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Breaking Barriers: Assistive Technology for Visually Impaired EFL Educators

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Abstract. Visually impaired EFL educators face unique challenges relating to using assistive technology to enhance listening and reading skills, which highlights a need for better resources and support. This study examined visually impaired EFL educators' perceptions of the use of assistive technology to foster their receptive skills (namely listening and reading) and the challenges involved in using this technology. The study used a qualitative, analytical-descriptive research design, with a validated 15-item semistructured interview developed by the researchers. Interviews were conducted with five schoolteachers and two university instructors who had been selected purposefully through public contact information from Jordanian K–12 and tertiary institutions of learning. The interviews were audio recorded, transcribed, and subjected to thematic analysis to identify recurrent patterns and insights. The findings reveal that, while there was a strong perception of the effectiveness of assistive technology in fostering receptive skills, several significant challenges were identified. These challenges were insufficient institutional support, limited availability of appropriate assistive tools, and issues related to compatibility, affordability, and accessibility. The study highlighted the critical need for improved resources and support systems to enable visually impaired EFL educators to fully leverage assistive technology, thereby enhancing both their instructional effectiveness and professional development.

Keywords: Assistive technology; EFL practitioners; Reading; Receptive skills; Visual impairment; Writing

1. Introduction

Public and private initiatives increasingly aim to enhance the independence of persons with disabilities. However, achieving meaningful accessibility and inclusion requires addressing complex challenges that affect their opportunities and societal equity (Rehan Youssef & Morsy, 2023).

While legal frameworks have advanced accessibility and inclusion, practical barriers persist, particularly in education (Hawamdeh et al., 2025; Rehan Youssef & Morsy, 2023; Yakup, 2021). Globally, legislation, such as the Individuals with

Disabilities Education Act in the United States, mandates equal access to education, and similar initiatives have been adopted worldwide. Subsequent legislation has advanced the rights and options of PwDs in both public and private education institutions worldwide further (Olusanya et al., 2023). However, despite such de jure advancements, the practical realities of PwDs seeking to access education remain problematic, particularly outside developed countries in Europe and North America (Fernández-Batanero et al., 2022).

Visual impairment is a term used to describe any form of vision loss, whether total blindness or partial vision loss (Sangeeta & Frederic, 2022). Recent statistics indicate that there are approximately 2.2 billion persons with visual impairment worldwide (World Health Organization, 2023). Despite significant technological advancements that continue to improve opportunities for persons with visual impairment, substantial challenges persist, particularly in education (Clay, 2023).

In Jordan, resource limitations hinder the access of persons with disabilities to education further (AlHeresh et al., 2013). The *National Strategy on Deinstitutionalization for People with Disabilities*, aligned with the *Law on the Rights of Persons with Disabilities No. 20 of 2017*, promotes inclusive education by integrating learners with disabilities into mainstream schools. This involves infrastructure adaptations, specialized curricula, teacher training, and assistive technologies to support diverse learning needs (Higher Council for the Rights of Persons with Disabilities, 2020).

Even though assistive technology can significantly improve education and employment for persons with disabilities, its adoption remains limited in many institutions owing to financial constraints, lack of awareness, and weak policy enforcement (Rehan Youssef & Morsy, 2023). These barriers often prevent visually impaired educators and learners from obtaining the tools they need to succeed (Rokach et al., 2021; Ruin et al., 2023).

While assistive technology aims to foster inclusion, it can also inadvertently reinforce segregation when it is designed as a separate rather than an integrative solution (Seale, 2013). For instance, Braille books and screen readers improve accessibility but may isolate persons with visual impairment from mainstream educational and workplace environments where such tools are not standard.

High-tech accommodation can also be extremely expensive, and poor implementation of laws regarding accommodation has left many visually impaired educators and learners without the tools they need to succeed in school and the workplace. Even when access to technology is used to *include* people with disabilities, it often has unintended exclusionary side-effects (Rokach et al., 2021; Seale, 2013).

