

Article

Creation of Particular Learning Methods for Blind Children

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Abstract: The aim of the research is to discuss the process of creating teaching methods for visually impaired children, emphasizing the benefits of individualised instruction, accessible materials, and the integration of assistive technologies. By utilising these techniques, education can ensure equal opportunity for blind children to thrive socially and academically. In order to overcome some obstacles in education needs of children with visual impairments, it is essential to implement some methodologies like Braille which has always been the oldest and commonly used, audio books, tactile graphics. The results of using the Braille method, tactile learning, and auditory learning for blind children are generally positive and have been shown to contribute significant results to their overall development and foster their academic success, social development which lead to their future employment.

Keywords: Children with visual impairments, learning, Braille, Tactile graphics, auditory training.

1. Introduction

Creation of new improved methods for blind children is nowadays contraversial topic. The role of this is crucial in terms of having “opportunity to be equal”. Globally, about 70 million blind people’s years are caused by childhood blindness. According to statistics, There are about 1.5 million blind children worldwide, and unfortunately, this number appears to be growing. Approximately 500,000 children become blind every year, one every minute and about half of them die within one or two years of becoming blind. Nonetheless, these children should have the chance to take the same lesson as their other classmates do, to interact with their peers at mealtimes and after study as well as in regular classrooms when appropriate subjects are being taught. However, importance of creating appropriate learning methods as well as having common learning atmosphere leads to promotion of literatcy among blind children. As technology has advanced and our understanding of the needs of blind children has grown. In order to enable them to acquire knowledge effectively, it is needed to flourish them with opportunities by supplying with new and developed techniques for learning.

Learning strategies have been categorized in three parts. First one is paper strategy is using Braille, that’s a device of raised dots that may be felt via way of means of the fingertips and used to symbolize letters and numbers. In Simran Yadav’s article for example imtortant role of braille has mentioned. “This device lets blind voungsters study and write and affords them a manner to get entry to records independently”.

The second part is E-text strategies that includes tracking, auditory support and refreshable braille. According to Charlotte Cushman “ Supporting the child to interact with others in safe and comfortable environments. Playful experiences and exposure to others with reciprocal give and take helps to build the foundation for communication and social development”.

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The last one is auditory strategy which develops sensitiveness of children who have bad eyesight. This approach helps blind students engage with the content and reinforces their understanding of the subject matter. Additionally, auditory learning can be combined with other sensory experiences, such as touch and smell, to create a multisensory learning environment that appeals to different learning styles.

2. Materials and Methods

This study employed a descriptive qualitative method to explore effective learning strategies for blind children. Data were collected through a literature review of academic journals, research reports, and institutional publications published between 1998 and 2021. The selected sources included studies on Braille literacy, the use of audio books, tactile graphics, and orientation and mobility (O&M) training. Each study was analyzed to identify the impact of these methods on the academic performance, literacy development, and social inclusion of blind students. The aim was to synthesize existing knowledge and present evidence-based approaches that support educational access and success for blind learners.

3. Results

With the recognition of the potential and capabilities of handicapped children, what is needed is to change the existing learning strategies or the formation of new attitudes. This is important because blind children have the right to receive an education just like their sighted peers. By developing learning methods specifically designed for blind children, we can ensure that they have equal access to educational opportunities and can develop skills and knowledge that meets their unique needs.

Braille learning

This concept was beneficial to all blind people from around the world and is still commonly used today. This tactile system of reading and writing enables them to develop literacy skills and access written information independently. One of the few research projects focussing on braille writing has been the Emerging Braille Literacy Research Program in British Columbia Canada, conducted over 1998 – 2000, by Cay Holbrook, Anne Wadsworth and Elaine Ferguson. The project involved 16 primary aged students, their teachers and parents over a three year period and was aimed at developing objective data to guide their technology policies for early braille literacy. The results indicated that the use of the Mountbatten Braille had very positive effects on braille reading and writing skills in addition to enhanced opportunities for inclusion. (Harpo, 2015).

Audio Books

Another effective learning method for blind children is the use of audio books. Audio books are recordings of books that can be listened to, allowing blind children to access the same literature as their sighted peers. According to Montgomery (2009), audiobooks can improve reading and academic performance for both English Language Learners and Native English Speakers. This research was significant because it indicated that audio books helped the middle school children improve reading comprehension levels who were reading below grade-level. (Smita Guha, St. John's University, 2020).

Tactile graphics

Tactile graphics are crucial to allow blind children to access the same information as sighted by providing with a visual representation of the information. According to Zebehazy & Wilton, the presentation of textual information along with tactile graphics is the most suitable form of presenting information to BVI students in school. In the study, the authors demonstrated the significance of tactile graphics in the learning results of students with low vision and BVI students. (Mukhriddin Mukhiddinov & Soon-Young Kim, 2021).

Orientation and Mobility Training:

Orientation and mobility training is essential for blind children to navigate their physical environment safely and independently. Zegeye (2019) stated that the resilience among blind adolescents is lower than their sighted peers and Orientation&Mobility training increased resilience among these adolescents. Malik and Abd Manaf (2018) concluded that O&M curriculum training improved the academic achievement of children who are blind.(Noshin Kamali&Mohammad Ashori, 2021).

4. Discussion

The findings highlight the importance of adopting specialized learning methods to meet the unique needs of blind children. Braille continues to be a fundamental tool in promoting literacy and independent learning, with evidence showing that technology-enhanced Braille instruction—such as the use of the Mountbatten Brailier—can further improve outcomes. Audio books provide an inclusive alternative that enhances reading comprehension, particularly for students reading below grade level. Tactile graphics have proven effective in presenting visual information in an accessible way, supporting students' understanding of complex concepts. Finally, orientation and mobility training not only improves navigation skills but also enhances resilience and academic achievement. These findings suggest that a combination of adaptive tools and inclusive teaching practices can significantly improve educational experiences for blind children.

5. Conclusion

Henceforth, it can be concluded that the creation of teaching methods for blind children is crucial for ensuring equal educational opportunities and promoting their overall development. Personalized instruction, accessible materials, and assistive technologies play significant roles in enhancing blind students' learning experiences. By implementing these strategies, educators can empower blind children to overcome barriers, acquire knowledge, and successfully navigate their academic journey. Continued research and collaboration are necessary to further advance teaching methods and improve outcomes for blind children.

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