Teaching Strategies for Learners with Visual Impairment: A case of Mporokoso and Munali Secondary Schools

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Abstract

The purpose of the study was to find out the teaching strategies for visual impairment and their benefits. A case study research design was used in this study. To collect and analyse data, a qualitative research approach was used. Learners with visual impairments and special education teachers who work with them were the target population. The sample size was 35 respondents. Data was gathered through the use of questionnaires and interviews. The descriptive statistics were generated using the Excel 2013 software in the form of frequency tables and percentages. Thematic analysis was used to analyse the data from the interviews. The study reported that teachers use individual education plan, inclusive education, audio device, recording of lessons, adaptation of lessons, materials written in high contrast and use of magnifiers in teaching of learners with visual impairment. The visual impairment teaching strategies provides a diversified learning among learners as they also encourage participatory learning. It is important to make mention that the participatory teaching strategy is used used in any physical setting, interpreting and fun. Therefore, helping to involve the VI learners in the subjects. It helps learners to learn about themselves. Through the participatory learning, the VI learners are able to analyse their own situation, rather than have it analysed by others. In other words, participatory learning helps the VI learners build self confidence. These teaching strategies help learners learn on their own. This makes it possible for the VI learners not to easily forget the learnt concepts. It therefore makes learning permanent among the VI learners. Visually impaired learners rely on selfexploration to learn about the world. The amount of information that learners can access with visual impairments is limited in this manner. Overall, these modalities cannot successfully compensate for visual inputs; they are only present to mitigate the effects of vision loss on learning, visually impaired students rely on self-exploration to learn about the world.

Keywords: Benefits, effectiveness, strategies, teaching, visual-impairment

Introduction

The 1996 Ministry of Education (MoE) policy document, Educating Our Future; National Policy on Education, emphasizes the notion that everyone has equal access to educational opportunities (MoE, 1996). According to this document, individuals with various special educational needs have the right to access and participate in the educational system at all levels. However, teachers and students in inclusive classes encounter problems that affect the teaching and learning process and students' academic and social well-being. Although learners with special educational needs have access to and support, providing special education services in schools poses several problems for both instructors and students. In the teaching profession, there is a challenge with instructing visually impaired students because of the lack of acceptable teaching practices. According to Sight Savers International (2010), utilizing teaching methodologies for learners with sight resulted in the low academic achievement of learners with visual impairment. This resulted in insufficient classroom involvement and performance among visually impaired students, resulting in low educational levels. Despite the government's efforts to supply teaching materials, train instructors, and deploy teachers and standard officers, only a tiny percentage of visually impaired students complete their education.

According to the Central Statistics Office (2003), 12,754 blind people aged five and up. Fifty-seven percent of those surveyed had no formal education, 29 percent had a primary school education, 11 percent had a secondary school education, 0.8 percent had A levels, and 1.3 percent had higher education. Seventy-four thousand eight hundred eighty-two people were partially blind. 39.6% had no education, 40.7 percent had completed elementary school, 15.6 percent had completed secondary school, 2.2 percent had completed A-level schooling, and 1.8 percent had completed a higher level of education. In 2010, the Ministry of Education reported a lower figure than the Central Statistics Offices. There were 24,937 visually impaired students in schools, according to the report. There were 23,183 students in grades 1 to 9, with 12,236 males and 10,947 females, and 1,754 (647 males and 1,107 females) in classes 10 to 12. (MoE, 2010). Only 7% (1,754) advanced to the senior secondary level of schooling, while 93 percent (23183) dropped out. Socio-economic factors, poor classroom involvement, and academic achievement due to traditional teaching methods, and environmental risks were all factors that contributed to students dropping out of school (MoE, 2010).

Lack of sponsors, inability to qualify for grade 8, early marriages, pregnancies, being too big to learn with young learners, and bad attitudes of both parents and pupils, according to Ndhlovu (2005), all led to dropping out of school. In addition, parents' inability to pay boarding and other fees on their children's behalf contributed to their children dropping out of school. As a result of these circumstances, 41 (18 men and 23 females) of the 123 students enrolled in grade 1 dropped out before reaching grade 7, accounting for 33 percent of the total.

