

## EDUCATION OF PERSONS WITH VISUAL IMPAIRMENT IN INCLUSIVE SETTING

Shittu, M. A.

Corresponding author-[shittu2001@gmail.com](mailto:shittu2001@gmail.com) +2348062559768

Department of Special Education for Learners with Visual Impairment,  
Federal College of Education (Special), Oyo

### Abstract

*This paper focuses on education of persons with visual impairment in an inclusive setting. The paper sees education is an essential process in human development and that inclusive education encompasses different and diverse students learning side by side in the same classroom. It emphasises that persons with visual impairment should be educated in an inclusive setting for maximum benefit in their educational pursuit, because all over the world, children with disabilities are excluded from schools, because of their disabilities, race, language, religion, gender, and poverty level. This paper therefore examines the following: definition of visual impairment, causes of visual impairment, implications of visual impairment, rehabilitation in visual impairment, inclusive education and persons with visual impairment, and inclusive education for persons with visual impairment in the classroom. The paper therefore, recommends that students with visual impairment should be educated in inclusive classroom for maximum benefits and the teachers of students with visual impairment should diversify teaching by collaborating with other regular teachers to come up with robust methods and strategies to help foster the education of students with visual impairment in an inclusive classroom.*

**Key words:** Education, Inclusive Setting, Visual Impairment

### Introduction

Education is an essential process in human development. It is different from schooling. Schooling is just one of the ways in which education is provided, whereas education deals with the total process of human learning by which knowledge is imparted, faculties are trained, and different skills are developed. Education is also defined as the act or process of educating or applying discipline on the mind or a process of character training (Adesemowo & Tumininu, 2022). It is a dynamic instrument of change. Education is expected to affect the social or behaviour of the person being educated. Education is a life-long process which is always used to imply a positive state of mind. According to Bamisaiye (2016), education is an accumulative process of development of intellectual abilities, skills and attitudes, all of which form human various outlooks and dispositions to action in life generally.

Also, education is the main essence of learning which makes human beings permanently able beings and predispose someone to benefit from its proceeds. On the other hand, if not well

managed schooling may lead to negative behaviour, acquired knowledge may be negatively used, learning too can also be negatively manipulated, but education often breeds positive results (Adesemowo, & Tumininu, 2022). The type of school one attends often influences one's behaviour. For instance, someone attending a school can succeed in carrying out anti-social behaviour like "pen-robbery", armed robbery, examination malpractices, raping, or engaging in secret cult activities which are acquired through negative learning in school, but one's behaviour is modified through worthwhile education. It is important to note that various level of school one goes through do not in themselves constitute education. However, each of the levels plays significant roles in making one educated person.

Broadly speaking, education consists of all the influence involved in shaping the development of an individual. The whole life of an individual is education and it ceases when one die. Education can be given at home, in school, church or mosque, community village or town. Only the literacy aspect of education is best given at school. There are many types of education, viz: literacy education, mental education, social or moral education. Mental education is the development of a child mentally, while in literacy education, the child must be able to develop a sound life. Mind and be God-fearing in all aspects of life. The educated person must adjust himself to any environment. Education is sometimes referred to as imitation in the sense that anybody that comes into society does not know the norms and the other essential things to be known in a society. The only way to do this is by imitation. Education is also the means by which culture, norms, tradition, rules from one generation to the other is transmitted and this is done so that the society can continue to exist (Matthews, & Savarim, 2020).

The idea of education in any developing country which has undergone a colonial experience in terms of the transmission of culture is different from that of a country that has not gone through this experience. Hence in the transmission of culture in the developing country must not constitute only the alien culture, but also the indigenous culture. Education is therefore regarded as a veritable tool for inculcating in the individual the skills, abilities, aptitudes, attitudes, interest, values and skills which are necessary for functioning effectively in the society. Education is also essential for salvaging virtues of all shades in a way that is beneficial to the society. It is a known fact that not all learning can transform into education.

Farrant (2016) identified three characteristics that distinguish true education from such things as role learning, purely mechanical training, indoctrination or brainwashing. According to him, true education deals with knowledge that is recognisably worthwhile and capable of achieving a voluntary and committed response from the learner which leads to a quality of understanding that gives rise to new mental perspectives in the learner. It uses methods that encourage the exercise of judgment by the learner and the use of his critical faculties.

