

Examining Braille Material and its Support in the Academic Process

Revisión del material braille y su apoyo en el proceso académico

* Original Research Article

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Abstract

For students with functional diversities, braille materials are a crucial part of the foundation of the academic process. The current study intended to analyze whether the braille resources available in a public library supported the educational process of students with visual impairments. To address every aspect that affected their academic process, a qualitative descriptive type of research was conducted with three visually impaired students, three teachers, and five librarians of a public university in Colombia. The data collection instruments were document analysis of braille material, surveys and semi-structured interviews to cover the different perspectives and familiarity that the population had with the resources. The preliminary results displayed that the library had a lack of braille resources in accordance with the number of blind students from different faculties that the same possesses. The implications that the absence of braille resources has for the academic process are covered in the article that follows.

Keywords: braille, inclusive education; public university; social inclusion.

Resumen

Para los estudiantes con diversidades funcionales, los recursos en braille son cruciales en la base del proceso académico. El presente estudio buscó analizar si los recursos disponibles en braille apoyaban el proceso educativo de los estudiantes con impedimentos visuales. Para abordar los aspectos que afectaban su proceso académico se realizó una investigación cualitativa descriptiva con tres estudiantes con discapacidad visual, tres profesores y cinco bibliotecarios de una universidad pública en Colombia. Los instrumentos de recolección de datos fueron un análisis documental del material braille, encuestas y entrevistas semiestructuradas para abarcar las diferentes perspectivas y la familiaridad que la población tenía con los recursos. Los resultados preliminares dieron a conocer que la biblioteca tenía un déficit de libros en braille, de acuerdo al número de estudiantes ciegos que esta universidad posee. Las implicaciones que la falta de recursos braille tiene sobre el proceso académico de los estudiantes son abordados en el siguiente artículo.

Palabras clave: braille, biblioteca pública, educación inclusiva, inclusión social

Introduction

Inclusion in Colombia as in the rest of the world is an issue to be tackled to improve values and equity in our society. Correa et al. (2008) define inclusion as the responsibility of citizens and government agents to attend to inequity in cultural, socio-economic and individual necessities. These features of inequality are reflected in ethnic communities, illiterate people, people displaced by violence and people with special needs. Hence, in Colombia, the concept of inclusion holds significant importance as it is seen as the essential process of integrating individuals with diverse life situations into society. It goes beyond mere acceptance and aims to create an equity environment where everyone can actively participate and contribute, regardless of their background or abilities.

To achieve equity, inclusive material must be provided to aid people with functional diversities perform tasks in a context designed for people with non-impairments. It is important to highlight that inclusive materials used in educational contexts are also useful tools to reinforce knowledge outside the classroom (Rosado-Castellano et al., 2022). In that sense, we are emphasizing on the role of inclusion as the implementation of tools for disabled people in a natural context, such as the library setting.

It is necessary to put a lot of attention into backing up libraries because they play a fundamental role in supporting the learning development of students. Additionally, personal and social competencies are enhanced, which helps them solve problems in daily life situations (Abidin et al., 2021). These centers of

knowledge mentioned should be considered inclusive spaces since they reinforce the learning process independently of the different necessities. For that reason, libraries should be equipped with inclusive material, and librarians should receive the appropriate training to facilitate the use of all the resources that the library can offer.

According to the assistance that these settings can provide for individuals with functional differences, active members of national institutions in Colombia have published guide booklets, such as the one by Correa et al. (2008) that sought to support the adoption of an inclusive approach in institutions. Another study that was specifically designed for libraries was the one presented by Valbuena et al. (2020), whose goal was to examine the compliance of inclusive policies at the libraries run by the Servicio Nacional de Aprendizaje (SENA). It was found that SENA libraries do not meet the criteria for offering an inclusion service.

The research done in the SENA about the compliance of inclusive policies and verification of facilities and inclusive equipment serve as evidence that libraries should be improved to reach all types of populations. However, the study only represents a selected number of libraries that are run by this organization. For instance, Boyacá does not have any studies on the value of braille resources in public libraries.

The lack of research in Boyacá highlights the insufficient attention given to this issue in the local context. The national government has implemented strategies to underscore the importance of ink braille books and resources for blind

individuals, aiming to alleviate the consequences resulting from a lack of awareness, such as inadequate material and support for public libraries. For instance, resolution 20191200001433 of 2019 [Ministerio de Educación Nacional]. Por lo cual se dota de material especializado a instituciones educativas y bibliotecas del país. 2019, July 19th. This resolution aims to support the various public libraries by supplying them with a specific quantity of books in braille ink. In addition, there are agreements, as the one mentioned below, that aim to enforce inclusive policies in each university individually, similar to this resolution.

