



Navigating the Dearth of English Braille Study Materials for Visually Impaired Undergraduates

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Abstract

Study materials play a crucial role in the education of English as a second language for both sighted and visually impaired learners. Undergraduates with visual impairment can use braille, audio, and screen reading study materials, with braille being particularly instrumental in developing reading and writing competence. This research explores the dearth of braille reading materials for visually impaired undergraduates in the acquisition of ESL. The objectives include examining this dearth of braille English study materials while proposing viable solutions. Employing a qualitative approach, the research involved interviews with two special needs instructors as well as thirty students, fifteen each with and without visual impairments, from the second and third-year batches at two state universities. A comparison of the reading materials used by these students revealed a contrast, with sighted students having Ample resources than the visually impaired. Despite both universities offering English instructors and audio study materials for blind students, there is an absence of textbooks in braille for English. Although braille question papers are provided for some students, it takes time to read as the braille material is bulky. For some, computers are provided instead of braille facilities. The study recommends enhancing facilities for visually impaired students, including the provision of textbooks, question papers, and handouts in braille. Additionally, specialized instructors proficient in braille can contribute to improving English as a second language proficiency among the visually impaired.

Keywords: Dearth, Braille Study Material, Visual Impairment, English as a Second Language, Reading.

1. Introduction

The utilization of study materials is a right of students of any academic discipline. Particularly, in the context of language learning, using study materials is mandatory to foster familiarity with the targeted language. This necessity cannot be distinguished between sighted and visually impaired students, the latter including students with ‘a disability of the sense of sight ranging from low vision to total blindness’ (Guanoluisa et.al, 2022). This study attempts to throw light upon the study material utilized by Sri Lankan undergraduates who can be included in the category identified by the above definition.

Undergraduates with visual impairment can use study materials via braille, audio, and screen reading mediums. Among these, braille medium is predominant in developing reading and writing competence. The Braille system is made up of dots which are printed in a manner which can be read with fingers. As the definition goes,

‘Braille is not a language. Rather, it is a code by which many languages such as English, Spanish, Arabic, Chinese, and dozens of others may be written and read. A full braille cell consists of six raised dots arranged in two parallel rows each having three dots. The dot positions are identified by numbers from one through six. Sixty-four combinations are possible using one or more of these six dots. A single cell can be used to represent an alphabet letter, number, punctuation mark, or even a whole word.’

As explicated above, braille medium is methodically designed for facile utilization for learners with visually impairment. Whilst audio and screen reading mediums do facilitate the visually impaired to a great extent, comparatively, it is not designed specifically for them as the braille system.

Thus, braille material is more convenient and efficient to cater to the academic needs of visually impaired undergraduates rather than the other alternative modalities.

Several studies have been conducted about the concerns related to the educational challenges of the visually impaired community. Guanoluisa et.al, shed light on the constraints of this health condition, as it does not allow learners to complete educational tasks in a parallel manner to sighted learners, affecting their proficiency in English language learning (Guanoluisa et.al, 2022).

Kapperman and fellow researchers argue that foreign language instruction ought not to be confined solely to auditory input, ‘since being able to read and write the language is also of paramount importance’ (Kapperman et al., 2018). According to Cárdenas & Inga, internalizing a foreign language is a challenge for all students, but it becomes a more pronounced challenge for the visually impaired students (Cárdenas & Inga, 2021). A research which involved 90 teachers, revealed a scarcity of accessible and utilizable basic teaching materials for visually impaired students (Efstathiou &

Polichronopoulou, 2015). According to Zheng, the teachers and educators have little knowledge and skills to support blind students in most of the educational contexts (Zheng,2014).

This research attempts to explore the dearth of braille reading materials for Sri Lankan visually impaired undergraduates in the acquisition of English. The objectives of the research are to explore the dearth of braille English study materials for visually impaired students and to find appropriate solutions.

2. Methodology

A qualitative approach was employed to carry out this research. Two special needs instructors and thirty students with and without visual impairment from the second- and third-year batches of two state universities were utilized as key informants. Fifteen students were visually impaired whereas fifteen were not. Both blind and sighted students are taken as the sample as then the contrast between the availability of English study material for the blind and sighted students can be clearly explored. Two universities are considered to maintain impartiality while arriving at accurate conclusions with ample data.

These key informants were interviewed by the researchers and in these group interviews, they were asked about their perceptions and experiences with regard to the availability of the English study materials. The duration of these group interviews was 30 minutes. Then, data gathered from these thirty interviews were thematically analyzed and while analyzing data, the availability of reading material of these students were compared and contrasted with each other. Through this data analysis, the researchers derived significant conclusions on the dearth of Braille study material.

3. Discussion

The data acquired through interviews revealed a stark contrast in the accessibility of English study materials between sighted and visually impaired students. Through the data collected via the interviews, it was identified that sighted students comparatively have ample English reading material which can be utilized in improving their English language competence.

It should not go unnoticed that both the universities have facilitated blind students with an English instructor or a lecturer and audio study materials, fostering a positive impact on their knowledge of English. However, a notable limitation was perceived according to interview data, as many of these English instructors are not familiar with the braille medium. Thus, the writeups/essays or tutorials of the students cannot be accurately read by the lecturers if those are written in the braille method. Addressing this limitation, if ample braille reading materials were provided for the students, they could engage in self-studies to a considerable extent.

