

ENGLISH LANGUAGE LEARNING BY BLIND AND VISUALLY IMPAIRED INDIVIDUALS: ACHIEVING WRITTEN COMMUNICATION WITH THE SIGHTED TEACHERS IN INCLUSIVE SETTINGS

Gul Zamin Khan

Principal Author

Assistant Professor University of Malakand

Email: gulzaminkhanuom@gmail.com

Dr. Islam Badshah

Co-author

Assistant Professor National University of Modern Languages Islamabad

Email: ibadshah@numl.edu.pk

Tariq Mahmood

Assistant Professor, English department, NUML Peshawar

Email: tqmahmood@numl.edu.pk

Abstract

This study is part of my PhD research and it investigates the issue of achieving written communication by BVI learners with their sighted teachers in an inclusive education environment. This qualitative, phenomenological study employs in-depth interviews as tool for data collection. The purposive sample consisted of fifteen participants, including ten BVI students and their five sighted teachers. The study employs Oliver's (2013) Social Model of Disability to investigate both external and internal factors underlying The BVI learners' attempts at accessing the written word. The collected data is transcribed and thematically analysed. The findings suggest that the students experience difficulties in achieving written communication with their sighted teachers, as the practices, dominant in the system, are majority oriented and marginalize the students with visual impairment. The BVI students, despite confronting such barriers, try to get on with their studies employing their individualized coping mechanisms to overcome these obstacles.

Key words: written communication, blind and visually impaired, English language learning, inclusive education.

Introduction

Effective inclusive education for Blind and Visually Impaired (BVI) students requires a critical shift from mere presence in the classroom to ensuring full and equitable participation in academic exchange (Ashraf et al., 2017). For students learning English, this necessitates achieving seamless and timely written communication with their sighted teachers. This study establishes the concept of the "Equitable Written Exchange," arguing that successful inclusion relies not just on the BVI student's ability to produce written English, but critically, on the school system's guaranteed capacity to ensure the teacher's assessment and feedback are received in an accessible format without delay. According to Tefera (2005, p. 108), "inclusion requires a lot of struggle and commitment to overcome attitudinal and social barriers." Though "Education for All" is the motto of the country, creating equal opportunities and ensuring the blind and visually impaired (henceforth "BVI") students' participation in an integrated English language class are very limited.

The BVI population represents a broad spectrum of needs; there is no single "typical" vision-impaired student. Visual impairment (VI) encompasses a range of conditions, from low vision (relying on magnification or residual sight) to total blindness (relying on tactile and auditory

modalities) (AFB, 2012). The impact on learning varies significantly based on the extent and timing of vision loss, with some students using Braille, others large print, and still others accessing information via audio-tape. Generally, all visual impairment has one thing in common: it renders the visually impaired individual print-challenged. Thus, when a person's vision is deficient to such an extent that she/he can't function effectively in his academic and daily life, he is declared legally blind and visually impaired (MDE 2020).

The individualized nature of communication access is formalized through the Learning Media Assessment (LMA). This systematic evaluation determines the initial selection of the literacy medium—print, enlarged print, Braille, or a dual medium—and serves as the foundation for the student's required communication pathway. This determination is essential because the complexity of switching between reading media, or the increased processing time required for Braille (which can take up to three times as long as sighted reading), must be accommodated in instructional design and workload management (Bardin & Lewis, 2008)..

Despite advances in assistive technology (AT) allowing BVI students to produce sophisticated written work, a fundamental systemic failure exists in the feedback loop. The most immediate barrier is the sighted teacher's reliance on traditional means of marking, such as handwritten comments, which are completely inaccessible to BVI learners.

A deeper, more critical failure is the problem of latency. Providing learning materials and assignments in alternative formats (Braille, large print, audio) often requires a substantial delay, sometimes taking six to eight weeks for the material to be produced (Papadopoulos et al. 2008). This delay is not merely an inconvenience; it constitutes a direct, critical failure of the inclusive system, effectively preventing the BVI student from engaging equally in real-time learning and feedback cycles. If a student receives materials or assessed work months after their sighted peers, the timely, iterative benefits of Assessment for Learning are nullified.