Assistive technology, a subset of access technology, can facilitate the learning experiences of PwDs. Assistive technology refers to any apparatus or system that enables a person to perform a task that they would otherwise find impossible or that increases the convenience and safety with which it can be performed (Musselwhite, 2017; Rahman, 2017). This broad operational definition could pertain to anything from simple aids (e.g., pencil grips) to complex computer control programs and robotic devices.

Assistive technology can also be categorized according to the type of disability it addresses, including cognition, mobility, hearing or vision impairments (Zallio, 2022). Access to these technologies is increasingly seen as a fundamental human right for PwDs, even in developing countries. However, it is crucial for access to be both appropriate and effective, and that it should consider the socio-economic context and an individual's specific needs (Toro-Hernández et al., 2019).

According to the World Health Organization, 10 percent of the world's population have some form of disability, which mean PwDs represent a substantial socio-economic sector of national and global economies (Onwumechili, 2017). This suggests that most individuals are likely to know someone affected by a disability, which highlights the societal loss when PwDs are not fully included. Disability, as described by Cieza et al. (2018), is a relative concept that is shaped by the interaction between the individual and the environment. Therefore, overcoming disability can involve changing the person (through treatment or aids) or modifying the environment (e.g., providing wheelchair ramps); however, limited access to equipment that can enhance functional abilities remains a major challenge (Mullner, 2011).

The application of advanced technology in the lives of educators with visual impairment has been boosted by the availability of modern assistive technology, which has increased both employment opportunities and teaching competencies, particularly in listening and reading tasks. However, as these educators become more integrated into mainstream settings, their access to essential assistive technology may be compromised by uninformed policies and logistical challenges. Institutional decisions often deem the provision of such technology to be nonessential because of concerns over cost, logistics, and other associated challenges (e.g., Almeida & Ferreira, 2024; Alves et al., 2009; Loveys & Butler, 2023; Vouglanis, 2024).

Despite the increasing recognition of the importance of assistive technology, there is a significant research gap regarding the specific challenges faced by visually impaired English as a foreign language (EFL) educators in utilizing such technologies, especially in the Jordanian context. While research has highlighted the broader challenges of assistive technology adoption (Belay & Yihun, 2020; Cassells & Weber, 2018; Klingenberg et al., 2020), the unique intersection of visual impairment and EFL education has not received much attention. Furthermore, the limited availability of high-quality EFL material for visually impaired learners compounds the issue, as reported in both global and Jordanian contexts (AlHeresh et al., 2013; Cruz González, 2011).

This research addresses this gap by examining the barriers to and potential solutions for integrating assistive technology into the teaching practices of visually impaired EFL educators in Jordan. By focusing on this specific group, the study aimed to contribute to the understanding of practical challenges and provide context-specific recommendations for fostering inclusivity and professional efficacy in EFL education for visually impaired educators.

More specifically, the purpose of this research was to determine the extent to which EFL educators with visual impairment in Jordanian schools and universities reportedly leverage assistive technology to develop their receptive

skills and to explore the challenges they face in this endeavor. This objective was achieved through thematic analysis of five schoolteachers and two university instructors' personal experiences and insights, which were collected using a semi-structured interview schedule.

In educational settings, receptive skills (listening and reading) pose the greatest accessibility challenges for persons with visual impairment compared to their fully sighted counterparts, probably because receptive skills rely utterly on the seamless comprehension of the message (AlAli et al., 2025; Al-Barakat & Bataineh, 2011; Al-Barakat et al., 2025). It is essential for educators with visual impairments to focus on receptive skills, because these skills are fundamental for effective communication and information acquisition. Strong receptive language abilities enable individuals to follow instructions, comprehend questions, and engage meaningfully in conversations, all of which are crucial for instructional effectiveness.

Moreover, fostering the receptive language skills of visually impaired educators involves providing hands-on experiences paired with auditory labels and descriptions within a rich literacy environment. This approach supports language development by compensating for the absence of visual input, and ensures that these educators can effectively process and understand information. By emphasizing receptive skills, visually impaired educators can enhance their teaching competencies, facilitate student comprehension, and create inclusive learning environments that cater to diverse needs. However, despite the critical importance of receptive language development, modern curriculum materials often pose challenges. Many contemporary educational resources are visually intensive and fail to consider the needs of educators with visual impairments, which inevitably lead to disruptions in understanding. This lack of accommodation affects visually impaired educators in various educational contexts (AlAli et al., 2025).