Failing to qualify for grade eight still arises here, implying that, despite other factors affecting learners' progression, the most significant factor is a lack of effective teaching strategies that affect academic classroom participation and performance of these students, as well as their parents' negative attitudes toward school. This is accompanied by parents failing to pay their children's school fees. Similarly, according to the Zambia Agency for People with Disabilities Report (2009), 40 percent of disabled students enrolled in grade 1 dropped out before reaching grade 7, owing to insufficient classroom involvement and academic performance, among other factors. The Republic of Zambia's government has committed to providing high-quality education to Special Educational Needs (SEN) students. It has been acknowledged that increasing teachers' and schools' capacity to teach

students with a wide range of SEN is critical to enhancing these students' achievement. Professional coaching frequently emphasizes the training of transferrable thinking and learning skills (Mulenga, 2007).

According to research conducted in Zambia by Mulenga (2007), most people with visual impairments work for the government. Most of their jobs are confined to switchboard operations, lecturing, or teaching. On the other hand, others with visual impairments are either unemployed or have dropped out of school for various reasons. Others are begging on the streets, and those in schools are not doing well academically. This incident prompted the researcher to inquire how special education teachers use teaching tactics when teaching students with vision impairments. As a result, the purpose of this study was to determine the instructional tactics employed in teaching learners with visual impairments and their usefulness in terms of academic accomplishment.

Visual impairment can be congenital (present at or shortly after birth) or acquired later in life through various factors (Sacks & Silberman, 1998). Retinopathy, glaucoma, cortical visual impairment, coloboma, and optical nerve hypoplasia are congenital causes of visual impairments. Kirk *et al.* (2011) pointed out that cancer, cataracts, trauma, accidents, and poor nutrition can cause vision impairment later in life. A teacher must therefore understand how vision loss affects the learning process before imposing any teaching on students with visual impairments (Sacks & Silberman, 1998). Visual information is critical in assisting children in observing and interpreting what is going on around them. It is also a necessary precondition for a student's conceptual development. Due to the malformation and loss of this portion of the body, the learner receives less sensory data, resulting in a deficiency or delay in many abilities gained through observation and imitation from others.

Cognitive and linguistic development is hampered when a child's vision is impaired in infancy (Bishop, 1996). However, if the loss of eyesight occurs after five years when visual memories are no longer kept, some visual memories will be retained. This visual memory will be instrumental in the learning process. It will aid in developing and forming images and concepts and later in life when linking new concepts and experiences. There are three fundamental ways for children with visual impairments to obtain information from their surroundings. For visually challenged students, verbal description is the most crucial source of knowledge.

On the other hand, others' verbal descriptions are usually incomplete and fail to meet the person's needs. The use of tactile stimulation is another option. On the other hand, a tactile approach is ineffective since a learner must constantly feel an object to grasp the image of the object. Finally, visually impaired students rely on self-exploration to learn about the world. The amount of information that learners can access with visual impairments is limited in this manner. Overall, these modalities cannot successfully compensate for visual inputs; they are only present to mitigate the effects of vision loss on learning (Spungin, 2002). As a result, a teacher instructing visually impaired students in inclusive classrooms must arrange lessons around these assumptions.

According to Adey *et al.* (1999), teaching strategies are the structure, system, methods, techniques, procedure, and processes that a teacher employs throughout instruction. These are tactics that a teacher uses to help a student learn. Evans *et al.* (2003) divided teaching strategies into two categories: those that contain discussion, demonstrations, field excursions, role acting, and resource people, and those that do not. The supervised study, experiments, and independent study are some of the personalized ways. Meijer (2003) refers to them as "strategies," including lecturing, tutoring, inquiry learning, questioning, discovery learning, and simulation games. In addition, teaching facilities, microcomputers, and audio-visual aids were incorporated into the teaching methodologies in primary and secondary schools.