As a matter of fact, education can be regarded as the society's cultural reproductive system. Through education, society reproduces itself, passing on its main characteristics to the next generation, though the process becomes complicated as time goes on due to the influence of philosophical, economic, political and social forces acting on the mechanism. On the long run, each generation is different from where it sprang, yet it has been responsible for keeping the society alive. Education can be provided in three different ways - formal, non-formal and informal.

### **Definition of Visual Impairment**

Visual Impairment (VI) is a condition of reduced visual performance that cannot be remediated by refractive correction (spectacles or contact lenses), surgery or medical methods.

Consequently, it results in functional limitations of the visual system that may be characterised by irreversible vision loss, restricted visual field and decreased contrast sensitivity, increased sensitivity to glare as well as decreased ability to perform activities of daily living, such as reading or writing. Corn & Lusk (2022) affirm that individuals with VI have measurable vision, yet experience difficulties accomplishing visual tasks even with the use of refractive correction. Furthermore, these individuals are sometimes capable of enhancing their abilities to accomplish visual tasks with the use of compensatory low vision aids and/or environmental adjustments.

This description of VI is useful because it considers that individuals with VI may not always display predictable clinical changes in visual function and that changes in functional vision may not always correlate to measurable changes in clinical findings. The World Health Organization (WHO, 2015) added a functional dimension to the definition of VI. This definition is stated as a person with low vision is one who has impairment of visual functioning even after treatment and/or standard refractive correction and has VA of less than 6/18 to light perception, or a visual field of less than 10 degrees from the point of fixation, but who uses, or is potentially able to use, vision for the planning and/or execution of a task. This definition refers to the visual acuity (VA) of the better eye with the best possible refractive correction. According to the International Classification of Diseases, 10th revision (ICD-10), VI may be classified into four levels, namely mild or no VI, moderate VI, severe VI and blindness. Moderate and severe VI are collectively categorised as VA of less than 6/18, but equal to or better than 6/120 in the better eye with the best refractive correction. When the extent of the visual field is considered, an individual with a visual field radius of no greater than 10 degrees around the central point of fixation in the better eye is placed in the

### **Causes of Visual Impairment**

The causes of VI differs significantly between regions, with the prevalence of cataract being lowest and macular degeneration being greatest in high-income regions. Globally, the leading causes of blindness and moderate and severe VI include uncorrected refractive error, cataract and macular degeneration. Bourne (2017) further reported that the magnitude of individuals affected by blindness and moderate and severe VI caused by uncorrected refractive error increased from 6.3 million and 88.0 million in 1990 to 6.8 million and 101.2million in 2010, respectively. In Africa, the main causes of moderate and severe VI in adults are cataracts and diseases affecting the cornea and retina.<sup>4,7</sup> In Sub-Saharan Africa, the prevalence of cataracts causing VI declined from 24.2% in 1990 to 17.8% in 2010; however, the prevalence of macular degeneration and glaucoma increased from 2.8% and 1.5% in 1990 to 4.8% and 2.6% in 2010, respectively. Specifically in South Africa, the main causes of moderate and severe VI include cataract, corneal opacity, glaucoma, refractive error and retinal diseases such as retinitis pigmentosa, Stargardt's disease, Usher's syndrome and Leber's Congenital Amaurosis.

Recent studies undertaken in South Africa confirmed that cataract, uncorrected refractive error, posterior segment diseases (optic atrophy, trauma and macular hole) and glaucoma were the main causes of moderate and severe VI. Even though 65% of individuals with VI are older than 50 years, childhood blindness and VI remain a major concern because of the expected number of years to be lived.<sup>22</sup> Of the 1.4 million children that are blind, a quarter is as a result of retinal diseases while 20% are because of corneal pathology.<sup>23</sup> Cataract and glaucoma account for 13% and 6% of blindness in children, respectively.<sup>23</sup> Globally, the main cause of moderate and severe VI in children aged 5–15 years is uncorrected refractive error. Corneal scarring accounts for between 25% and 50% of the VI reported in rural parts of Africa and Asia. In South

Africa, the chief causes of childhood blindness include retinitis pigmentosa, albinism, cataract, glaucoma, nutritional causes, infections and inherited genetic disorders (other than retinitis pigmentosa and albinism).