Building on the research problem and purpose outlined above, there is an urgent need to address the specific requirements of educators (and learners) with visual impairment across various disciplines, particularly within the field of foreign language education. This study contributes to the ongoing discourse by seeking answers to the following research questions:

1. How do EFL educators with visual impairment in Jordanian schools and universities use assistive technology to develop their receptive skills?
2. What are the challenges involved in this process?

The findings of this research seek to offer insights into the experiences, successes, and challenges of educators with visual impairment in Jordan. These insights can help decisionmakers allocate appropriate resources to facilitate access to resources and, ultimately, improve educational and life opportunities for persons with visual impairment in Jordan. As an in-depth qualitative study, this research undertook a comprehensive examination of both the obstacles and support systems available to educators with visual impairment. The data collected have the potential to serve as a critical reference for education institutions and

policymakers, by encouraging reflection on existing provisions for educators with visual impairment and identifying areas that require immediate attention.

Receptive skills are fundamental in language acquisition, yet their development can be hindered for visually impaired educators who lack sufficient cognitive scaffolding or prior knowledge of a particular topic, especially when instructional content is not adapted to their needs. This challenge is particularly acute for educators with visual impairments (Herrera et al., 2015). Research provides evidence that a high rate of visual impairment correlates with a low literacy rate (Blood et al., 2010), often because of insufficient resources and aids for persons with visual impairments. The effect of these shortcomings on the receptive skills of visually impaired educators is readily observable, particularly for those working in mainstream education settings that do not have access to specialized language support (Ajuwon et al., 2015; Ash et al., 1997).

To these researchers' best knowledge, no research has investigated the extent to which educators with visual impairments in Jordanian schools and universities use assistive technology to foster receptive skills and the challenges involved. However, there is a good body of research on learners with visual impairment in the Jordanian (Abuzaitoun, 2008; Alananbeh & Asha, 2023; Hanna, 2022), Arab (Almalki, 2021), and international contexts (Argyropoulos et al., 2019; Coşkun, 2013; Guerreiro & Gonçalves, 2015; Kamaghe, 2021; Kamali-Arslantaş et al., 2022; Lee et al., 2014; Malinovská & Ludíková, 2017; Nahar et al., 2015; Nguyo, 2015; Nisbet, 2020; Nkiko et al., 2018; Salah Eldin & Hassan, 2019; Spooner, 2014; Tuncer & Altunay, 2006).

In Jordan, no EFL-specific research has examined how educators with visual impairment use assistive technology to foster receptive skills or the challenges involved. This study takes an exploratory step toward bridging this gap, with the goal of enhancing accessibility and socio-economic opportunities for persons with visual impairment. The current findings contribute to a growing body of research on assistive technology and its role in the daily and professional lives of educators, by focusing exclusively on educators with visual impairment in schools and institutions of higher learning. Cross-disability issues and workplace accessibility were beyond the scope of this research.

By building on the literature on the topic, the study sought to bridge this gap by offering an in-depth exploration of the use of assistive technology for receptive skill development by Jordanian educators with visual impairment. By situating its findings within the broader context of existing regional and global research on learners with visual impairment, this study aimed to provide valuable insights that can inform policy decisions, enhance education accessibility, and contribute to the growing discourse on inclusive pedagogical practices.

2. Methodology

2.1 Design

This study used a qualitative, analytical-descriptive research design to explore Jordanian visually impaired EFL educators' perceptions of and challenges in using assistive technology for receptive skill development. The approach aimed

to gain a deeper understanding of how assistive technologies are perceived, and the challenges involved in their use.

2.2 Participants

The population comprised educators with visual impairment in Jordan. Participants were defined as *visually impaired* based on Roe and Webster's (2002) criteria, which include individuals whose sight cannot be corrected beyond 6/12 and who use alternative methods of information access and communication, such as screen readers, braille, or hands-free mobile devices.