As the basis for this article, agreement 015 of 2021 Article 03. [Consejo Superior de la Universidad Pedagógica Y Tecnológica de Colombia]. Por el cual se adopta la política de educación Superior Inclusiva y Diversa que fortalezca el ingreso, permanencia y graduación a poblaciones vulnerables de la Universidad Pedagógica y Tecnológica de Colombia. April 9th, 2021 was taken into account. It defines inclusive education as a permanent process that appropriately meets the diverse characteristics, possibilities, and expectations of undergrads without exclusion. It must guarantee reasonable support and adjustments to the educational process of its students. Its main focus is adopting policies that strengthen the permanence and graduation of vulnerable populations such as ethnic groups, victims of the armed conflict in Colombia, individuals with different sexual orientations, populations with special needs, among others.

Thereby, one of the specific objectives outlined in the agreement is to develop strategies that minimize the barriers hindering the educational continuity of students with diverse needs. Additionally, the agreement emphasizes the

importance of training the university community and creating inclusive dialogue spaces that embrace diversity. These actions aim to guide and direct institutional practices to ensure an inclusive educational process for all students.

Building upon the principles of inclusive education outlined in the agreement, this research focuses on analyzing the extent to which the braille material available in the main library of a public university in Tunja, Colombia meets the needs of visually impaired students. The study was conducted by categorizing the resources available in the library. The findings indicate that out of the total 44 braille books available at the university, only four were found within the library selected for this research. This article follows a structured approach that includes a literature review, methodology section, data analysis, conclusion, and culminates with a discussion that provides implications for further research.

Literature review

Inclusion

Everyone needs to have an equal chance to participate in tasks in a social setting so they can all feel included and play important roles in society. Murillo and Duk (2016) analyze the concept of inclusion by focusing on how all students should be treated equally, regardless of their needs. They stress the importance of removing obstacles that prevent differences in society from performing equally. Having mentioned this, Murillo and Duk (2016) define inclusion as the ongoing

implementation and innovative use of strategies aimed at overcoming the diverse needs and backgrounds of every kind of student within the educational context.

Additionally, it is crucial to acknowledge the diverse backgrounds and cultures of students because they reflect different needs and worldviews (Parada, 2017). By being aware of this, educators can adjust their strategies and give each student the specialized support they require. As a result, acknowledging different backgrounds is a crucial first step in promoting inclusion (Nanjunda, 2017) because it lays the groundwork for addressing and embracing the distinctive qualities and needs of each student.

The work of recognizing the diversity of students is a responsibility assigned to the inclusive society. As asserted by The United Nations World Summit for Social Development (1995), the inclusive society is tasked with reducing exclusion and advancing inclusion by facilitating an active participation of individuals with impairments within society. This endeavor serves to diminish the disparities in opportunities and foster a context that upholds equality for all.

Libraries and librarians play a crucial role in fostering an inclusive society, as they bear the responsibility of ensuring that their services are accessible and cater to the diverse needs of the entire community. To effectively accomplish this, Wickramarachchi (2021) emphasizes the need for libraries and librarians to evolve beyond their traditional roles. This can be achieved through the development of programs that prioritize adapted learning, the creation of barrier-free environments,

and the promotion of universal access, through the concentration of issues related to education, culture, literacy, and social welfare.

Universal Access

Universal access opens up possibilities for more marginalized populations, countries with lower levels of development, and people with disabilities to access public centers, infrastructure, and facilities (Ling, 2017). Public centers, such as libraries with the goal of achieving universal access, play a vital role in encouraging and promoting equity. They achieve this by ensuring that everyone can access the same amount of information independently, regardless of their physical or social characteristics.

To ensure that everyone can utilize the services offered by a library, Irvall and Nielsen (2005) presented a checklist outlining the essential characteristics libraries should encompass. The most significant features include physical access, which refers to the facilities and physical space; media formats, suggesting for libraries to offer diverse book versions, such as braille books, to reach a broader population; and service and communication, emphasizing the importance of specialized training for librarians to assist disabled patrons. Considering and implementing improvements based on this checklist is vital to foster a more equitable society.

