Practice Guidelines for Assisting Students with Visual Impairments

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Abstract

Students who are visually impaired but receive adequate support at an early stage have a greater chance of progressing in their academics and future careers. In this research article, the author identified various practice guidelines that can help students with visual impairments achieve a successful transition into the world of work. To discuss available practice guidelines for students from this population, the author conducted a narrative-integrative literature review. According to the study findings, teachers and schools have practical roles to play in assessing and administering educational programs for these students, as well as in utilizing assistive technologies. Further, the study provided guidelines for encouraging career transitions among these students, what is expected of their parents and caregivers, how to provide social and emotional support to these students, and ways to improve their access to library resources. This research contributes to advancing teachers', parents', librarians', and counsellors' knowledge about how to best assist students with visual impairments The study concluded that ongoing training is critical for all relevant stakeholders, including school administrators, parents, and teachers of visually impaired students.

Keywords: Career Transition, Assistive Technology, Visual Impairments, Practice Guidelines

Abstrak

Siswa tunanetra yang menerima dukungan memadai pada tahap awal memiliki peluang lebih besar untuk maju dalam bidang akademik dan *karir dimasa depan. Dalam artikel penelitian ini, penulis mengidentifikasi berbagai pedoman praktik yang dapat membantu siswa tunanetra mencapai transisi yang sukses ke dunia kerja. Untuk mendiskusikan pedoman praktik yang tersedia bagi siswa dari populasi ini, penulis melakukan tinjauan literatur naratif-integratif. Berdasarkan temuan penelitian, guru dan sekolah memiliki peran praktis dalam menilai dan mengelola program pendidikan bagi siswa tersebut, serta dalam menggunakan bantuan teknologi. Lebih lanjut, penelitian ini memberikan pedoman untuk mendorong transisi karir di kalangan siswa, apa yang diharapkan dari orang tua dan pengasuh mereka, bagaimana memberikan dukungan sosial dan emosional kepada siswa, dan cara untuk meningkatkan akses mereka terhadap sumber daya perpustakaan. Penelitian ini berkontribusi untuk meningkatkan pengetahuan guru, orang tua, pustakawan, dan konselor tentang cara terbaik untuk membantu siswa tunanetra. Studi ini menyimpulkan bahwa pelatihan berkelanjutan sangat penting bagi semua pemangku kepentingan terkait, termasuk administrator sekolah, orang tua, dan guru tuna netra.*

Kata Kunci: *Transisi Karir, Teknologi Pendukung, Gangguan Penglihatan, Pedoman Praktek*

Introduction

An individual's ability to learn, transition, and adapt at work is typically enhanced via visual cues. Visually impaired individuals often experience delays in acquiring a wide range of skills for learning and entering the workforce. Visually impaired individuals can perform some activities like their sighted peers, although they usually require assistance[1].

In everyday life, people primarily rely on their vision for survival[2]. In the case of a visually impaired individuals, their ability to develop intellectually, verbally, and socially can be adversely affected. Having the ability to move

[1]American Foundation for the Blind. Accommodations and Modifications at a Glance: *Educational Accommodations for Students Who Are Blind or Visually Impaired*. (2017). http://www.familyconnect.org/info/education/know-your-rights/accommodations-and-modifications-at-a-glance/235

[2]Morelle, Mokwena, and Ramodungoane Tabane. "Challenges experienced by learners with visual impairments in South African township mainstream primary schools."*South African Journal of Education* 39, no. 3 (2019): 1-6.

about, observe, and handle things is crucial for visually impaired individuals to succeed in school and workplace. The support of teachers, parents, school authorities and service providers during educational and career transitioning of visually impaired students is crucial[3,4,5]. This is because visual impairments substantially affect the student's motivation to engage in learning and career activities[6].

Teachers of such students can assist them in overcoming the obstacles posed by their impairments through individualized education plans. School authorities can establish secure and open learning spaces that can inspire the students to get involved in their educational activities. Families of the students can assist them through early intervention and support. Service providers are expected to maintain professional conduct in assisting these students.

This review article aims to discuss some practice guidelines for assisting visually impaired students based on a narrative-integrative review of previous studies. This is crucial because if the necessary support is provided to visually impaired students, they will be able to achieve a successful career transition.