The purposefully selected sample consisted of five visually impaired schoolteachers and two university instructors involved in teaching English as a foreign language in Jordan. The five schoolteachers were one female and four male teachers from Abdullah Ibn Umm-Maktoum Secondary School for the Blind, a public school in Amman known for its support of visually impaired educators and learners. The instructors were both male PhD holders—a professor from Al-Balqa' Applied University and an associate professor from Mutah University. The study aimed to gather in-depth insights into their perceptions, challenges, and practical experiences regarding the integration of assistive technology into their language teaching practices. These technologies are particularly essential for supporting the development and application of receptive language skills, which often require adaptation for non-visual access through tools like screen readers, text-to-speech software, or braille displays.

2.3 Data Collection and Analysis

The data were collected through semi-structured interviews. The first author, who is low-vision herself, conducted the interviews. The 15-item interview schedule was designed by the researchers and validated by a jury of experts, who reviewed the first draft and recommended revisions that were integrated into the final draft before the interviews were conducted.

The purpose of the interviews was to explore the participants' experiences and perceptions regarding the use of assistive technology for reading and listening tasks. The questions were designed to elicit insights into the specific devices and applications they used, the frequency and ease of use, the perceived benefits and challenges, and the support systems available to them as educators. Participants were also encouraged to reflect on how assistive technology has affected their own language learning and academic performance, as well as that of their learners. Additionally, they were invited to suggest ways in which educational institutions could enhance support for visually impaired educators. To ensure comprehensive understanding of the factors influencing assistive technology use among visually impaired educators, the interviews also addressed variations in technology use by their visually impaired peers and the influence of factors such as training, institutional support, and personal experiences

The interviews were recorded, transcribed, thematically analyzed, and manually coded to identify relevant patterns and relationships, following Braun and Clarke's (2021) established process. Inter-rater reliability of the coding process was established by having another researcher independently code a subset of the data to compare the coding results and assess consistency and agreement, using

Cohen's kappa. The calculated kappa value of .79 indicates substantial agreement between the two coders, thereby demonstrating the reliability of the coding process.

2.4 Ethics

Participants, who were fully informed about the research and the confidentiality of their responses, provided written consent to participate and have their interviews audio recorded and transcribed. An accessible PDF summary was also emailed to the participants, which stated that participation was entirely voluntary and that they had the right to withdraw at any time during the data collection process. The participants were also sent screen reader–compatible PDF transcripts of their respective voice recordings to verify the accuracy of their responses prior to analysis.

3. Results

This study investigated how educators with visual impairment integrate assistive technology into their receptive skill development and the challenges they face in doing so. All seven participants confirmed that they actively used assistive technology to develop their receptive skills. That 100 percent of the sample used these tools attests not only to the relevance of the insights shared in the interviews but also to the significance of the research. The participants reported that their use of assistive technology extended beyond traditional hardware to include specialized software and applications designed to meet their specific needs, which demonstrates their commitment to fully incorporating these technologies into their day-to-day routines.

The analysis of the interview transcripts revealed five major themes: using assistive technologies, effect of assistive technologies on language development, limitations of assistive technology, proficient use of assistive technology, and calls for institutional support. These themes are discussed and illustrated below.

3.1 Using Assistive Technologies

The participants reported that assistive technology plays a central role in structuring their daily routines. They expressed confidence and comfort in using these tools, which indicates a general sense of acceptance and reliance on them. One participant stated, "I use audio materials and audio recordings in the classroom by using a Bluetooth speaker, and I use audio materials that I send to my students via WhatsApp. To develop my receptive skills, I use the computer with screen readers installed on it." Another participant emphasized their daily use of assistive technology, saying, "I use it daily, all the time, and I resort to it whenever I need it," which readily illustrates visually impaired educators' constant integration of assistive technology into their instructional practices.

Moreover, participants referred to the practicality and efficiency gained from using assistive technologies. As one participant said, "Assistive technology has greatly served the visually impaired linguists and language educators, and it saved a lot of effort and time."

3.2 Proficient Use of Assistive Technology

Most participants rated their proficiency in using assistive technologies as high, thereby suggesting that they have developed effective problem-solving skills to overcome common challenges. One participant emphasized this adaptability, by saying, “I resort to alternative applications or devices that are easier and more convenient whenever I face difficulties.”