Traditional procedures such as lecture, recitation, one-on-one sharing, group work, brainstorming, the project method, role acting, and nonverbal methods were conceptualized by Daniels et al. (2000). Teachers do not alter their teaching strategies in the classroom. According to the findings of Davis et al. (2004), to gain and maintain learners' attention, teachers must vary their instructional procedures. Breaking up lectures with examples, demonstrations, practice, and feedback is easy to accomplish inside a class that most teachers fail to do. There's enough variety here to keep anyone on their toes. Teachers must change their programme format from lesson to lesson. It is sometimes necessary to convey an idea to learners, who must then find the concepts from examples presented; other times, learners must discuss the significance of a study; and other times, a simulation must be done. Furthermore, instructional tactics for visually impaired students necessitate specialized training. Many teachers in the system lack a diverse set of teaching practices appropriate for students with visual impairments. It should be no surprise that the visually handicapped have the highest failure rate in the educational system. Furthermore, special education teachers are not adequately trained in new learning activities and teaching methodologies when a new curriculum is implemented. According to Mulenga (2007), children with visual impairments are the same as other children; they see less. As a result, teachers should avoid singling out children with vision impairments and making them feel different. Visually impaired students, like other students, require praise and encouragement. They must get the impression that the teacher values and respects them.

On the other hand, children with visual impairments have unique educational demands due to their disabilities, which some teachers overlook. They may, for example, need to learn specific skills or have access to specific equipment and supplies. They may also find certain tasks, including reading and writing, and navigating around the school, more complex than fully sighted students. Most of the time, children with visual impairments do not receive the sorts and amounts of support they require.

Individuals with unique needs and those who are currently classified as disabled or extraordinary have always existed. However, special education services to meet their requirements have not always been available. Modern special education has roots in several academic areas, including medicine, psychology, sociology, and education. Formal unique education teaching practices, according to historical accounts, first appeared in the late eighteenth century, particularly involving children who were blind or deaf. By the early tenth century, attempts had been made to educate youngsters with significant cognitive and behavioral issues, as well as those who had been labeled insane or foolish at the time.

Special educators also created, evaluated, refined, and disseminated various educational methods (Kirk *et al.*, 2011). These teaching methods went beyond traditional academic disciplines like literacy and arithmetic. Perception, motor training, self-help skills, leisure, occupational preparation, and behavioural and social skill development were also covered. Today's special education teachers, on the other hand, are asked to do more than ever before in our brief history (Spungin, 2002). They must ensure that all students access the general education curriculum, expectations, materials, and objectives. In addition, practical skills for everyday living and effective life transitions are taught. In inclusive environments, they must develop, execute, and evaluate instructional practices with general education teachers. Manage paperwork workloads and assist students in preparing for high-stakes state and local exams.

They must also collaborate with specialists in various therapies to incorporate their skills into classroom and community practice. Aside from that, specialist instructors are expected to be familiar with and use educational and assistive technologies and services to help their students succeed in school and life (Webster & Roe, 1998). What matters most, however, is that special educators consistently provide high-quality educational services to

their students. According to Heward (2006), special education is first and foremost a powerful and intentional intervention. Successful interventions decrease, reduce, or eliminate the barriers that prevent people with disabilities from learning and participating fully in school and society.

Learners with visual impairments may have difficulty understanding particular concepts due to their loss of sight. This is likely due to their parents' overprotectiveness and lack of encouragement to explore the world around them (Hagemoser, 1996). For example, when discussing the life of a giraffe. Teachers are always looking for innovative ways to help their students understand. A learner with a visual handicap may have no idea what the teacher is talking about because they have never seen a giraffe. If this is the case, the teacher will need to offer some giraffe-related information. It features a long neck, a small head, and four lengthy legs, for example. Kahn (1990) says that the instructor can also bring a giraffe model into the classroom, which students with visual impairments will feel with their hands. The learner (along with the others) will visually evaluate the model if the learner has low vision. Looking at a large and clear picture of a giraffe will also help learners with low eyesight. Because the teacher encourages students to use their various senses to learn, this learning style is called multi-sensory learning.

To put it simply, people develop their understandings of the world based on their past and present experiences. We know that some people are friendly, some are nasty, some are more complex than others, and so on, based on conventional wisdom. These are all things I've learned via my reflections and interactions with others. Constructivism is a method of teaching, not a theory. It is, in essence, a model or metaphor for how people learn or how learning occurs (Cobern, 1995; Von Glasersfeld, 1989). It justifies the synthesis of new ideas through interpretation. In this vien, this study was guided by the following questions:

- i. What teachnig strategies are used in instructing learners with visual impairment?
- ii. What are the benefits of the teaching strategies used on learners with visual impairment?