Inclusive Libraries

Inclusive libraries serve as welcoming and accommodating spaces that are accessible to all populations, ensuring that everyone can benefit from a wide range of information services (Nanjunda, 2017). These libraries play an important role in

promoting equity within communities by facilitating the learning process and fostering social inclusion (Lodge & Stewart, 2022). In this situation, readers from diverse backgrounds, abilities, and interests come together to explore, engage, and connect with the vast reservoir of knowledge. The collective of these factors influenced international and national research to be conducted on social inclusion and social policies.

In India, Nanjunda investigated the role of the library in social inclusion and the social policies that such places integrate to accommodate minorities. For this purpose, 35 librarians and 75 readers belonging to a disadvantaged group were selected by means of a purposive sample technique. The total number of participating universities was 30, including municipal level libraries, academic libraries, district level libraries, among others. The method of data collection was well structured survey questionnaires. The results demonstrated that “More than 45% of the library staff does not have any idea about social inclusion” (Nanjunda, 2017, p. 45). Consonantly, it was evidenced that none of the libraries have implemented any programs for promoting social inclusion since they were established

In Colombia, Bolaños et al. (2020), carried out a project that compared the Colombian inclusive policies with the reality of public libraries. Therewith, the author made a descriptive study analyzing the services, infrastructure, equipment, and trained personnel. The study involved librarians from public university and school libraries as participants. The author demonstrated that “ 60% de la población en sus lugares de trabajo no han implementado ningún medio de comunicación

para las personas con discapacidad, sin embargo, el 40% restante reconoce que utilizan sistema braille” (60% of the population in their workplaces have not implemented any means of communication for people with disabilities, however, the remaining 40% recognize that they use Braille") (p.20). The analysis revealed that despite the presence of users with disabilities at the library, the institution has not taken proactive measures to establish inclusive spaces or cater to the needs of its entire population. This observation indicates that, despite the presence of inclusive policies in this country, libraries are insufficient in their capacity to cater to the needs of the entire population.

On the same insight, Beltran (2020) aimed to diagnose the virtual and printed resources, infrastructure, and services offered by the CGA library of the National Learning Service (SENA) to visually impaired students. For the development of the study, a series of interviews and observations of the physical resources and infrastructure were conducted. It was shown that the institution possessed virtual resources such as specialized software. The author issues a compelling appeal to the institutions responsible for supporting students' educational processes, urging them to view the study's findings not as criticism, but as an invaluable opportunity for growth and enhancement.

Additionally, the Instituto Nacional Para Ciegos (INCI) took proactive measures by implementing a strategy to distribute braille book kits across public libraries in Colombia, each containing 10 braille books (Ministerio de Educación Nacional, 2019, Resolution 20191200001433). In Boyacá, a total of 125 public libraries located in Muzo, Quipama, and Tunja were equipped with four of the

mentioned Braille book kits. While this strategy has reached a portion of the public libraries across the municipalities, there is currently no specific association with public universities. Therefore, conducting a critical analysis of the braille material available at the main library of a public university, which has not been previously investigated, becomes necessary.

Data and Methodology

A qualitative approach was used in this investigation for analyzing the variety of library resources. As Hernandez-Sampieri (2020) pointed out, qualitative studies are distinct from quantitative ones as they do not rely on numerical data. Instead, they employ various data collection techniques such as evaluating personal experiences, interacting with groups, conducting semantic analyses, and more. This approach was chosen because it offers the opportunity to gather the necessary data from a series of document analyses, forms, and semi-structured interviews.

Furthermore, the investigation was framed as qualitative-descriptive research, which distinguishes it from other qualitative research types like grounded theory or action research (Lambert & Lambert, 2012). Unlike these approaches, the selected method offers more flexibility and does not strictly adhere to their guidelines. This choice also allowed for the utilization of a focus group as the primary participants, providing valuable insights into the satisfaction of students' needs concerning the service offered. Moreover, the chosen research type

facilitated data collection through document examination, specifically using the books found in the library as valuable sources of information for the study.

Research Context and Participants

The study was conducted in the second semester of the year 2022 at the main campus of a public university in Tunja, Colombia, where it is located the library selected for this study. The university comprises three sectional campuses, six extension program campuses, and 24 regional distance learning centers. Additionally, U-Sapiens 2022-2 ranked the university as the 11th-best university in Colombia according to research indicators.

In the same way, the participants in this study were library staff, professors, and visually impaired students in the humanities area. Three university scholars were chosen for this research project, all of whom have required the services offered by the library during their academic careers. Among them were undergraduates with low vision, some of whom were proficient in handling the braille writing system, while others were not.