Written communication skills for BVI students require instruction in specialized areas often missed by incidental learning. This body of knowledge is defined by the Expanded Core Curriculum (ECC). ECC skills, such as Assistive Technology (AT) proficiency, are considered curricular requirements, not merely accommodations. Written skill development is fundamentally linked to mastery of these AT tools, such as Braille Notetakers, screen readers, and magnification software (Attachoo & Sitthitikul, 2020).

This pedagogical necessity dictates that the legal mandate for access must be interpreted by policymakers as a mandate for fluency in the required technological pathways—digital word processing, Braille, and text-to-speech—for both students and the educators who assess them. If the teacher cannot assess or interact with the student's work product (e.g., Braille files) without significant difficulty or delay, the educational requirements established under FAPE are not fully met, as the critical assessment component is inaccessible or compromised. Therefore, specialized training for sighted teachers is not optional professional development but a systemic requirement for meeting the spirit of the law.

Achieving equitable written exchange relies on a robust technological infrastructure that supports both the BVI student's ability to produce text and the sighted teacher's ability to seamlessly receive and read that text. For students with no functional vision, the primary tools for producing complex written English are Braille notetakers and refreshable Braille displays (RBDs). Devices like the Monarch feature multiline, 10-line by 32-cell refreshable displays, allowing users to render tactile graphics integrated with Braille, drastically reducing the time required for students to access information. Braille notetakers are versatile, featuring Perkins-style keyboards and often including synthetic speech output, Wi-Fi connectivity, and integrated organizational tools, making them lifelong tools for composition and access. When used in conjunction with a word processor, the RBD allows the student to display the text tactually,

enabling self-correction and editing, significantly improving the quality of their final written work.

For students utilizing digital platforms, specialized software ensures accessibility:
* Screen Readers: Software such as JAWS and VoiceOver (built into Mac systems) uses synthetic speech to read aloud content displayed on a computer screen, allowing students to interface with standard word processing programs.

Dictation software is a crucial alternative for BVI individuals who may also have a disability affecting typing proficiency. It utilizes standard or modified keyboards for input, converting speech directly to text.

Students with low vision can use low-tech solutions such as dark felt-tip markers, soft lead pencils, and specialized paper with darkened or raised lines to increase contrast for easier writing. High-tech solutions include video magnifiers or Closed-Circuit Televisions (CCTVs), which project an enlarged image of the writing surface onto a monitor. Stand-mounted CCTVs are particularly effective for handwriting assignments as they provide room for the hand underneath the camera.

The recent trends in research for BVI students mainly focus on the teachers' perceptions of services for BVI students in regular classroom environment (Al-Ayoudi, 2006; Wungu & Han, 2008); the impact of blindness on the cognitive abilities of BVI learners with regard to second language learning (Smets, H., 2015); educating them in regular classroom settings (Bishaw, 2013; Janae, 2017; Murray, & McKenzie, 2010; Simon, Echeita, Scandoval, & Lopez, 2010); characteristics of their learning styles under the impact of assistive technology (Hussin, 2013; Nguyo, 2015; Padure, 2011); and teachers' competence for teaching BVI students (Smith, Kelley, Maushak, Griffin-Shirley, & Lan, 2009). These and other studies have investigated learning in general by BVI learners from various perspectives, but no study, to the best of the researcher's knowledge, investigating specifically achieving written communication with the sighted teachers by BVI students in inclusive setting, has been done so far, and it is for this reason that the researcher undertook the task of investigating this area. Tobin's (2011) opinion is still valid, who, along with Orini-Jones (2009) and Topor and Rosenblum et al (2013) argued for extensive research into the field of second language learning by BVI individuals.

2. Research questions

The study seeks answers to the following questions:

1. What strategies do the BVI students adopt to achieve written communication with their sighted teachers in an inclusive setting?
2. To what extent do they succeed in achieving written communication with their sighted teachers?