Moreover, participants reported on their efforts to innovate and improve their use of technology, as evidenced by a participant who said, “I designed a virtual environment on Google Suite for Abdullah Ibn Umm-Maktoum Secondary School for the Blind, but, unfortunately, I did not have the opportunity to implement this experience on the ground.” Participants also demonstrated flexibility in switching between devices and applications to optimize their teaching practices, thereby showcasing their proficiency and resourcefulness. According to one of the participants, “When preparing lessons, I use a screen reader for textbooks and a braille display to take notes. In class, I switch to a speech synthesizer for presentations and a mobile app to track attendance. It’s about using the right tool at the right time.”

3.3 Effect of Assistive Technology on Language Development

The participants provided overwhelmingly positive feedback on how assistive technology has influenced their skills development, particularly in listening and reading. They reported significant improvements in their ability to engage with instructional materials, and attributed this improvement to the way assistive technology gave them access to diverse learning resources. A participant shared, “[Assistive technology] has helped me build knowledge, and through the continuous use of screen reader programs and audio content, it has given me the opportunity to constantly practice the English language.”

Another participant elaborated on the specific skills that were enhanced by assistive technology, by saying, “Whether braille or screen readers, assistive technology has enhanced and improved our skills in pronunciation, spelling, and building oral skills.” Additionally, participants appreciated the language accuracy features of assistive technology, with one explaining, "The synthesizer in the screen reader can give us the correct pronunciation for words and in both British and American accents.”

3.4 Limitations of Assistive Technology

While the merits of assistive technology were unanimously acknowledged, participants also pointed out its limitations, ranging from technical difficulties to broader societal challenges. Participants reported facing challenges in performing particular tasks, but they also shared how they had developed adaptive strategies to navigate them, albeit with varying levels of ease.

One participant noted, “There are obstacles in dealing with some commands and functions of screen readers in presenting digital text accurately. Colored text and formatted italic or underlined texts are unreadable by screen readers.” Another participant pointed out the quality issues associated with some devices, by stating, “Sometimes low-quality audio in some speech synthesizers can make understanding the content difficult.”

In addition to technical constraints, participants highlighted both environmental and societal challenges that hindered their use of assistive technologies. One participant noted the lack of suitable spaces, emphasizing that "there are no conducive environments prepared to use all means of assistive technologies, not to mention that our tools are heavy and large. Also, reliance on speech synthesizers necessitates quiet spaces and intense focus." Alongside these physical and logistical barriers, participants expressed frustration with persistent societal stigma surrounding the independence of visually impaired individuals. Despite the empowering role of tools like braille devices, optical aids, mobility canes, and speech synthesizers, the slow societal adaptation to these technologies continues to limit full inclusion in educational and professional settings.

As an illustration, a participant remarked, "Even though technology has come a long way, the way people react hasn't caught up. They still doubt my ability to teach effectively just because I use assistive devices," and another said, "People still assume that because I'm using a cane or a speech synthesizer, I'm completely helpless. It's frustrating because these tools actually make me more independent, not less." These comments emphasize the divide between the practical empowerment provided by assistive technology and persistent social misconceptions about their use.

Responses such as, "Sometimes colleagues or students see the technology and focus more on that than on my skills or knowledge. It's like they're surprised that I can actually do my job well," and "I feel empowered when I use my braille device to prepare lessons, but when people see it, they often just see the disability, not the competence" were uttered in frustration, which highlights the disparity between how visually impaired educators perceive their own capabilities and how others perceive them. Despite the undeniable benefits of using assistive technologies to enhance the autonomy and professional competence of educators with visual impairments, participants reported frequently encountering outdated, stereotypical reactions, which not only affected their professional interactions but also affected their sense of inclusion and validation in education settings.