Research Method

In this research article, the author used a narrative-integrative review approach to offer an elucidation of the guidelines for assisting visually impaired students. The narrative-integrative review enables the researcher to offer insight on a research topic based on previous research[7]. The author searched, downloaded and reviewed related research articles, books, and grey literature to address this topic. Electronic literature databases such as AJOL, DOAJ, Google Scholar, and Scopus, were searched. The keywords used during the search include practice guidelines AND visually impaired students; practice guidelines AND career transitioning. The research process for this study is presented (Figure 1) as follows:

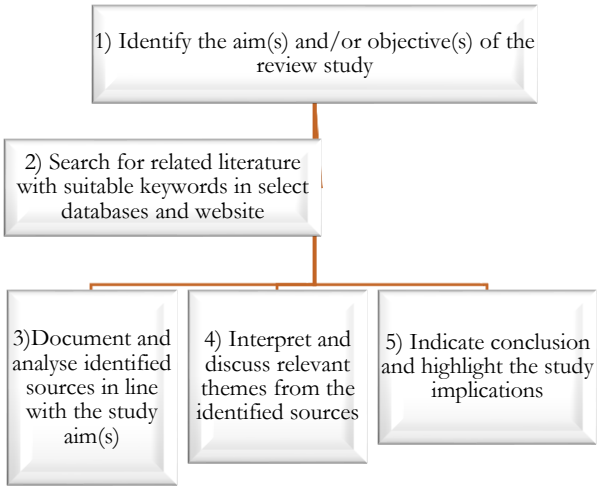

Figure 1: The review research process.

Findings and Discussion

Findings

Figure 2: Illustrating some areas where guidelines for assisting students with visual impairments are crucial

[3] American Foundation for the Blind. 'What's Different About the Way Visually Impaired Children Learn?' *APH ConnectCenter* (2020). http://www.familyconnect.org/info/browse-by-age/infants-and-toddlers/education-iandt/whats-different-about-the-way-visually-impaired-children-learn/1235.

[4] Colclasure, B. C., Thoron, A. C., and LaRose, S. E. 'Teaching Students with Disabilities: *Visual Impairment and Blindness*.' (2018): 129–136. https://doi.org/10.4324/9780367824488-30

[5] Maurya, H. Strategies for Teaching Students rvith Visual Impairment. *VIKAS VINIARSH (An Int€rnational Multidisciplinary Refereed Resesrch Jouro*, (2016).

[6] Pinquart, M., and Pfeiffer, J. P. 'Change in psychological problems of adolescents with and without visual impairment.' *European Child & Adolescent Psychiatry* 23, no. 7 (2014): 571–578.

[7] Eseadi, C. Interventions for Supporting Career Transition among Students with Visual Impairments. *Psikoislamika: Jurnal Psikologi dan Psikologi Islam*, 20, no. 2 (2023):716—728

Based on the analysis of past studies, the author identified the need to highlight practice guidelines in various areas to assist students with visual impairments, as shown in Figure 2. From the literature, the author identified specific areas where practice guidelines for assisting visually impaired students is crucial. These areas includes administering educational programs, assessment, assistive technologies (AT), career transitioning, teacher and classroom activities, social and emotional support, parenting and caregiving, and information access. In the context of this research, practice guidelines are intended to assist relevant stakeholders including career practitioners and training institutions in conceptualizing, designing, and implementing support services and interventions for individuals with visual impairments. Practice guidelines provide psychologists and other stakeholders with advice on how to improve their interpersonal and therapeutic relationships with individuals who have visual impairments and make their practice more accessible and disability sensitive. A key component of practice guidelines is the inclusion of information that explains how sociocultural perceptions of impairments and variables related to disabilities may impact the evaluation and treatment of individuals[8]. To promote knowledge, training, and educational and social experiences for persons with visual impairments, such guidelines should include recommendations that are necessary for successful psychological practice. Another key component is the recognition that visually impaired individuals have the right to self-determination, social inclusion, and equal access to counseling services. A key part of practice guidelines is the recognition of the diversity and individuality of visually impaired individuals. Further, organizations advocating for visually impaired students and other special needs population emphasizes equal access to education, and their implementation must take into account the special needs students[9,10,11,12,13].