Theoretical Framework

For this research, the Social Model of Disability Theory presented by Mike Oliver (2013) was used. Oliver (2013) was himself a disabled academic, and he coined the term 'social model of disability' in 1983. Initially the model was used for people with physical impairment only. Later, all types of people having different types of impairments which also include people having learning difficulties were included (Oliver, 2013). The framework deals with the barriers faced by visually challenged learners. It divides the barriers into four categories: first, attitudes; second, materials; third, untrained teachers; fourth, financial issues (Nthama & Annie, 2019).

This framework posits that these four factors influence the learning positively or negatively. The negative attitude of the teachers and learners create hindrances and negatively impacts the learners with visual impairment. Materials refer to the Braille, embossed texts, or electric notes. Absence of such materials becomes a hurdle in their learning process. Untrained

teachers with no expertise to deal with such students also impact their learning negatively. Further, financial resources refer to the financial reserves that can be used to assist such students. Lack of funds results in a crisis for visually challenged learners. The theoretical framework is highly relevant to the study, as it deals with visual impairment, inclusive education and learning.

The social model of disability posits that the barriers that exist are not the result of the disability; they cannot be attributed to the unsound medical condition of the individual. The disabled individuals face challenges because of the unsound social environment. In other words, it is not their impairment which makes them disabled, rather the social structures render them incapacitated. In the light of this model, impairment is defined as a functional limitation due to mental, physical or sensory conditions that are distinct from regular norms within an individual. Conversely, disability is a restriction caused by an institution, organization or society which excludes individuals based on their impairments from performing and participating in the social activities with their counterparts. Therefore, society imposes disability by not providing opportunities and facilities to the visually challenged learners, thus hindering their participation in the social activities to their full potential. In this way, society –transforms their impairment into disability.

Research methodology

This qualitative study tried to study participants in their natural environment using different means to interpret meanings shared by the study participants. Qualitative research generally aims to understand the way people comprehend the world from different aspects, and accepts the varied interpretations of human experience; both the researchers as well as the study participants thus have a discovering experience (Guba & Lincoln, 1994). This study used a qualitative approach because of various reasons, as enumerated by Creswell (2018)): (a) when research questions begin with how, what and why, (b) there are multiple aspects to the issue under study which need investigation, and (c) the study has to be carried out in a natural environment. The researcher believes that the blind and visually impaired students' views about the world around them and the realities they draw, and construct can best be understood through a qualitative approach.

The research population for this study consisted of blind and visually challenged students, whose ages ranged from eighteen to twenty-two years. A comprehensive list of BVI students enrolled in Islamic International University and National University of Modern Languages was obtained from these universities. Ten BVI students were selected through the process of purposive sampling. The BVI students were contacted and their willingness to participate in this study obtained through consent forms.

For this study, semi-structured interview was considered appropriate because through this type of interview the researcher could glean from the participants maximum relevant information. Moreover, this type of interview enabled the participants to freely express their views. A set of questions was developed (which was in line with the main research question and the research objectives) and put before the participants during the interviews which lasted on average for around one hour. In line with the views of Smith and Osborn (2008), a relaxed atmosphere was created so as to allow the study participants to share their views regarding the role of assistive technology in their English language studies, and whenever needed, cues were provided to them when they appeared to get stuck.

Before finalising the interview guide, however, a pilot study was conducted with two BVI students, and certain changes (e.g., minimising technical terms and reordering certain questions for the sake of smooth flow in conversation) were made in accordance with the outcomes of

the study. Data was then collected from ten blind and visually impaired students through semi-structured interviews. All the interviews were audio-taped through a smartphone and a laptop. The student participants used a mixture of both Urdu and English to express their views. The researcher then translated and transcribed all the interviews into English. My knowledge of both Urdu and English and my position as an insider (I am myself a blind individual having the experience of using assistive technology, especially computer-based, to study English language) proved very effective with regard to understanding their views and perceiving the contextual as well as cultural nuances associated with their responses.

Major themes were established through a thematic analysis of the data. Moreover, validity and reliability of the study was established through interpretative and descriptive validity, using such strategies like member check sessions and low-inference descriptors.