### **Implications of Visual Impairment**

Visual impairment has severe consequences, more especially in developing countries. Its debilitating effects decrease the ability of affected individuals to function independently and may negatively impact daily living and quality of life. Most of the information about the world is achieved through the sense of vision as it is fundamental to learning and integrating information from the other sensory organs. Approximately 80% of learning occurs through vision. Thus, if VI is present at birth or develops shortly afterwards, it may negatively impact development. As a result, children with VI are developmentally delayed in gross and fine motor skills in addition to visual perception. Furthermore, approximately 90% of children with VI are deprived of an education because of socioeconomic and physical barriers including discrimination and stigmatisation, limited accessible schools and the inability to cope with the impairment. The physical, social and psychological well-being of children and adolescents are also negatively affected.<sup>30</sup> It has been reported that children and adolescents with VI experienced reduced quality of life when compared to age-matched children and adolescents without VI also contributes to the socioeconomic burden on society as a result of a loss in education, career opportunities and economic gain for individuals with VI and their families.

### **Rehabilitation in Visual Impairment**

The functional ability of an individual with VI is not determined solely by the magnitude of vision loss. In addition to the physiology of the eye, other physical, psychological and social factors also influence daily living. Individuals with VI experience more symptoms of depression than those without VI. The combination of social, functional and psychological disabilities related to VI result in an overall reduction in quality of life. As a result, rehabilitation of an individual with VI requires a holistic approach that considers social, economic and psychological needs in addition to their visual needs. An ideal interdisciplinary team of health care professionals that can provide such an approach would include, among others, an optometrist, ophthalmologist, psychologist, audiologist, occupational therapist, orientation and mobility instructor and physiotherapist.

The rehabilitation of children and adolescents with VI aims to increase their functionality and independence, aid in their education and improve their social interaction. It has been reported that proper management of individuals with VI can provide the same quality of life as that of normally sighted individuals. Rehabilitation services should be made available, accessible and affordable particularly in developing countries. Early intervention provides effective visual rehabilitation and is vital in reducing the incidence and impact of VI. The perspective of the child with VI is vital in their rehabilitation as their views do not always correspond with the views of their parents or even that of the health care professionals. Significant gender differences exist regarding access to rehabilitation for individuals with VI. Even though more women are blind or have VI, only minority see rehabilitation and/or low vision services. This warrants the need for vision screening and awareness programmes targeting women, more especially in developing areas.

Visual impairment remains a global concern that is likely to escalate with prolonged life expectancies. Approximately 90% of individuals with VI live in developing countries because of

poor access to health care services. There has been an overall decline in the number of individuals with VI from 314 million to 285 million in 2010, which may be attributed to the achievements of the women are at higher risk of VI than men; however, this gender disparity was lowest in Sub-Saharan. The implications of childhood blindness and VI may be more significant because of greater life expectancies, thus contributing to the socio-economic burden on society. As a result, rehabilitation of individuals with VI requires a holistic approach that is readily available, accessible and affordable, particularly in developing countries.

### **Inclusive Education and Persons with Visual Impairment**

The term inclusive education encompasses different and diverse students learning side by side in the same classroom. They enjoy field trips and after-school activities together, they participate in student government together and they attend the same sports meets and plays. Inclusive education values diversity and the unique contributions each student brings to the classroom. In a truly inclusive setting, every child feels safe and has a sense of belonging. Disability can be caused by a number of factors including malnutrition, lack of or poor from prenatal and postnatal health care, increased vulnerability to accidents caused by risky work 919 environments, interaction with unexploded ordinance and landmines, or the lack of early detection of illness and abnormalities.