Otherwise, three teachers from the faculty of education were selected for interviews based on their pedagogical experiences with students of diverse backgrounds and abilities. Additionally, five members of the personnel, including

the head of the library, were included in the assessment to determine their knowledge of the library's inclusive resources.

To protect their real identities, we assigned some pseudonyms. For library staff Ariada, Juana, Julia, and Leyla. The students were named Laura, Juliana, and Luisa. Finally, teachers received the alias Ryand and Claudia. Also, they signed a consent form to record their voices, and use the data collected for research purposes. According to Cohen et al. (2017), the term participants or population in this context refers to both the individuals and the textbooks that were being analyzed. The population was the fundamental key to determine the quantity and quality of braille material and inclusive library resources throughout a critical description of that.

Instruments for data collection

The instruments used for data collection were document analysis, online surveys and semi-structured interviews. Firstly, as Meriam (1988) pointed out, all types of documentation help analyzers to understand and discover relevant insights into the research problem. This was convenient since a portion of the population comprised braille books. Besides, a document analysis can reveal the range and diversity of braille books available in the library. This helps identify potential gaps in the collection. Further, the findings of the analysis can be used as

evidence to advocate for more resources, funding, and support for equipping accessible resources.

As a second instrument, we selected an online survey because it offers several advantages for data analysis. As established by Minnaar and Heystek (2016) these pros can be reflected in the global reach, time efficiency, question diversity, branding capability, and the most beneficial for this research, the ease of data entry and analysis. Through online surveys, it was possible to address one of the pivotal points: evaluating the librarians' training to assist students with special needs and their awareness of the braille material available in the library.

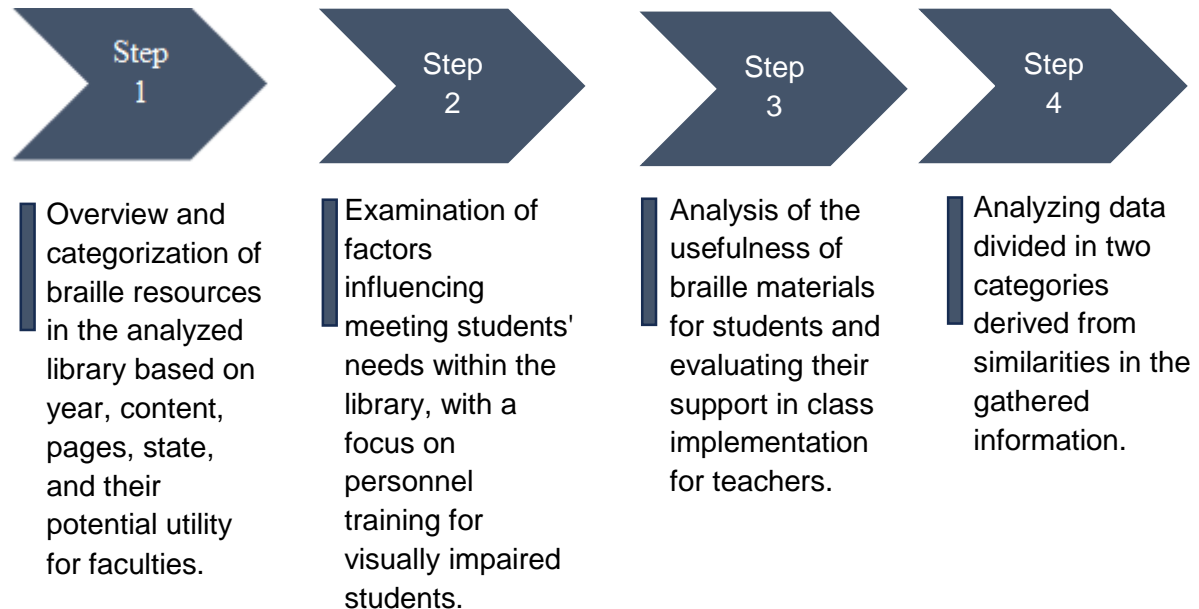
As a final instrument, a semi-structured interview was applied to examine the answers of the participants closely, so that all the expected topics could be covered together (Harrell and Bradley, 2009). The last instrument was applied to students, professors, and staff that provided further information about the material and the library. This type of interview was chosen because this allowed us to understand their perceptions about the material found in the library.

