner skills at least serves to emphasize the power of the teacher in influencing educational outcomes (p.59)

This suggests that the social environment of the child such as the school and the teacher factors have major influence in the social and the learning development of the visually impaired child in the inclusive classroom context. Effective classroom organisation is essential for visually

impaired children due to their circumstances. The classroom should be well arranged or organised to enable the visually impaired children to access the classroom. In support of this Cox and Dykes (2001) explain that teachers should organise the classroom in such a way that visually impaired children can move around the classroom with ease just like their sighted peers.

Stronge, Tucker and Hindman (2004) explain that classroom organization focuses on the physical environment, how teachers strategically place furniture and other teaching and learning materials in the classroom in order to optimize students learning and reduce distractions. According to Stronge, Tucker and Hindman (2004). The layout below shows a good classroom organization.



Adapted from Stronge, Tucker and Hindman (2004).

Impact of family-school collaboration on visual impairments language development

Individual Education Plan (IEP) according to Kamens (2004) is a document that is designed for public schools for the instruction of children with special educational needs or with disabilities such as children with visual impairments. The programme is an American concept for ensuring that children with special educational needs participate in the general education curriculum (Skrtic, Harris and Shriner, 2005). According to Skrtic et al (2005) regular education teacher, special education teacher, parent, a person knowledgeable about the curriculum and anyone who provides a related service to the child with special educational needs can participate or be part of the team in the designing of the plan for the child.

According to Kamens (2004) IEP may consists of the following sections; Long term or annual goals, short term objectives, duration and evaluation of objectives, program modifications and special designed instruction, demographic information, consideration of special factors present level of performance and student's strengths and needs. The annual goals and the specific objectives of the plan should be measurable, monitored and evaluated in a reasonable time interval to ascertain the progress of the child.

From the perspective of Kirk, Gallagher and Coleman (2015) IEP for children with visual impairments

should have a variety of goals, “some focusing on the effective use of the learning environment, some on instructional content, and some on skills that the student will need to perform effectively in the inclusive classroom. It will take a team of professionals to implement the goals” (p.412). The researchers argue that team work is very essential for the implementation of IEP for students with visual impairments as a result the general education classroom teacher may need assistance from an itinerant teacher to carry out the goals and objectives of the IEP successfully. Kirk, Gallagher and Coleman (2015, p.412) provide this table as an example of IEP for visually impaired child named Jerry.

In designing IEP in inclusive context to ensure the social and learning development for children with special educational needs like the visually impaired, it is important to ensure that the inclusive context is enriched to empower children to benefit from the teaching and the learning process. From enrichment perspective, “a school is seen as a social context in which everybody profits educationally from the coexistence in a community” (Befrings 2001, p.12). Additionally, Befrings(2001) argues that: “a unified heterogeneous school can create a context for children to learn to take care of one another” (p.9).

IEP Goals and Objectives for Visually Impaired Student

Long-term goals	Short-term objectives
Jerry will use special devices and materials in order to perform at grade level in reading and mathematics.	<ol style="list-style-type: none"> 1. Jerry will demonstrate effective use of various tools of magnification. 2. Jerry will demonstrate effective keyboarding skills that allow him to do word processing. 3. Jerry will score within one grade level of the class norm in academic achievement tests.
Jerry will establish effective social relationships with some of the nondisabled members of the class.	<ol style="list-style-type: none"> 1. Jerry will join and participate in one of the clubs or organizations in the school that stresses social interactions. 2. Jerry will work on class projects with other students as a contributing team member. 3. In class parties, Jerry will join in the activities and interact with other class members.

As a result, there should be collaboration between teachers, teachers and children and children with and without special educational needs such as the visually impaired in the inclusive context. According to Buli-Holmberg and Alagappa (2016) “inclusive education means that all students in a school, regardless of their strengths or weakness” (p.1). According to Friend and Bursuck (2006) it very necessary for teachers to collaborate in the inclusive context because such collaboration helps in the effective planning and delivering of classroom instruction and this enhances better learning environment for children with special educational needs.

In line with this Buli-Holmberg and Alagappa (2016) argue that in the effective inclusive education, special teachers

and regular teachers team up to prepare curriculum for the children with special educational needs. According to Bateman and Bateman (2002) positive interaction between teachers and children in the inclusive setting builds up interest and confidence in the children and motivates them to learn. There should also be collaboration between students with and without special educational needs. In the direction of this Tichenor, Heins and Piechura-Couture (1998) explain that students’ collaboration in the inclusive context has significant importance because such an interaction helps in the achievement of the vision of inclusion.

The reason is that inclusion becomes successful when children with and without special educational needs recognise and accept one another and fosters peer tutoring. In line with this Befrings (2001, p.8) notes that “in supportive tutoring roles, pupils with and without disabilities have the opportunity to a) discover their own strengths and learning potentials as they assist others to learn”. The curriculum should also be flexible and the teaching methods and learning materials should also be adapted to the children with special educational needs ability level. In this vein Buli-Holmberg & Alagappa (2016, p.5) argue that “teachers have to adapt the teaching instructional methods and instructional materials to suit the students’ needs and abilities for better inclusive educational practice”.

The impact of family-school collaboration on children with visual impairments

Research has shown that children with visual impairments are normally also have other disabilities such as speech and language development and functioning. Rahi and Cable (2003) write that visual impairment is normally associated with other forms of disabilities, most especially when the visual loss is severe. In view of this it has been argued by scholars that the collaboration between families and the school are very important for the enhancement of the child’s speech and language development and functioning. According to Hornby (1995) for any educational intervention for a child to be successful, it depends to some extent the collaboration between teachers and parent in the classroom. Parent participation in school in general has been identified as crucial process of enacting equitable, culturally responsive relevant educational outcomes(Anlimachie, 2019,a,b, 2016, 2015b) education and school immersion in community In view of this the writer argues that teachers are considered as being experts on education and parents are also viewed as experts on their children.