Around the world, children are excluded from schools because of disability, race, language, religion, gender, and poverty. But every child has the right to be supported by their parents and community to grow, learn, and develop in the early years, and, upon reaching school age, to go to school and be welcomed and included by teachers and peers alike. When all children, regardless of their differences, are educated together, everyone benefits this is the cornerstone of inclusive education. When education is more inclusive, so are concepts of civic participation, employment, and community life. Special education provides no guarantee of success for children who need special attention; inclusive schools that should provide supportive, context-appropriate conditions for learning demonstrate far better outcomes. Extracurricular activities, peer support, or more specialized interventions that involve the entire school community working as a team are the main pursuits of inclusive education. Inclusion in education is an attempt at educating students with special educational needs. Under the inclusion model, students with special needs spend most or all of their time with non-disabled students regardless of their strengths or weakness in any area and seek to maximize the potential of all students. Successful inclusive education happens primarily through accepting, understanding, and attending to student differences and diversity, which can include physical, cognitive, academic, social and emotional (Abbotti & Cribb, 2017). This is not to say that students never need to spend time out of regular education classes, because sometimes they do for a very particular purpose for instance, for speech or occupational therapy. But the goal in this should be the exception.

The driving principle is to make all students feel welcomed, appropriately challenged, and supported in their efforts. It is also critically important that the adults are supported, too. This includes the regular education teacher and the special education teacher, as well as all other staff and faculty who are key stakeholders and that also includes parents. Students and their parents participate in setting learning goals and take part indecisions that affect them. And school staff has the training, support, flexibility and resources to nurture, encourage, and respond to the needs of all students. Inclusive education is also seen as the programme that allows children with

disabilities to learn together with other children in regular school with appropriate support (Pascolini & Mario, 2010).

This implies that effective inclusion entails the use of appropriate supportive facilities and services to meet the needs of children with special needs in regular school system. Inclusive education is a process that involves the transformation of school and other cultures to cater for all children. It involves changes and modification in content, approaches and strategies, structures, facilities and services with a common vision that covers all children of appropriate age. The regular school setting is responsible to educate all children in the same neighborhood schools with appropriate supportive resources that would meet each child educational needs, disability notwithstanding.

According to Mont (2007), children with disabilities in poor and developing countries face particular difficulties, linked to poverty and social barriers. In many traditional cultures, a child with a disability is seen as a bad omen, bad luck, or a result of poor lineage. Some children with disabilities are hidden from the community and kept out of school. Those who do attend school often the ones with less severe disabilities may face embarrassment, discrimination and misunderstanding. Every child has the right to an education. Unfortunately, in the past many people assumed that the best place for children with disabilities was in a special school or classroom, separated from their normal peers. However, international experts and people with disabilities themselves are united in the belief that inclusive education in the child's local community school, together with their non-disabled peers, offers the best opportunity for social integration and self-sufficiency. Inclusive education models are particularly well suited for developing countries that cannot afford duplication or separation of essential educational services.

According to the Global Campaign for Education (GCE) implementing a fully inclusive education system for persons with visual impairment take large policy changes, funding, leadership, and the appropriate education of teachers. However, it is the more direct, hands-on approach that can be seen to give relevance to the whole notion of inclusive education. According to the GCE fundamental approaches have been shown to demonstrate large gains in the educational advancement of students in inclusive education programmes. Therefore, the following according to Walters State Community College (2024) would benefit persons with visual impairment in an inclusive classroom:

1. Provide a list of required textbooks and/or syllabi in advance to allow time for arrangements such as texts on tape, or enlarged print.
2. Permit lesson notes to be taped and/or provide enlarged copies of lesson notes where appropriate.
3. Make available large print copies of classroom materials by enlarging them on a photocopier.
4. Convey in spoken words whatever you write on the chalkboard.
5. Read aloud subtitles when using media resources.
6. Assist the student in finding note takers or readers as necessary.
7. Reserve front row seats for students who are with visual impairment.
8. The teacher should inform students who are blind if he/she is rearranging classroom furniture.
9. Keep classroom doors fully opened or closed. Do not leave them ajar.
10. Contact special educators to assist in arranging tests in alternate formats, i.e., oral, taped, or enlarged print.