Discussion

Practice Guidelines for Assisting Students with Visual Impairment in Administering Educational Programmes

The need to ensure the effective administration of educational programs for visually impaired students necessitates careful attention to several critical factors, including the presence of trained and qualified staff, diligent monitoring of workload, and appropriate control over access to resources. Educators who possess the necessary licensure or accreditation to instruct visually impaired students ought to possess prior experience in working with such individuals. Additionally, they should actively engage in assessments, demonstrate proficiency in developing Individualized Education Programs (IEPs), and deliver personalized instruction tailored to the unique requirements of each student[14]. It is crucial for individuals holding this role to possess licensure to cater to visually impaired students. The implementation of licensure is intended to guarantee that visually impaired students are instructed by professionals who have obtained the necessary certificates. The National Association of State Directors of Special

[8] Forber-Pratt, A., Reesman, J., Hanson, S., Sung, C., and Bruyere, S. 'APA GUIDELINES for Assessment and Intervention with Persons with Disabilities.' *American Psychological Association Council of Representatives*, (2022).

[9] World Blind Union. Joint Submission to the UNCRPD Committee on the Education of Persons with Disabilities for a Day of General Discussion Leading to General Recommendation, (2015). *World Blind Union (WBU) and International Council for Education of People with Visual Impairment (ICEVI)*'s.

[10] U.S. Department of Education. 'The Condition of Education.' *National Center for Education Statistics*, (2000): 1–383.

[11] National Federation of the Blind. Career mentoring. https://nfb.org/programs-services/career-mentoring

[12] World Services for the Blind. Vocational training programs. https://www.wsblind.org/career-training-programs

[13] American Foundation for the Blind. Transitions. https://www.afb.org/blog/topic/transition

[14] U.S. Department of Education. Number of students ages 6 through 21 served under IDEA , Part B, by disability and state, (2019): 2018-2019. Disability Category and State: Fall 2006. https://www2.ed.gov/programs/osepidea/618-data/static-tables/index.html

Education (NASDSE) has formulated rules pertaining to staff supervision and service delivery for visually impaired students[15]. The 1996 changes to the Individuals with Disabilities Education Act (IDEA) marked the inaugural recognition of orientation and mobility training as a specialized service within the realm of special education. It is imperative that individuals with visual impairments are provided with comprehensive orientation and mobility training as an integrated programme[16]. Visually impaired students should also freely access classroom materials in accessible formats. Teachers should educate students on ways they can access and use AT in the classroom, and Braille to read and write[17] [18] [19].

Practice Guidelines for the Assessment of Students with Visual Impairments

The appraisal of students with impairments extends to visually impaired students. Law mandates the involvement of individuals with requisite skill and training in the assessment of visually impaired students. The evaluation of academic success and access to the general curriculum must be done using a combination of formal and informal assessment[10] [18]. The combination of residual eyesight, other impairments, environment, learning methodologies, and specific skill requirements should also be taken into account during professional assessments of these students[20] [21] [22] [23] [24] [25]. Cattell[26] who sought to assess the intellect of early blind students, discovered that there was no variation in the rate of skill acquisition as long as the student had practised the skill beforehand and knew what to anticipate. There are two possible reasons for this: the visual impairment itself as well as the absence of opportunities to learn through watching, demonstrating, simulation, and visual feedback. Learning through these ways is sometimes known as learning inadvertently[27]. Incidental learning cannot be taken for granted with visually impaired students[28] [29] [30]. A trained and experienced individual in assessing visually

[15]Egnor, D. 'Individuals with Disabilities Education Act Amendments of 1996.' *Focus on Autism and Other Developmental Disabilities* 11, no. 4 (1996): 194–206. https://doi.org/10.1177/108835769601100401

[16] Pugh, G. S., and Erin, J. Blind and visually impaired students: Educational service guidelines, (1999b): Alexandria, *VA: National Association of State Directors of Special Education*.

[17] Michigan Department of Education. Low Incidence Outreach. Michigan Vision Severity Rating Scale (Rev.), (2013). http://mde-lio.cenmi.org/LinkClick.aspx?fileticket=fdERXj-G4Vw%3D&tabid=1897

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[27] Ferrell, K. A. Preface: 'What's different about how visually impaired children learn?' In P. Crane, D. Cuthbertson, K. A. Ferrell, & H. Scherb (Eds.), Equals in partnership: Basic rights for families of children with blindness or visual impairment, (1997): 1–3. Watertown, MA: The Hilton/Perkins Program and the National Association of Parents with Visual Impairment.

[28]Lowenfeld, B. The visually handicapped child in school, (1973): New York, NY: Day.