Theoretical framework

The study was guided by the Vygotsky constructivism theory of learning. The theory states that learners construct and build their own knowledge of the world around them through life experiences. The school curriculum in particular, changed from previously observing positivist epistemology (behaviorist) learning theory to constructivist epistemology and learner centered education (Kalpana, 2014). The shift also resulted in the teacher education curriculum adopting a constructivist epistemology paradigm shift in secondary schools which is noted in learner centered learning.

From the constructivist learning perspective learning is contextualized. Teachers in education have to design learning activities, which require learners to interpret, argue, practice and transfer ideas to other situations. Kharade and Thakkar (2012) argues that it is from this that learners develop cognitively and construct, create and acquire knowledge. Nawaz (2012) point out that, in the learning paradigm education institutions and teachers should create powerful learning environments. It seems obviously that these learning environments should provide learners with opportunities to reflect on what they are learning so that they understand it and be able to apply the constructed knowledge in a new context or environment. Therefore, teaching strategies should be aligned with constructivist learning principles to improve the quality of teaching and learning. This implies that the active learners construct their own knowledge while the teacher facilitates the learning process. The teaching strategies should therefore allow the visually impaired learners to experience

reality as this may not make them forget easily what they have seen, touch, hear, and actively participated, hence making an experiential reality to learners.

Methodology

A case study research design was used in this study. To collect and analyse data, a qualitative research approach was used. Learners with visual impairments and special education teachers who work with them were the target population. The sample size was 35 respondents. Data was gathered through the use of questionnaires and interviews. The descriptive statistics were generated using the Excel 2013 software in the form of frequency tables and percentages. Thematic analysis was used to analyse the data from the interviews.

Results and discussion

Teaching strategies for learners with visual impairment

The study intended to determine the teaching strategies for learners with visual impairment used in special schools. Table 1 below reports the teaching strategies for learners with visual impairments.

Table 1: Teaching strategies for learners with visual impairment.

| Teaching Strategies | Frequency | Percentage % |
|------------------------------------|-----------|--------------|
| Individual Education Plan | 6 | 20.0 |
| Inclusive Education | 5 | 16.7 |
| Audio Device | 3 | 10.0 |
| Recording Of Lessons | 4 | 13.3 |
| Adaptation Of Lessons | 5 | 16.7 |
| Materials Written In High Contrast | 4 | 13.3 |
| Use Of Magnifiers | 3 | 10.0 |
| Total | 30 | 100 |
| | | |

Source: Field Work, 2019 N = 30

The shows that six (6) out thirty (30) representing 20.0 % of the respondents indicated that they used individual education plan. This is prepared for a learner which specifies the learning goals that are to be achieved by the learner over a set a period of time and the teaching methods, resources and supports necessary to achieve those goals. It is developed to ensure that learners with visual impairment receives special instruction and related services. The purpose of IEP is to meet the learner's needs based on the learner's development rather than on predetermined expectations based on grade level. Teachers must comprehend this desire to predetermine instructional strategies to provide effective instruction. The study supports Salisbury (2008) whose study guided that the assistance that teachers provide to students with visual impairments should be based on the utilization of various sensory stimulations, such as sounds, scents, textures, and forms, to assist them in constructing a picture of the world.

According to the study, the Individual Educational Plan (IEP) is a pedagogical and development plan created for each child with SEN by customizing the curriculum to the child's abilities and needs. Based on a child's performance in class, new learning objectives are identified. These goals should not be too difficult for the child to become discouraged,

but they should also not be too simple because they need to be challenged to master new abilities. On the other hand, the plan should include all of the information needed to track the child's progress, and the teacher should create it in collaboration with other members of the team who are responsible for the child's inclusion. One of the study's participants stressed the necessity of an individualized education plan in aiding a child's growth.