3.5 Calls for Institutional Support

Despite their unanimous agreement on the need for structured training and ongoing support, participants reported that their institutions provided minimal digital learning materials designed specifically for educators with visual impairment, which indicates a critical gap in institutional support. The participants called for education institutions to take a more proactive role in integrating assistive technology into their learning environments, particularly for educators with visual impairments. A participant highlighted the absence of institutional support by stating, "There is no such kind of support, not even a special disability office that provides us with accessible materials other than the school curriculum, which is available in braille only."

Participants emphasized that universities should offer structured training programs, with one suggesting, "At the university level, each university must prepare a prerequisite or course on how to use assistive technology skills from beginner to advanced levels." They expressed that such courses would not only enhance technical proficiency but also foster confidence in educators with visual

impairments by equipping them with the skills needed to effectively integrate assistive technologies into their instructional practices.

Providing structured training would, furthermore, demonstrate institutional commitment to inclusion and accessibility, thereby encouraging a more supportive learning environment, as indicated by a participant, "When universities take the lead in training, it shows they value accessibility and are actively working to bridge the gap between technology and practice." Another participant specifically emphasized the importance of financial and logistical support, by recommending that "universities should not only provide training but also allocate funds to ensure that assistive technologies are accessible and regularly updated. Without proper funding, even the best training programs won't make a difference."

These insights underline the urgent need for increased awareness and support from educational institutions to normalize and encourage the use of assistive technology, not only for educators with visual impairments but for persons with visual impairments in general.

4. Discussion

The qualitative analysis of the interview data shows that educators with visual impairment rely heavily on assistive technology in their daily routines, which enables them to interact more effectively with their surroundings. This finding emphasizes the importance of continuous refinement of these technologies to enhance their efficiency and ensure seamless integration, especially in developing countries where accessibility remains a significant challenge (Fernández-Batanero et al., 2022).

Participants referred to the necessity of a holistic approach that integrates both hardware and software into their routines, which reflects the diverse technological requirements of educators with visual impairment. Understanding the factors that drive the adoption of assistive technology can help stakeholders, including policymakers and developers, design solutions that meet the needs of both educators and learners in foreign language education (Nguyo, 2015), while simultaneously preventing inadvertent exclusionary practices (Rokach et al., 2021).

A thematic analysis of the interview data suggests that fostering receptive skills requires not only access to assistive technology but also effective integration for more complex and time-consuming tasks. Participants emphasized the need for targeted interventions to address challenges that general assistive technologies may not resolve adequately. They proposed workshop sessions aimed at optimizing the use of assistive technology in different scenarios. Additionally, they emphasized the need for collaborating with developers to enhance language learning applications, to ensure that developers not only include accessibility features but also usability enhancements that incorporate direct user input in terms of navigation and access. Essential features, such as search functions, bookmarking, commenting, and keyboard shortcuts, were identified as crucial for enhancing accessibility.

Moreover, the findings reveal that assistive technology is deeply integrated into the daily lives of participants, and extends beyond professional use into personal routines. Given this level of reliance, future research could explore how educators with visual impairment allocate their time when using assistive technology, to shed light on usage patterns and identify areas for improvement. Participants also emphasized the transformative role of assistive technology in language development, and demonstrated how it contributes to significant improvements in receptive skills. Investigating the mechanisms behind these improvements could help shape evidence-based approaches to assistive technology integration in foreign language education, particularly in Jordan, where this area remains underexplored.

Despite the advantages of assistive technology, institutional support remains inadequate, particularly regarding the availability of digital materials designed for educators with visual impairment. The systematic neglect of accessibility needs in Jordan's education institutions presents a major obstacle to inclusion. Future research should investigate whether this issue stems from a lack of awareness, technological constraints, or financial limitations.

Based on participants' insights, four primary categories of assistive technology devices that can be used to support receptive skills were identified, which provides a framework for understanding the diverse roles of assistive technology in language learning.

- Enabling devices are technologies that enable users to engage with listening and reading tasks that would otherwise be inaccessible, such as talking media players that improve listening comprehension.
- Enhancing devices are tools that improve the efficiency of completing receptive skill tasks, such as wireless headphones and microphones that enhance audio clarity for learners.
- Special-purpose devices are technologies designed for specific educational functions, such as braille displays that help with spelling and textual comprehension.
- Compensatory devices are alternatives that enable tasks to be completed through a different method, such as braille embossers that convert printed text into tactile formats.