## Conclusion

In order to help individuals with visual impairment to benefit from instruction and to be able to integrate well in the society later in life inclusive education must be encouraged, because inclusive setting provides lot of opportunities that cannot be found in special schools such as relating and sharing experiences with the sighted individuals, even with others who have disabilities in other sensory organs. Therefore, inclusive setting is good for persons with visual impairment order to allow them to learn among other learners without visual impairment in the classroom. In inclusive classroom these children would be taught with different methods from other children without visual impairment. Inclusive classroom also provides opportunity for teachers of persons with visual impairment to be available to collaborate with regular teachers and resource room personnel. School administrators, principals, education officers, and parents can also join hands to educate this unique set of individuals.

## Recommendations

Based on this the following recommendations are made:

1. Students with visual impairment should be educated in inclusive classroom for maximum benefits
2. The teachers of students with visual impairment should diversify by collaborating with other regular teachers to come up with robust methods and strategies to help foster the education of students with visual impairment in an inclusive classroom.
3. The school administrators to make it a point of duty to make classroom conducive for students with visual impairment through provision of facilities that would make inclusive education work for students with visual impairment.

## References

- Adesemowo, P.O., &Tumininu, A.A. (2022) Basic of education: the meaning and scope of education.[https://www.researchgate.net/publication/361813544\\_basic\\_of\\_education\\_on\\_the\\_meaning\\_and\\_scope\\_of\\_education](https://www.researchgate.net/publication/361813544_basic_of_education_on_the_meaning_and_scope_of_education)
- Awoniyi, T. A. (1976). *Principles and practice of education*. Great. Hodder and Stoughton Ltd.
- Bamisaie, R. (2016). *A practical approach to philosophy of education*. AMD Publishers.
- Carlo, D. K, &Woo, G. C. (2006). *Parents with low vision*. In: Benjamin WJ, editor. Borish's clinical refraction. 2nd ed. Elsevier, p. 1591–1618.
- Corn, A. L., &Lusk, K. E., (2022). Perspectives on low vision. In: Corn AL, Erin JN, editors. *Foundations of low vision: Clinical and functional perspectives*. 2nd ed.AFB Press; 3–34.
- Farrant, J. S. (2016). *Principles and practice of education England*. Longman Group Ltd.
- Kavitha, V., Manumali, M. S., Praveen, K.,&Heralgi, M. M. (2015). Low vision aid-A ray of hope for irreversible visual loss in the pediatric age group. *Taiwan J Ophthalmol.* ;5(2):63–67. <https://doi.org/10.1016/j.tjo.2015.02.002>

- Oduntan, A.O., (2005). *Prevalence and causes of low vision and blindness worldwide*. South Africa University
- Matthews, S.M., & Savarim, A. (2020). *Role of education in transmitting culture in society*. [https://www.researchgate.net/publication/339816271\\_Role\\_of\\_Education\\_in\\_Transmitting\\_Culture\\_in\\_Society](https://www.researchgate.net/publication/339816271_Role_of_Education_in_Transmitting_Culture_in_Society)
- Pascolini, D., & Mario, S.P. (2010). Global estimates of visual impairment. *Br J Ophthalmol*. 2012;96(5):614–618. <https://doi.org/10.1136/bjophthalmol-2011-300539>
- Resniko, S., Pascolini, D., & Etya'ale D. (2024). Global data on visual impairment in the year 2002. *Bull World Health Organ*. 82(11):844–551.
- Sacharowitz, H. S. (2005). *Visual impairments in South Africa: Achievements and challenges*. <https://doi.org/10.4102/aveh.v64i4.239>
- Stevens, G.A. (2013). Global prevalence of vision impairment and blindness magnitude and temporal trends, 1990–2010. *Ophthalmology*. ;120(12):2377–2384. Retrieved from <https://doi.org/10.1016/j.opthta.2013.05.025>
- Walters State Community College (2024). Teaching strategies visual impairment. <https://ws.edu/studentservices/disability/teaching/visual/index.aspx#:~:text=Visual%20Impairment,-College%20requires%20enormous>
- Watkins, R. D. (2001). The management of global blindness. *ClinExpOptom*. 84(3), 104–112. <https://doi.org/10.1111/j.1444-0938.2001.tb04953.x>
- World Health Organization(2016). *Global initiative for the elimination of avoidable blindness Action plan*. <http://apps.who.int/classicalons/icd10/browse/2015/en#/H54>