[29]Warren, D. H. Blindness and children: An individual differences approach, (1994): New York, NY: *Cambridge University Press*.

[30] Musgrove, M., and Yudin, M. K. Dear Colleague letter on Braille. Washington, DC: U.S. Department of Education, Office of Special Education & Rehabilitative Services, (2013).

impaired children is expected to conduct at least two types of assessments. First, it is essential to carry out a functional vision assessment to ascertain the students' vision usage patterns and identify potential accommodations and modifications that could enhance their learning experience in general education classes[31] [32]. Second, it is crucial to administer a learning media assessment in order to ascertain precisely which medium a student utilizes to acquire knowledge and evaluate their writing and reading proficiencies[33] [34]. This evaluation should include determining whether a student requires Braille instruction.

Practice Guidelines for Assisting Students with Visual Impairments in using Assistive Technology

A critical component of the assistive technology (AT) practice guideline requires educators to grant technological access to visually impaired students. Nevertheless, empirical research pertaining to the implementation of technology as an intervention or instructional strategy for students with disabilities is comparatively scarce. Assistive technology is an effective method for teaching composition and writing to visually impaired students[9]. The students should be instructed in technology-related skills for at least 30 to 60 minutes each day until they are proficient[36] But it appears that the use of AT for visually impaired students in the classroom is not being fully implemented.[35] [36] [37] [38] [39]. It is possible that the majority of educators who instruct visually impaired students either lack the technological expertise of certain students who have grown up with digital devices or utilize only a particular type of technology.

Educators who have engaged in professional development initiatives to augment their technological expertise and understanding with regard to visually impaired students are more assured and inclined to instruct their students on technological matters[40] [41]. Therefore, educators responsible for instructing visually impaired students must regularly update their expertise regarding the application of technology to support these learners. There exists a significant positive association between the amount of training that instructors provide their students and the way in which they utilize technology [37]. Hume's observation of a strong inverse correlation between instructors' caseload and their utilization of technology with students is also noteworthy; the potential for increased utilization of technology in the future exists as caseload sizes are decreased and AT personnel undergo ongoing training[34]. As

http://www2.ed.gov/policy/speced/guid/idea/memosdcltrs/brailledcl-6-19-13.doc

[31] Corn, A. L., and Erin, J. Foundations of low vision, (2010): New York, AFB Press.

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[36] Kelly, S. M. 'Use of assistive technology by students with visual impairments: Findings from a national survey.' *Journal of Visual Impairment & Blindness* 103, (2009): 470–480.

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[38]Kelly, S. M., and Smith, D. W. The impact of assistive technology on the educational performance of students with visual impairments: A synthesis of the research. *Journal of Visual Impairment & Blindness* 105, (2011): 73–83.

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[40] Kamei-Hannan, C., Howe, J., Herrera, R. R., and Erin, J. N. 'Perceptions of teachers of students with visual impairments regarding assistive technology: A follow-up study to a university course.' *Journal of Visual Impairment & Blindness* 106, (2012): 666–678.

[41]Zhou, L., Ajuwon, P. M., Smith, D. W., Griffin-Shirley, N., Parker, A. T., and Okungu, P. Assistive technology competencies for teachers of students with visual impairments: A national study. *Journal of Visual Impairment & Blindness* 106, (2012): 656–665.

evidenced by the literature review, low-vision services and additional technologies improve the ability of visually impaired students to utilize Braille and print materials[42]. It is recommended that the IEP teams determine whether a particular student needs AT equipment purchased at home. As per this recommendation, educational institutions have a responsibility to assist visually impaired students in utilizing technology across all environments, including assimilation into the workforce[10].

Practice Guidelines for Career Transitioning of Students with Visual Impairments

Despite obtaining a college or university degree, a significant number of visually impaired students have limited employment opportunities[43]. A significant majority of visually impaired individuals, specifically 78%, were found to be unemployed[44] [45]. Furthermore, it is worth noting that about 37% of visually impaired students who successfully underwent professional reintegration were able to secure employment in the labor market; approximately 31.3% of individuals within the working-age population, specifically those between the ages of 18 and 64, who were visually impaired, were documented as being either employed or underemployed[35]. Visually impaired students face significant obstacles in the labor market, particularly in relation to societal perceptions held by sighted individuals, including biases against blind individuals[47]. However, a significant portion of the difficulties experienced by visually impaired individuals can also be attributed to the insufficient guidance provided to them throughout their formative years, specifically in regards to developing skills for interpersonal communication[46].