As a result of this the researcher explains that effective collaboration between teachers and parents can then be a partnership which involves a sharing of expertise and control in order to provide the optimum education for children with special educational needs such as the visually impaired child. Law, Garrette and Nye, (2003) explain that through collaboration between the school and the family interventions could be designed to improve an area of speech or language

functioning of the child with visual impairments concerning either expressive or receptive phonology (production or understanding of speech sounds), expressive or receptive vocabulary (production or understand of sounds), or expressive or receptive syntax (production or understanding of sentences and grammar).

It is argued that teachers and parents should collaborate in the identification of speech and language development and functioning of the child with visual impairments in order to plan appropriate intervention strategies for the child to facilitate the learning and social development of the child. According to Frederickson and Cline (2009, p.264) "it is important to identify speech and language difficulties as early as possible". In line with this Taylor (2003) argues that the teacher of the special need's child like the visually impaired child can demonstrate to parents the diverse ways of reinforcing major or key skills at home and explain the intention or the purpose of the exercises so that parents can understand their educational importance.

The writer explains that through this collaboration between parents of the child with visual impairment and the school can make the parents understand that they are included and valued as a member of the child's learning team and this builds up a good and sustained relationship between the parents and the school to ensure effective learning of the child. The reason is that the parents may build trust for the school and have confidence to report or give information about the progress and the difficulties encountered by the child at home to the teachers in the school and vice versa so as to plan accordingly for the child.

Depending upon the nature of the child's speech and language development and functioning, through collaboration between the family and the school the child could be referred to speech and language therapy for assistance in the speech and the language development of the child. In the study of Law, Boyle, Harris, Harkness and Nye (2000) the researchers note that there is a positive effect of speech and language therapy interventions for children with expressive phonological and expressive vocabulary difficulties. Law et al. (2000) define approaches to intervention by using three categories.

- Didactic (direct training of linguistic behaviour).
- Naturalistic (teaching the child to respond effectively to the linguistic demands of the environment).
- Hybrid (a combination of didactic and naturalistic).

The writers explain that the terminologies provide a useful framework to outline approaches to intervention even though therapists may use an eclectic approach and adapt interventions accordingly in response to the child. Through collaboration between parents and the school, both parties can decide on what intervention is best for the child. Law, et al. (2000) explain that:

Direct intervention focuses on the treatment of the child either individually or within a group of children depending on the age and the needs of the children requiring therapy as the facilities available. Indirect intervention is often perceived to be more naturalist approach where adults in the child's environment facilitate communication. Traditionally this approach is used to create an optimum communicative environment for the child by promoting positive parent-child interaction (p.2).

Similarly, Labbe and Williamson (1984) cited in Frederickson and Cline (2009) explain intervention known as stimulus fading. The researchers note that when the family and the school collaborate, this stimulus fading intervention strategy could be used to influence the child's speech and language development and functioning.

According to Labbe and Williamson (1984) stimulus fading as an intervention strategy for speech and language development and functioning may be used to help a child such as the visually impaired child who communicates with the mother at home but who does not talk or communicate with the teacher in the school or in the classroom. According to the researchers in such a situation the child might be assisted to develop communication with the teacher by playing with or reading with the mother in the school and after a number of sessions in which the child becomes used to communicating with familiar person in an unfamiliar environment, the teacher may gradually be faded in while the parent may be faded out.

V. SUMMARY AND CONCLUSIONS

The review of the relevant literature in this paper suggests that most definitions of blindness set a physical standard of sight at less than 20/200. This means that one cannot see with vision correction at 20 feet what the typical person sees at 200 feet. A person with low vision would have, after correction, 20/70 to 20/200 vision and that visual impairments can be caused by variety of factors such as heredity, diseases and other environmental conditions like accidents. The literature suggests that most visual problems can be corrected through glasses, contact lenses and other immunization programmes.

The findings revealed that children with visual impairments learn through their other senses or complement vision in their other senses in their learning development. In view of that for teachers to adapt their teaching strategies to include the children in the classroom is very important. In the direction of this it has been explained that teachers should use teaching strategies that will stimulate their other senses to motivate the children to learn and also to make use of concrete objects that the children can feel and manipulate during teaching and learning process. Also, it has been explained that teachers should organize the classroom very well so as to facilitate mobility of the children.

The review of the relevant literature further suggests that effective inclusive practices are necessary for the visually

impaired children but most teachers in the ordinary classrooms are not able to practice inclusive ideas due to lack of professional experience, inadequate resources, and lack of self-confidence and the necessary skills and knowledge among others. It has been argued that the social environment for the social and the academic development of the child is very important. In line with this it has been illustrated that teachers, parents, peers and the school authorities have major roles to play to enhance the learning development of the children with visual impairments. As a result of this Rye (2001) suggests eight guiding principles to guide teachers and pupils in the classroom to facilitate positive interactions with one another.

The findings also showed that for IEP implementation for the visual impaired child to be successful in the inclusive context, the environment should be enriched through the collaboration of the team who plans the programme for the child. It has been argued that the collaboration between families and the school has influence in the speech and language development and functioning of the child with visual impairments. In view of that it is necessary for the school and families to collaborate to plan the needed intervention for the child.

This paper argues that there is a fertile basis for a more detailed longitudinal comparative qualitative study on responsive teaching and learning strategies from variety of cultural and socio-economic contexts. This is crucial in developing better models for maximising learning among the visually impaired children in diverse school and classroom contexts.

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