Data presentation and analysis

This study shows that the majority of students found it quite easy to successfully communicate with their sighted classroom teachers. Those students who could use assistive technology, such as computers with screen readers, scanners, printers or braille notetaking devices, were able to communicate very independently with their teachers, as they could make the study material accessible for themselves, prepare their assignments and present them to their sighted teachers in print format for their perusal who could not read braille. These students did not have to rely on others' assistance for their written tasks, assignments or exam papers and submitting them to their sighted teachers.

For example, Rafiq, Farooq, Ahmad and Hassan used their laptops and printers in order to make their assignments (both in-class as well as home assignments) accessible to their sighted teachers (who are braille-illiterate). Similarly, Sadia does her homework and her in-class assignments on her laptop with the help of a screen reader, prints them on her inkjet printer and submits them to her teacher for perusal and grading. "For my English course, I can print out information directly from my braille notetaker utilizing a standard printer for immediate reading by my regular classroom teachers."

One student (Sanan), however, relied on the services of an amanuensis as he dictated his answers to a sighted individual. Thus, he achieved written communication with his sighted teacher by taking the services of a sighted person. One major problem with dictation is, however, that the teacher is never sure whether the spelling or punctuation errors present in the dictated answers/assignments are committed by the student or his amanuensis. This was exactly the case with Sanan: since his teacher was unable to view Sanan's own writing, he couldn't determine whether he was aware of the correct way of punctuating or spelling. "Sanan writes through an amanuensis. I have no way of finding out, therefore, whether he knows the correct use of punctuation marks or how to spell the English words."

All the teachers stated that, mainly because of the latest developments in assistive technology, their blind students were able to submit their written assignments to them in print format quite independently. The blind students, via their computers and printers, write and submit their written work to their sighted teacher for their perusal and grading without any reliance on others. Since the sighted teachers are almost always braille-illiterate, their blind students have to submit their assignments in print and not in braille.

Both Mr. Akbar and Mr. Ali said that assistive technology has enabled the BVI students to prepare their assignments on their own and turn them in quite in time. "My student prepares and prints out his homework assignments and in-class work independently," said Mr. Ali, "utilizing a screen reader on his laptop and a standard printer, Thus, making his assignments quite legible and accessible to me who has no knowledge of braille." According to Mr. Akbar:

“They write their answers to homework assignments and exams on their laptops and submit them in the form of printouts.”

Miss Aneela said she did not know how her student did his homework assignments, but he always submitted them in print on time and he generally did them very well. She said he used a braille word processor for taking notes in class. “My BVI student loved to be independent, and he always presented his assignments in print quite on time. He also took his exams on his laptop and submitted his answer-sheets in the form of printouts.”

Only Ibraheem dictated his answers in exam and assignments to an amanuensis because he was physically handicapped as well. His teacher had to act as amanuensis for him sometimes, especially when the in-class task required the rest of his classmates to perform theirs in a short period of time. The teacher expressed his frustration that he was never able to view his blind student’s written expression. “I am in no position to know if my blind student knew how to spell the English words and how to punctuate his sentences.”

Underscoring the importance of possessing such ability on the part of visually challenged students, Mc Broom et al (1994), citing Kessler (1984), argues that the BVI students have the right to compose, edit and produce tasks and assignments without the assistance of some sighted individual. The majority of students found it quite easy to successfully achieve written communication with regard to the submission of written assignments, tests and so on, with their sighted classroom teachers. Those students who could use assistive technology, such as computers with screen readers, scanners, printers or braille notetaking devices, were able to communicate very independently with their teachers, as they could make the study material accessible for themselves, prepare their assignments and present them to their sighted teachers in print format for their perusal who could not read braille. These students did not have to rely on others’ assistance for their written tasks, assignments or exam papers and submitting them to their sighted teachers. They could also take their exams on their laptop and submitted their answer-sheets in the form of printouts for their sighted teachers’ perusal. The BVI students loved to be independent, and doing and presenting their assignments and tasks independently always boost their confidence as well as self-esteem. “For my English course, I can print out information directly from my braille notetaker utilizing a standard printer for immediate reading by my regular classroom teachers.”, said Farooq.