The topic of career transition for students with blindness is of significant importance within the realm of education. However, it has been observed that the transition process for this particular group of students has not been adequately addressed or explored in scholarly literature. Transition is identified as a crucial element of secondary education in many administrative guidelines and regulations[13]. The implementation of career education and social skills interventions across a student's academic trajectory is positively correlated with post-graduation job outcomes[42]. Several scholars have recognized early employment and work experiences during secondary school as a significant contributor in understanding the factors that determine employment[47] [48] [49]. Notably, there was no significant correlation found between job experiences financed by educational institutions and subsequent employment in post-secondary settings[48]. McDonnall identified supplementary factors in prior scholarly investigations, apart from professional background, which encompassed linguistic and quantitative aptitude, familial support, self-perceived physical well-being, attainment of a post-secondary education, autonomous living,

[42] Le Fanu, G., Bassendine, M., McCall, J., McCall, S., and Myers, J. Guide: Inclusive teaching and learning for children with visual impairments. *Sense International*, (2018): 1–104.

[43] Wolffe, K., and Kelly, S. M. Instruction in the areas of the Expanded Core Curriculum linked to transition outcomes for students with visual impairments. *Journal of Visual Impairment & Blindness* 105, no. 6 (2011): 340–349.

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[49] McDonnall, M. C., and Crudden, A. 'Factors affecting the successful employment of transition-age youths with visual impairments.' *Journal of Visual Impairment & Blindness* 103, no. 6 (2009): 329–341.

mobility, and interpersonal adaptability[46]. McDonnall and Crudden conducted a study on adolescents who received services from the vocational rehabilitation system, and identified several factors that were related with employment; these factors included academic competency, self-efficacy, understanding and utilization of assistive technology, as well as the ability to navigate independently[48]. Furthermore, Monson conducted a study indicating a correlation between self-determination and independent living skills with a higher quality of life after completing formal education[50]. Therefore, it is advisable that visually impaired students be assisted to acquire these skills relevant to employment throughout their time in school in order to facilitate a smooth transition into a successful career upon completion of their studies.

Teacher and Classroom Practice Guidelines for Assisting Students with Visual Impairments

The academic and vocational success of impaired students, particularly those with vision impairment, hinges upon the supporting attitudes and help provided by the educational institution and its faculty, both teaching and non-teaching. The assistance provided by these individuals in supporting visually impaired students is a vital aspect of their academic achievements. Despite the assistance provided to these students, they still need to exert significantly greater effort compared to their non-impaired counterparts in order to achieve their maximum capabilities. Several practice guidelines have been identified, which are as follows:

a) In the context of classroom instruction, it is imperative for teachers to ensure that their presentations are easily comprehensible and accessible to all students. This should be done while delivering instructions or disseminating information in various educational settings such as lectures, tutorials, or debates. Precise and comprehensive instructions are necessary.
b) Lighting plays a crucial role for the majority of individuals with vision impairments. Individuals may possess varying requirements, and both excessive light and intense shade can present challenges. Minor alterations, such as the substitution of a light bulb, possess the potential to yield significant consequences and are generally economically viable. Collaboratively evaluate the individual requirements of each student.
c) Visually impaired students frequently depend on their auditory capabilities to assimilate information. Therefore, it is imperative to minimize background noises and disruptions in the classroom during lectures. Effective communication is of utmost importance for educators as well.
d) During academic lectures, it is not advisable for educators to assume that visual aids such as overheads, board materials, or videos will lack effectiveness for students with visual impairments. It is imperative that the entirety of the book be audibly consumed, with particular attention given to the elucidation of any novel or infrequently encountered vocabulary. The students are likely to derive benefits from interpretations pertaining to the visual items.
e) Students who have visual impairments may have a preference for larger font sizes, audio recordings, or Braille versions of exam papers. Individuals have the option to utilize various devices, such as laptops, typewriters, or cassettes, for the purpose of presenting their own written materials. If any of these options are implemented, it is quite likely that they will necessitate the use of a separate space and an extended duration.
f) Educators need to utilize regular breaks to ensure the students have comprehended and can retain the content taught, particularly when it is conveyed graphically, such as through the use of projected slides.