The other five (5) out of thirty (30) representing 16.7 % of the respondents reported that they used inclusive education. Inclusive education is seen as a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion from education and from within education. The goal is that the whole education system will facilitate learning environments where teachers and learners embrace and welcome the challenge and benefits of diversity. Within an inclusive education approach, learning environments are fostered where individual needs are met and every student has an opportunity to succeed. Inclusive education is a real implementation of the basic human right to education. It is not only about attaining universal access to education, but universal access to meaningful and purposeful knowledge and learning for all. This study agrees with Salisbury (2008) who argued that inclusive education emphasizes an adaptive teaching approach, a good teacher should be the one to consider these changes for students' learning. Although we discuss these adjustments and adaptations to the teaching and learning environment, adaptation is not required in other cases. Teaching strategies and other practices used with sighted learners can also be used with visually impaired students. Therefore, a teacher instructing visually impaired students in inclusive classrooms must arrange lessons around these assumptions.

Three (3) out thirty (30) representing 10.0 % of the respondents indicated that they used audio devices to enable learners improve their hearing during the teaching and learning process. They are critical to learners' success when properly amplified. The sound in the classrooms improves learners' attention and their interactions increases. The learners learn and retain more through increased hearing ability. The classroom amplification system allow learners to hear more clearly and learn more. These systems improve speech intelligentibility, comprehension and rentention through proper engineering. The audio device helps learners comprehend what the teacher say, hence resulting in a moren enjoyable because they incorporate multinatemedia sources such as videos, music and internet. Learning has been thought of as a product of instruction for a long time. The study findings supports Webster and Roe (1998) whose study reported that effective teaching entails more than just conveying information from teachers to students; it also entails a complex relationship. A paradigm shift is required from non-participatory, traditional education to modern teaching, involving teacher-student interaction and considering varied student needs. On the other hand, teaching in inclusive classrooms is difficult because instruction must be more tailored than in traditional classes, with few differences among students (Peters, 2003).

The four (4) out of thirty (30) representing 13.3 % of the respondents reported that they used recording of lessons to enable learners repeat learning on their own in their free time. It is important to make mention that learners with visual impairments rely mainly on verbal information, therefore audio devices should be incorporated to aid teaching. These may include things like audio cassettes and compact discs. As Salisbury (2008) acknowledged that lesson contents with diagrams, tables as well cannot be well explained in an audio format. It is for this reason that lessons can be tape-recorded and given to learners with visual impairments for later playback at individual Educational Plans (IEPs).

Recording of classes is the simplest and cheapest option to improve the learning environment for learners with visual impairments. This allows students to listen to instructions or lessons numerous times to comprehend their expectations wholly. Lessons

can be recorded on smartphones utilizing free apps that can be downloaded. The school could purchase a microphone and recorder for improved sound quality, transferring the audio file to the students' computers or recorders, as Law suggested (1997). Respondent A interviewed pointed out that, " for learners with VI, audio recordings, assist them in enhancing academic performance." While respondent B argued that inclusive education allows VI students to develop social interaction skills. This VI learners may not feel alone or discriminated against in the educational system to focus on their studies.

The other five (5) out of thirty (30) representing 16.7 % of the respondents reported that the adaptation of lessons was used in the classrooms. If the learner has difficulties in learning by listening, teachers try to preteach difficulty vocabularly and concepts. This allows teachers make changes to instruction in order to allow learners equal acces to the curriculum and give them the opportunity to process and demonstrate what has been taught. The adaptation of adjustment in the environment, instruction, or in materials for learning that enhances the learners' performance and allows for a partial participation. The point of adapting the lesson to learners progress shorten those plateaus, increasing the frequency of the bursts of understanding of learners helps have the the right amount of time on the subject they are learning.

The four (4) out of thirty (30) representing 13.3 % of the respondents reported that they used materials written in high contrast. Other options for reading include large print materials, audio books and Braille. The study supported Kern and Choutka (2002) who indicated that teachers should not provide learners with a handout that contains written instructions. Visually-impaired learners in class may have difficulties seeing the words and learning what is expected. Therefore, teachers should be giving oral instructions or put them in Braille for every activity given. The interviewed respondent argued that learning should not only take place in class. It can also be done while at home. Therefore, it is essential to mention that teachers record lessons on audio devices for visual impairment learners to play and listen to them at home or in their own free time. Respondent B interviewed agreed that teachers should help visually impaired learners by recording lessons on audio devices. If the visual impairment learners did not understand certain concepts during the lesson in class, they could repeatedly listen to the audio during their own time.