Those students, like Sanan, who relied on the services of an amanuensis for writing assignments, tests and tasks are rendered dependent on others, and had to suffer not only academically, but also mentally and psychologically. They find it hard to perform to their full potential, as they rely on the competence of their amanuensis. On the contrary, if their amanuensis is more proficient than them, their true competence might never be known to the teachers. In either case, it is harmful for the BVI students. Moreover, there is always the issue of determining on the part of the teacher whether the spelling or punctuation errors present in the dictated answers/assignments are committed by the student or his amanuensis. The teacher has no way of finding out, therefore, whether the student knows the correct use of punctuation marks or how to spell the English words. This was exactly the case with Sanan: since his teacher was unable to view Sanan’s own writing, he couldn’t determine whether he was aware of the correct way of punctuating or spelling.

All the teachers stated that, mainly because of the latest developments in assistive technology, their blind students were able to submit their written assignments to them in print format quite independently. The blind students, via their computers and printers, write and submit their written work to their sighted teacher for their perusal and grading without any reliance on others. Since the sighted teachers are almost always braille-illiterate, their blind students have to submit their assignments in print and not in braille.

The general body of literature on visual impairment also states that dependence upon others for the achievement of academic objectives is always problematic and should, therefore, be avoided. The body of literature disapproves of the BVI students' reliance on sighted individuals for doing such basic tasks as producing written assignments in print for the sighted teachers. Yuditsky (1991) is of the view that if the BVI students are to be successful, they must be self-reliant, instead of depending on their teachers and others to make provisions for them. He believes that the BVI students' too much reliance on others can be significantly disadvantageous for them, especially in terms of competing with their sighted classmates. Citing Rothstein (1986), Mc Broom et al (1994) argues that the BVI students used to special treatment in specialized schools for the blind and visually impaired may be taken aback by the non-existence of those conditions at the college or university level.

Suggestions and recommendations

The technological sophistication of student production must be matched by the accessibility of the institutional infrastructure. When students submit assignments composed using Braille, the sighted teacher requires reliable translation tools.

If a student submits a Braille file (.brf or .brl), the teacher must utilize specialized Braille transcription software, such as BrailleBlaster, which employs open-source translators (like Liblouis) to efficiently convert the Braille code back into readable print text. Alternatively, some advanced Braille notetakers are designed with a unique built-in LCD screen that allows sighted teachers and parents to view the student's text directly, providing a simplified, real-time pathway for assessment without requiring software conversion.

The disparity between advanced student production technology (e.g., multiline RBDs) and often low-tech institutional reception methods (manual transcription or outdated software) frequently creates a severe workflow bottleneck. This barrier is mitigated when students are encouraged to use their Braille notetakers as input devices for standard, cloud-based word processing platforms (like Google Docs or Microsoft Word). When a device like a Braille notetaker connects via Wi-Fi to write into a digital document, the submitted file is already standard text. This bypasses the need for the teacher to run specialized conversion software for every assignment, resolving a major systemic friction point and dramatically improving feedback turnaround time.

For students who use large print, general education teachers must recognize that creating accessible large print is a technical skill. It involves custom reformatting to achieve a font size of 18pt or larger, enhanced contrast, and the strategic simplification of layouts. Complex visual materials like tables must often be converted into lists, and graphics enlarged, to ensure usability. Automated enlargement is insufficient and reduces the actual usability of the document.

On the other hand, teachers must mandate that all assignments and learning materials be handled in accessible file formats, such as standard.docx or accessible PDFs. Furthermore, any online learning platforms utilized must adhere strictly to accessible web design guidelines to ensure compatibility with student AT.

To foster inclusive digital interaction, educators must adopt explicit norms for written communication. This includes using inclusive language, avoiding ambiguous emojis, and explaining acronyms and abbreviations, as these elements can be difficult for screen readers to interpret correctly. The use of standardized emojis, placed at the end of text instead of embedded mid-sentence, is recommended over older emoticons, as they are generally easier for assistive devices to pick up.