According to the data gathered from the students, the textbooks are not provided in braille medium for any subject including English in both universities. While the handouts and examination papers are provided in braille medium at one university, that facility is not yet available at the other university.

Furthermore, the absence of braille books in the library of one of the universities is indicative of a dearth in catering to the educational needs of visually impaired students. In contrast, while the other university does possess braille reading materials, it was revealed that most of these resources are not intricately relevant to the academic curriculum. They predominantly serve as supplementary reading materials, contributing minimally to the substantive enhancement of English language proficiency among visually challenged undergraduates. The necessity of a reevaluation and restructuring of existing support frameworks is emphasized here in order to create a more inclusive academic environment.

Visually impaired students one university encounter challenges in reading braille question papers, despite their provision. It takes a considerable time for them to read the entire paper as the braille material is bulky. Hence, the adoption of braille contractions can be considered as a solution to reduce this bulkiness to a certain extent. Braille contractions is a standard method to write textbooks and other reading materials. In this system, 'cells are used individually or in combination with others to form a variety of contractions or whole words' (Sight Scotland,2023).

The employment of contractions can be explained as follows. This standardized method, commonly employed in textbooks, represents entire words or common combinations as abbreviated symbols. For instance, 'M' signifies 'Mother,' 'F' designates 'Father,' and amalgamations like 'ER,' 'AR,' and 'EN' are encompassed within singular slots, minimizing the need for exhaustive transcription. Yet, as revealed through the interview data from the special needs instructors, a significant number of undergraduates within the visually impaired community tend to be unfamiliar with the braille writing system. This underscores the pressing need for targeted educational initiatives elucidating the advantages of braille contractions, aiming to enhance proficiency and accessibility in higher education contexts.

According to the data gathered from the two special needs instructors, until recent times, the members of the academic staff at one university had to read out the entire examination paper. The soft copy is provided now, which is a comparative development in terms of the educational development of the visually impaired. Yet, it should be noted that it is not as effective as the braille reading medium. This juxtaposition underscores the ongoing challenges in optimizing educational accessibility for visually impaired students, necessitating further examination of alternative strategies and technological interventions to enhance the overall quality and effectiveness of educational provision.

It ought to be mentioned that there is an efficacious audio book program conducted by one of the universities, which enriches the visually impaired with both study related and supplementary material.

One can argue that audio and screen reading materials are likewise easily accessible and thus, adequate for visually impaired undergraduates to improve their knowledge of English.

Yet, the auditory nature of audio material supports their knowledge via listening, indirectly weakening the writing competency of the students. In contrast, the braille system allows students to improve their knowledge of grammar and spelling more than the audio and screen reading materials as it provides a firsthand writing experience. Consequently, when considering the holistic improvement of writing abilities, the braille medium emerges superior to audio and screen reading materials. This sheds light on the imperative to discern the pedagogical implications of tailored approaches that address the multifaceted educational needs of the visually impaired.

In Sri Lanka, there is a limited number of braille displays and the only national braille press at the National Institute of Education caters to print only textbooks, creating an insufficiency in the provision of diverse braille materials.

While the blind school at Ratmalana also contributes by printing textbooks and necessary study materials, the economic crisis prevailing in the country has escalated costs, rendering services from the three private entities offering braille printouts prohibitively expensive. Owing to the same crisis, the importation of the devices which were imported earlier is now terminated. Even though international braille reading materials can be borrowed, most do not have adequate technical knowledge to use them. Even if they possess that technical knowledge or get some support from tech-savvy friends, there is a financial barrier, as these online materials are very expensive. This situation indirectly limits the access to the braille reading materials available. Consequently, this intricate interplay of economic challenges, limited local resources, and a dearth of technical proficiency collectively constrains the accessibility and utilization of available braille reading materials in Sri Lanka.

The educational experiences of sighted and visually impaired students manifest a dichotomy wherein the former, through incidental exposure via newspapers, labels, name boards, and notices, acquires an implicit familiarity with letters, spellings, and language. In stark contrast, visually impaired students do not receive such indirect educational input, resulting in a comparative lag in their English language proficiency. The consequential deficiency in indirect exposure underscores the pivotal importance of tailored reading materials for visually impaired students, as this medium serves as a critical medium for bridging the observed gap.

This educational disparity further manifests in the uneven development of the essential language skills listening, reading, writing, and speaking among visually impaired undergraduates in Sri Lankan university context.

Despite the fact that the discussion revolves around the undergraduate level, it advocates for an imperative paradigm shift in the early education of visually impaired students, emphasizing the initiation of braille reading training as an early intervention in their childhood which can lead to a holistic and balanced development of language skills.

4. Conclusion and Recommendations

In the light of the findings of the research, due to the conspicuous dearth in braille reading material, a pressing need for comprehensive enhancements can be perceived. This research attempts to bring forth the requirement of providing more facilities catering to the academic needs of the students with visual impairment including the provision of textbooks, question papers, handouts in braille medium. Additionally, the significance of instructors specialized in braille medium is highlighted in this research. Extending braille instruction beyond the undergraduate level, improving the augmented facilities at the school level is another recommendation. The implementation of targeted interventions could cater to enhance the English language and literacy competence of visually impaired second language learners, effectively addressing the conspicuous dearth in braille resources.

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