[50] Monson, M. R. 'The Expanded Core Curriculum and its relationship to postschool outcomes for youth who are visually impaired.' *ProQuest Dissertations and Theses* 276, (2009).

g) The capacity to document lectures would prove advantageous for visually impaired students. Therefore, in the event that these students express a desire to adopt this method, educators should allow them. This can help the students to engage with and acquire a better understanding of the subject matter and underlying principles.
h) The close proximity of the learning activity and materials has a potential benefit for most visually impaired students. Therefore, it is imperative for educators and school officials to ensure that the seating arrangement is sufficiently adaptable to meet their needs.

Parenting and Caregiving Guidelines for Assisting Students with Visual Impairments

In the context of identifying individuals with blindness or visual impairments, it is noteworthy that the majority of federal regulations do not delineate specific thresholds for degrees of visual impairment. It is recommended that parents and caregivers take the initiative to have their child undergo a vision assessment between the ages of six and thirty months, even though there is no legislation mandating vision screening for newborns[53]. The inclusion of ophthalmological and functional vision tests is recommended in comprehensive vision examinations. The implementation of neonatal vision screening facilitates the timely identification of visual impairment, enabling prompt referral for early intervention programs[51]. It is also important to facilitate the implementation of a self-assessment guide aimed at enhancing the early detection and referral process for pupils with visual impairments[52].

Students who have visual impairments and co-occurring neurodevelopmental disorders, such as hearing, encounter significant challenges in their developmental progress[53] [54] [55] [55]. For instance, blind and deaf students exhibit reduced attentiveness towards caregivers, display limited efforts to engage in social interactions, have fewer incidental learning chances, and encounter challenges in developing early concepts due to diminished information from distant senses[56] [57]. Parents and caregivers should strive to mitigate these drawbacks by prompt action. Research has emphasized the need for the creation of customized and specialized services that are offered via collaborative efforts by organizations who possess a comprehensive understanding of the crucial role played by families in facilitating optimal outcomes for visually impaired children.[58] [59] [60]. Caregivers can better identify a child's cues for

[51]Holte, L., Prickett, J. G., Van Dyke, D. C., Olson, R. J., Lubrica, P., Knutson, C. L., Knutson, J. F., and Brennan, S. 'Issues in the evaluation of infants and young children who are suspected of or who are deaf-blind.' *Infants and Young Children* 19, no. 3 (2006): 213–227. https://doi.org/10.1097/00001163-200607000-00006

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[53] Chen, D., Alsop, L., and Minor, L. 'Lessons from Project PLAI in California and Utah: Implications for early intervention services to infants who are deaf-blind and their families.' *Deaf-Blind Perspectives* 7, no. 3 (2000): 1–8.

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[55] Michael, M. G., and Paul, P. V. Early intervention for infants with deaf-blindness. *Exceptional Children* 57, (1991): 200–210.

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[57] Chen, D., and Haney, M. 'An early intervention model for infants who are deaf-blind.' Journal of Visual Impairment & Blindness 89, (1995): 213–222.

[58] Prickett, J. G., and Welch, T. R. Educating students who are deafblind. In S. Z. Sacks & R. K. Silberman (Eds.), Educating students who have visual impairments with other disabilities, (1998): . 139–159. Baltimore, MD: *Paul H. Brookes.*

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interactivity by preparing ahead of time, thus being able to respond more appropriately to that child. They get advantage by learning to create routines that are sequential and elicit[61] [62]. Students who receive intervener services in the home have demonstrated that they grow more rapidly in a number of developmental areas beyond those expected by ordinary maturation, as well as in a noticeable increase in communication frequency and complexity and a corresponding decline in self-stimulatory behavior frequency[63].

Furthermore, it is imperative that children with visual impairments are afforded the entitlement to a public education that is free of charge, fair, and sufficient in accordance with the Individuals with Disabilities Education Act (IDEA). Nevertheless, this does not imply that parents or caregivers can simply entrust their children to schools and rely solely on chance for positive outcomes. It is imperative for parents and caregivers of visually impaired pupils to ensure that they receive the necessary support to facilitate their academic progress and foster their development into successful individuals in adulthood. The clinician responsible for the care of visually impaired pupils should facilitate the inclusion of families in early intervention programs aimed at assessing their specific needs. These programs may involve environmental modification, physical treatment, or occupational therapy. It is advisable for parents and caregivers of visually impaired students to engage in communication with school administrators and educators.