The three (3) out thirty (30) representing 10.0 % of the respondents indicated that they used magnifiers to enlarge the some of the writings. The low vision devices help make the best use of the remaing vision learners have, these includes magnifiers, glasses, telescopes and electronic devices. The study agrres with Spungin (2002) who indicated that teachers should avoid giving special treatment to visually impaired learners. The oral method of giving instructions and receiving responses from the learners can also be a good option. A teacher of visually impaired students can write down the answers given out orally by a learner with visual impairment. A tape recorder should be used to record the answers the learner is giving. However, in this way, a student cannot review their answers for possible correction. Therefore, learners with visual impairment and teachers with visual impairment should be consulted before the test is taken to find a better way of assessing a learner with visual impairment.

The study by Kershner (2003) reported that visually impaired learners may not always know who is talking. As a result, the teacher should always address learners by their name when calling them to answer or ask questions. This way, the visually impaired learner can learn to identify their pairs based on the sound of their voice. The study finding reported that teachers should give visually impaired learners extra time or additional time to complete the work given. Another respondent added that the visually impaired learners might need extra time to complete their assignments and tests. This is typical because reading Braille or using some form of technological aid can take additional time. Respondent C interviewed

argued that the "administration of remedial work will be of great of importance to the learning process of the learners with visual impairment. This will enable them to catch up on points they miss in class." However, the addition from respondent C can be argued that remedial work is not a best strategy as it is already an education policy for remedial work for slow learners for both SEN and learners from the general classrooms.

Benefits of the strategies used in teaching learners with visual impairment.

The study intended to bring to light the benefits of the strategies used in teaching learners with visual impairment.

Table 2: Benefits of the strategies used in teaching learners with visual impairment.

| Benefits of the teaching strategies | Frequency | Percentage % |
|--|-----------|--------------|
| Encourages co-operative learning | 5 | 16.7 |
| Helps to improve academic performance | 6 | 20.0 |
| Provides skills for social interaction | 4 | 13.3 |
| Provide diversified learning | 3 | 10.0 |
| Encourages participatory learning | 4 | 13.3 |
| Learners learn on their own | 8 | 26.7 |
| Total | 30 | 100 |

Source: Field Work, 2019 N = 30

The study shows that five (5) out of thirty (30) representing 16.7 % of the respondents reported that teaching strategies helps encourage co-operative learning among learners. Teachers who have a variety of educational options are less frustrated and effective in the classroom. This study supports Davies (2004) whose study revealed that co-operative teaching entails collaboration between teachers and colleagues, such as class teachers, school managers, inclusion specialists, health therapists, and parents, all of whom are members of a team responsible for the child's development. They work together to solve specific developmental issues for the child. Co-operative learning means that all children benefit cognitively and emotionally from co-operative learning, teamwork, and peer tutoring (socially and emotionally). In co-operative learning, positive interdependence allows each group member to contribute their particular strengths to the learning activity's final output. Children with Special Education Needs can learn from and emulate their peers' achievements.

The other six (6) out of thirty (30) representing 20.0 % indicated that the VI teaching strategies helps to improve academic performance. The use of the VI teaching strategies enables learners becomes active participants in the teaching and learning process. The study shows that four (4) out of thirty (30) representing 13.3 % of the respondents reported that the teaching strategies provides skills for social interaction among learners. The social enables the VI learners learn from each other. This also makes learning permanent in learners, hence learning becomes meaningful. According to the findings of this study, proper implementation of each teaching strategy improves learner achievement, provides teachers with more instructional options, promotes a variety of learning methods for a wide range of student abilities, and aids in the integration of learners with special needs into general education classrooms.