The single most important procedural change required is the mandatory cessation of handwritten comments by sighted teachers, which are functionally inaccessible to BVI students. The analysis suggests the mandatory adoption of digital tools that are compatible with AT:

* **Optimized Feedback Functionality:** The preferred method is the exclusive use of the Insert Comment tool or the Suggest Edits feature available in standard word processing programs (e.g., Microsoft Word or Google Docs). This approach is effective because these embedded functions are specifically recognized by screen readers and magnification software, allowing the BVI student to independently access, review, and act upon the feedback.

Teachers must proactively negotiate alternative feedback mechanisms with students and periodically check in to verify that the current adjustments are effective. Additionally, the teacher must explicitly verbalize all written actions performed in the classroom, such as reading aloud anything written on a whiteboard, ensuring the student has time to complete their note-taking.

Equitable grading practices are transparent, consistent, and free from bias, essential for student motivation and academic outcomes, particularly for marginalized groups. For BVI English learners, this requires diversifying assessment modalities beyond traditional written exams, which can be mechanically slow for Braille readers.

Educators must implement flexible assessment options that allow students to demonstrate knowledge without being hindered by the speed of their literacy medium. These alternatives include performance-based tasks such as oral reports, retelling stories, using projects and exhibits, or employing graphic organizers and word banks. Multiple-choice questions (MCQs) are highly beneficial as they minimize the cognitive load associated with complex written production, allowing BVI students to concentrate purely on content understanding. Furthermore, MCQs are easily adapted for auditory presentation.

The requirement for consistent and transparent assessment implies that accommodations should be viewed as essential features of the assessment process, rather than exceptions. Practices like "ungrading," which emphasize extensive, ungraded feedback over high-stakes scores, can promote learning and mitigate the risk of bias and erosion of student trust. By using varied and transparent methods, such as classroom exercises like "values affirmation," which invite students to write short statements about values important to them, educators can actively lessen stereotype threat, leading to improved performance and a stronger sense of belonging.

The success of written communication in an inclusive setting is heavily influenced by the student's confidence, social integration, and the general psychosocial climate of the classroom. Vision loss is strongly associated with an increased risk of anxiety and depression, partly due to impairments in quality of life and the difficulty of relying on non-visual cues during social interaction. Students who are blind may struggle to initiate conversation if they are unaware of who is nearby, leading them to remain socially passive rather than risk embarrassment. These psychological barriers are compounded by pervasive attitudinal barriers in education, including unconscious biases and negative stereotypes that may lead a teacher to make limiting assumptions about the BVI student's written ability. Educators must actively challenge these assumptions, foster acceptance, and celebrate diversity. The introduction of simple, low-effort classroom interventions, such as values affirmation exercises, where students write about important values, can significantly empower BVI students by lessening stereotype threat and increasing their sense of belonging.

The effective written academic exchange is intrinsically linked to the student's social confidence. If anxiety related to social engagement is high—stemming from the loss of visual cues critical for non-verbal communication (facial expressions, body language)—the student

may be inhibited from seeking clarification from the teacher or participating in collaborative writing tasks. Therefore, instruction in explicit social skills, often part of the ECC, becomes a necessary prerequisite for successful academic communication.

A significant barrier to inclusive education is the general educator's documented lack of specialized training and resources necessary to support BVI learners effectively. This deficiency must be addressed through mandated, continuous professional development. For English language teachers, foundational competence in Unified English Braille (UEB) is indispensable. While certified transcribers handle complex materials (Nemeth Code for mathematics, UEB Technical for science), sighted teachers must possess basic proficiency to understand and interact with the student's primary literacy medium. Training is readily available for sighted learners through self-paced online programs (UEB Online) or certificate courses (RNIB Certificate in UEB).