Parents may consider obtaining a second opinion from an educational expert when they harbor concerns regarding their child's learning environment[64]. It is necessary for parents to take responsibility for the academic success of their visually impaired children by consistently monitoring their progress and collaborating with their educators to ensure appropriate support is provided to suit their unique requirements. Parents and caregivers have the option to engage professionals in the event that their visually impaired child require support in acquiring life skills. In order to facilitate the adaptation and enhance the autonomy of visually impaired children, it is crucial to provide specialized training to their professional and informal caregivers[68].

Practice Guidelines for the Social and Emotional Support of Students with Visual Impairments

Visual impairment restricts students' social engagement and affect their socioemotional development negatively[65]. Visually impaired students encounter more affective and behavioral difficulties compared to their sighted counterparts[66] [67] [68]. Research show that educational interventions have positively benefited visually impaired students on how to get integrated socially into society. Treatments provided in special education settings and exclusive to these students losses have resulted in improvements in social skill

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improvement[69] [70]. Additionally, students who are typically enrolled in inclusive classrooms with visually impaired students have a greater opportunity to cooperate with classmates. These students may cultivate positive attitudes towards visually impaired students and exhibit compassion for the challenges they face, thereby preventing the formation of prejudices against them[71]. The interaction between children and their peers in homes, schools, and playgrounds can be regulated by adults, nevertheless, the art of fraternization must be deliberately communicated to visually impaired students to sustain and enable their membership in a variety of social groups.

Practice Guidelines for Assisting Students with Visual Impairments in Accessing Information

The role of the library is to promote enhanced social inclusion and economic involvement by fostering lifelong learning. Libraries should be readily available and open to everyone, providing a welcoming atmosphere for people from all backgrounds regardless of disabilities like visual impairments[72]. The library must accommodate all types of people, whether they are impaired visually or not, in order to help create an inclusive society[73]. The basic service of a typical library is to make information accessible and available at the time of need, in an understandable format, sufficient quantities, and with staff who are aware of the needs of the users, irrespective of the severity of their impairments. The library is expected to create a supportive environment that takes into cognizance the social interactions of users, especially the disabled students, to guarantee the ease of access to its reservoir of information resources by all patrons, the disabled– visually or otherwise– inclusive. According to Deines-Jones[74], all users including visually impaired students should be able to take full advantage of the services and resources the library promises since its primary purpose is to be universally accessible. Robertson[75] offers suggestions for best practices with relation to a wide range of impairments. There should not be any architectural obstacles in the provision of acceptable buildings, such as an excessive number of stairs, small stairways, steps at the building's entry, or a lack of ramps[76]. A floor plan and clear signs should be put close to the entrance, and the available space should be organised properly. Service counters have to be placed close to the entrance as well. Inside the library, wheelchair users ought to have no trouble moving around. A visually impaired wheelchair user should be able to access the library via a lift or ramp if the library has more than one floor. The thresholds of all doors should not be elevated, and they should be equipped with automatic door openers. It is recommended that shelves should also be accessible to visually impaired wheelchair users[77]. It is also critical that resources in the library be provided in Braille and large print formats to allow ease of access to visually impaired users.

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Gunde[78] asserts that the range of books in the library must be in mediums that are accessible to visually impaired users. The books should come in big print, audio formats, talking formats, and in Braille. This substantiates the fact that when information items are converted into alternate formats, visually impaired students can benefit from them[79]. Braille is the primary alternative to regular print that visually impaired individuals utilise[80]. It is a tactile mode of communication that is primarily used by individuals with blindness. The Braille is set in dots: a width of two dots by a height of six, making it a cell of a twelve-dots. A string of dots represents a letter or sound. Another option utilised by these individuals is large printed content. Additionally, information and communication technology (ICT) can be vital in helping persons with disabilities. Persons with visual impairments or in wheelchairs can use ICT to access the resources present in the library since the library must provide information in alternate layouts for them. Many of the current electronic resources are usable by persons who are unable to utilise traditional print, as such ICT has made print materials very accessible.

Conclusion

In this article, the author discussed several practice guidelines that could benefit visually impaired students if followed. Using these guidelines, practitioners can enhance the career development and wellbeing of these students as well as facilitate their transition from school to work. In this regard, career counsellors and specialists are urged to adhere to the recommended practice guidelines for assisting visually impaired students. All stakeholders, including school administrators, parents, and teachers of visually impaired students, need to receive ongoing educational and training regarding best practices to facilitate these students' career transitioning.

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