The study further reported that three (3) out of thirty (30) representing 10.0 % of the respondnts indicated that the teaching strategies provides a diversified learning among learners. The other four (4) out of thirty (30) representing 13.3 % of the respondents reported that the teaching strategies encourages participatory learning. It is therefore important to make mention that the participatory teaching strategy is used used in any physical setting, interpreting and fun. Therefore, helping to involve the VI learners in the subjects. It helps learners to learn about themselves. Through the participatory learning, the VI learners are able to analyse their own situation, rather than have it analysed by others. In other words, participatory learning helps the VI learners build self confidence. Furthermore, the study shows that eight (8) out of thirty (30) representing 26.7 % of the respondents revealed that the teaching strategies helps learners learn on their own. This makes it possible for the VI learners not to easily forget the learnt concepts. It therefore makes learning permanent among the VI learners., visually impaired students rely on self-exploration to learn about the world. The amount of information that learners can access with visual impairments is limited in this manner. Overall, these modalities cannot successfully compensate for visual inputs; they are only present to mitigate the effects of vision loss on learning, visually impaired students rely on self-exploration to learn about the world. The study supports Spungin (2002) whose study indicated that the amount of information that learners can access with visual impairments is limited in this manner. Overall, these modalities cannot successfully compensate for visual inputs; they are only present to mitigate the effects of vision loss on learning.

Conclusion

The purpose of the teaching strategies for VI such as the IEP is to meet the visual impairment learners' needs based on their development rather than on predetermined expectations based on grade level. Teachers must comprehend this desire to predetermine instructional strategies to provide effective instruction. Based on a child's performance in class, new learning objectives are identified. Inclusive education helps address and respond to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion from education and from within education. The goal is that the whole education system will facilitate learning environments where teachers and learners embrace and welcome the challenge and benefits of diversity. Within an inclusive education approach, learning environments are fostered where individual needs are met and every student has an opportunity to succeed. Inclusive education is a real implementation of the basic human right to education. It is not only about attaining universal access to education, but universal access to meaningful and purposeful knowledge and learning for all. Inclusive education should emphasize on an adaptive teaching approach, a good teacher should be the one to consider these changes for VI learners.

Recording of lessons for VI learners enables them repeat learning on their own and in their free time. These may include audio cassettes and compact discs. teaching strategies helps encourage co-operative learning among learners. Co-operative teaching entails collaboration between teachers and colleagues, such as class teachers, school managers, inclusion specialists, health therapists, and parents, all of whom are members of a team responsible for the child's development. They work together to solve specific developmental issues for the child. This enables teamwork, and peer tutoring (socially and emotionally). In co-operative learning, positive interdependence allows each group member to contribute their particular strengths to the learning activity's final output. Children with Special Education Needs can learn from and emulate their peers' achievements. The VI teaching strategies helps to improve academic performance. The use of the VI teaching strategies enables learners becomes active participants in the teaching and learning process. These teaching strategies provides skills for social interaction among learners. The social enables

the VI learners learn from each other. This also makes learning permanent in learners, hence learning becomes meaningful. The proper implementation of each teaching strategy improves learner achievement, provides teachers with more instructional options, promotes a variety of learning methods for a wide range of student abilities, and aids in the integration of learners with special needs into general education classrooms.

The teaching strategies for visual impairment provides a diversified learning among learners as they also encourage participatory learning. It is important to make mention that the participatory teaching strategy is used in any physical setting. Therefore, helping to involve the VI learners in the subjects. It helps learners to learn about themselves. Through the participatory learning, the VI learners are able to analyse their own situation, rather than have it analysed by others. In other words, participatory learning helps the VI learners build self confidence. These teaching strategies help learners learn on their own. This makes it possible for the VI learners not to easily forget the learnt concepts. It therefore makes learning permanent among the VI learners, visually impaired students rely on self-exploration to learn about the world. The amount of information that learners can access with visual impairments is limited in this manner. Overall, these modalities cannot successfully compensate for visual inputs; they are only present to mitigate the effects of vision loss on learning, visually impaired students rely on self-exploration to learn about the world.

Recommendations

- i. The Government through the Ministry of Education should procure more audio devices for visual impairment learners in special schools. This will enable them to learn on their own, hence making learning permanent.
- ii. The Government through the Ministry of Education should procure enough recording devices to encourage learner centred approach of learning in special schools.
- iii. The Government through the Ministry of Education should supply enough teaching and learning resources in special schools for learners with visual impairments such as models, talking books, printers and photocopiers.
- iv. Government through the MOE, should provide devices like perking's braille, magnifying glasses, lenses. This will help to improve the teaching and learning of learners with visual impairments.
- v. Teachers in special schools to integrate variety and appropriate teaching strategies fitting all learners .

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