Conclusion

The goal of achieving equitable written communication between BVI English language students and their sighted teachers is attainable, but it requires addressing systemic friction points rather than relying solely on individual goodwill or isolated technology purchases. The analysis demonstrates that the primary challenge is not the BVI student's ability to produce written English, but rather the institutional failure to provide timely, accessible feedback, resulting in a critical feedback latency that compromises the quality of inclusive education. The core communication challenge is the latency and inaccessibility of the teacher's written feedback, exacerbated by the use of inaccessible formats (handwriting) and the institutional delay (6–8 weeks) in material conversion. Digital word processing environments offer the most practical path to equitable written exchange, provided that both students (via AT) and teachers (via digital commenting tools) adhere to strict accessibility protocols. True equity in assessment requires the diversification of modalities beyond traditional written exams and the adoption of transparent grading practices to mitigate psychosocial barriers and maintain high expectations for BVI written output. The system must recognize and institutionalize the TSVI as the essential coordinator who manages LMA, AT compatibility, and transcription services, linking the student's specialized needs to the general curriculum.

References

- Attachoo & Sitthitikul (2020). A phenomenological study on English language learning of visually impaired students in Thailand (No. 183874). Thammasat University.
- Al-Ayoudi, M. (2006). Teachers' attitudes towards inclusive education in Jordanian schools. *International Journal of Special Education*, 21(2).
<https://www.researchgate.net/publication/289651204>
- American Foundation for the Blind. (2011). Educating students with visual impairments for inclusion society. Retrieved from SectionID=44&TopicID189&DocumentID=1344
- American Foundation for the Blind. (2012). Expanded core curriculum (ECC) Introduction: What is core curriculum.
<http://www.afb.org/info/programs-and-services/professionaldevelopment/expanded-core-curriculum-ecc/123>.
- Bardin, J. A., & Lewis, S. (2008). A survey of the academic engagement of students with visual impairment general education classes. *Journal of Visual Impairment & Blindness*, 102(8), 472-483. [10.1177/0145482X0810200804](https://doi.org/10.1177/0145482X0810200804)
- Brinkerhoff, L., McGuire, J., and Shaw, S. (2002). *Postsecondary education and transition for students with learning disabilities* (2nd ed.). Austin, TX: Pro-Ed.

- Creswell, J. W. (2018). *Research design: quantitative, qualitative and mixed methods approach* 4th Ed. Sage Publications Inc. California.
- Denzin, N. K., & Lincoln Y.S.(2000) (Eds). *Handbook of qualitative research*. London, UK: Sage Publication Inc.
- Denzin, N. K., & Lincoln, Y.S. (2012). *The sage handbook of qualitative research*, (4th ed.). Thousand Oaks, CA: Sage Publications.
- Hilary, K. (2006). Self-advocacy program for college students with disabilities: A framework for assessment. paper presented at the annual meeting of the American educational research association, San Francisco.
- Hussin, A. (2013). *experiences of students with vi in adoption of digital talking textbooks: An interpretative phenomological analysis* (PhD dissertation). Colorado State University. <https://files.eric.ed.gov/fulltext/EJ1098304.pdf>
- Rae, H., Murray, G., & McKenzie, K. (2010). Teachers' attitude towards mainstream schooling. *Learning Disability Practice*, 13(10). Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method, and research*. Thousand Oaks, CA: SAGE Publications.
- Smith, D. W. , Kelley, P. , Maushak, N. J. , Griffin-Shirley, N. , & Lan, W. Y. (2009). Assistive technology competencies for teachers of students with visual impairments. *Journal of Visual Impairment & Blindness*, 103, 457-469. [10.1177/0145482X1210601010](https://doi.org/10.1177/0145482X1210601010)
- Susanto, S., & Nanda, D. S. (2018). Teaching and learning English for visually impaired students: An ethnographic case study. *English Review: Journal of English Education*, 7(1), 83-92. <https://doi.org/10.25134/erjee.v7i1.1530>
- Tobin, M. (1996). Blindness in later life: myths, attitudes and reality. *British Journal of Visual Impairment*, 13 (2): 69-75. <https://doi.org/10.1177/026461969501300204>
- Topor, Irene and Rosenblum, Penny L 2019. English language learners: Experiences of teachers of students with visual impairments who work with this population. *Journal of Visual Impairment and Blindness*, pp. 79-91. <https://doi.org/10.1177/0145482X1310700202>
- Warren, D. H. (1994). *Blindness and children: An individual differences Approach*. Cambridge: Cambridge University Press.