5. Conclusion, Limitations, and Future Directions

Assistive technology plays a fundamental role in fostering receptive skills for educators with visual impairment, thereby ensuring greater access to educational content. However, challenges persist regarding accessibility, institutional support, and technological limitations. The findings underscore the need for more user-friendly assistive technologies that are tailored to the specific needs of educators with visual impairment, particularly in EFL contexts.

A broad spectrum of assistive technologies and strategies is available to help persons with visual impairments overcome the challenges they encounter in accessing education. In this study, four primary types of assistive technology were

reportedly used by educators with visual impairment in Jordan. While assistive technology serves as a vital tool in supporting educators, it is essential to recognize that the needs of users differ based on the degree and onset of their impairment. A particular device, method or approach that is beneficial for one individual may not be as effective for another. Therefore, effective implementation and ongoing training are crucial to increasing assistive technology literacy of educators and learners alike.

Even though it is sound in design and procedures, this research is not without limitations. The primary limitation lies in the small, purposefully selected sample, which comprised only seven visually impaired educators (five teachers and two university instructors). While the study, being qualitative in nature, does not aim to generalize its findings, it nonetheless provides rich, in-depth insights that may be applicable to visually impaired EFL educators in Jordan or in comparable education contexts. Additionally, the focus on educators from a single public school and two universities may not fully capture the diversity of experiences faced by visually impaired educators in different regions or education settings in Jordan. Moreover, the data collection relied on self-reported interviews, which may introduce subjectivity and response bias. In addition, despite efforts to maintain objectivity, the thematic analysis, conducted primarily by one researcher, albeit corroborated by another, may inherently reflect interpretive bias, which could affect the robustness of the conclusions drawn.

To address the challenges identified in the research, it is imperative that education institutions take a more proactive role in assistive technology integration, particularly for educators with visual impairments. This could include establishing dedicated accessibility offices at schools and universities to support visually impaired educators and providing ongoing training on effective assistive technology use. Furthermore, policymakers should commit to creating targeted funding opportunities for assistive technology training programs, to ensure that visually impaired educators have access to both the tools and the skills necessary to utilize them effectively.

In addition, there is a pressing need for universities to incorporate assistive technology training into teacher preparation curricula, to not only enhance the professional development of visually impaired educators but also to foster a more inclusive teaching environment. Collaborative initiatives between educational institutions and technology developers are crucial for designing user-friendly tools that address the specific needs of educators with visual impairment.

Future research is needed to explore how emerging technologies can be optimized to improve accessibility and inclusion. Given the growing number of educators with visual impairment and learners eager to improve their proficiency in English and other languages, innovative digital tools, such as computer-based education applications, interactive games, and speech-enabled platforms, can bridge gaps in accessibility through more user-friendly software specifically designed to support skills acquisition and development in persons with visual impairments.

Research is also needed to examine the utility of diverse technological enhancements, including laptops, tablets, and smartphones, for optimizing user experience across popular digital platforms. Examining how assistive technology

functions in various education contexts with differing resource levels could improve the generalizability of the findings beyond the current sample from three Jordanian institutions.

Adopting a user-driven approach, where representative samples of visually impaired educators and learners actively participate in pilot projects, could offer valuable insights for designing future technologies. Such initiatives would also help shape public policies on accessibility, to guide institutions toward developing customized services that better meet the needs of persons with visual impairment.

This study focused on an underexplored area in EFL research, namely the extent to which educators with visual impairment utilize assistive technology to develop their receptive skills, and the obstacles they encounter in the process. The findings reveal that Jordanian educators with visual impairments actively engage with assistive technology, and leverage it to expand their access to diverse education content across multiple platforms. Their experiences emphasize the transformative potential of assistive technology to overcome accessibility barriers. By fostering stronger institutional support and prioritizing user-centric technological innovations, education settings can become more inclusive, thereby empowering visually impaired educators to thrive professionally and personally. Continued research and advocacy in this area are essential to ensure that assistive technology fulfills its promise of enhancing education access and equity for all.

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