During the data collection process, we followed a four-step analysis: Step 1 entailed an overview of the Braille resources available in the analyzed library; Step 2 involved delving into the factors that influence meeting the students' needs within the library. This step included incorporating information about personnel training to support students with visual impairments; Step 3 centered on exploring the

preceding steps with a strong emphasis on the material's usefulness for students and the support provided by braille materials in class implementation for teachers; lastly, Step 4 focused on defining and analyzing the data divided into two categories that arose from similarities in the information gathered during the overall data analysis process (see Figure 1).

Figure 1.

Data Analysis Steps



Data analysis

To examine the data gathered from document analysis, online surveys, and semi-structured interviews, we utilized Thematic Analysis (TA) as the fundamental approach in this study. As illustrated by Braun and Clarke (2006), this method offers numerous advantages for data analysis. For instance, the

coding process can be flexible and adaptable throughout the information examination. Employing TA allowed us to create a well-organized summary, aligning with the approach's beneficial attributes (Brooks et al., 2015). Furthermore, we generated category names by condensing essential data features from the analysis and classifying the written material, online interviews, and oral information into two main categories. Lastly, the analysis was reinforced by the examination of vivid data, which included Spanish excerpts from the interviews.

This article was divided into two categories, the first called *Utility and availability of inclusive library resources*. The existing material was analyzed and categorized. The second one is *Inclusive Resources' Impact on Librarians, Teachers, and Students' Academic Support*. This shows an analysis of responses from library principals, students, and teachers. These categories were used for the purpose of answering the research question.

Category 1: Utility and availability of inclusive library resources

A document analysis of the braille material was carried out by searching in the virtual catalog for the keyword "braille". For this research, it was considered material available in the library and in its virtual website. The analysis was performed through a classification of the material by publication date, genre, accessibility, and type of material located in the library. Once it was analyzed print

and virtual material, we proceeded to examine the additional spaces included in the library, such as: the spaces for reading, films, and additional resources. It was by means of the information provided by librarians through online surveys and interviews.

To ensure credibility and accuracy, the information obtained was compared with online surveys and interviews addressed to librarians. It was observed that the answers followed a pattern towards a major category that reflected the educational support provided by the existing material to people with visual limitations.

The findings revealed that the library partially meets the needs of visually impaired students, primarily due to the lack of physical materials accessible to all disciplines, since six braille ink books were found. Their publication ranged within a time frame spanning from 1997 to 2015. Most of them are *children's stories*¹ with embossed illustrations containing no more than 10 pages. Additionally, an old book titled *Plan*

¹ El libro negro de los colores: Written by Menena Cottin, it describes how a blind child perceives colors. This resource can be particularly beneficial for careers that involve working with visually impaired individuals. However, it may not be suitable for entertainment purposes at the university level.

Peter Pan: James Matthew Barry's delightful fairy tale, "Peter Pan," is located in the children's section of the library. Within the faculty of education, this book can serve as a powerful tool to inspire and motivate young visually impaired individuals, fostering their imagination and love for reading.

Pulgarcito: Charles Perrault's children's tale, it is housed in the children's section of the library. Within the faculty of education, this book holds the potential to motivate young visually impaired readers, making literature accessible and enjoyable.

*Nacional de Atención a las Personas con Discapacidad*² was found with no longer than 64 pages.

After this overview, it could be noticed that there are no titles addressing the various disciplines found at the university. This issue is remarkable, as Majinge and Stilwell (2014) stated, libraries are intended to assist teaching, learning and research as universal access to support inclusion as a human right. It means that libraries must supply a pertinent section of books in accessible formats for people with visual impairments such as large print books, talking books, braille materials, among others (Gunde, 1991). However, visually impaired individuals are restricted to accessing only a fraction of the library's collection, significantly reducing their reading choices and educational opportunities.

Likewise, virtual sources provide accessibility from any location with an internet connection. This means that every student can remotely access articles, books, and other digital services. In the case of visually impaired students, they can access this information through the use of two computers with specialized service located in the library. Moreover, it is relevant to remark that these resources can be printed in braille ink by an external entity of the library. It is a complementary organization of the university that offers assistance to people with functional diversities.

² Plan Nacional de Atención a las Personas con Discapacidad presents essential proposals for integrating and eliminating exclusive disparities within Pastrana's government plan (1998-2002). Developed by populations with sensory, physical, and mental limitations, this plan holds relevance for the human sciences, as it addresses the demands and necessities of visually impaired individuals. By recognizing and implementing the principles outlined in the plan, the human sciences can effectively combat exclusion and create a more inclusive society.

Given the fact that there are only 2 computers with specialized software, the staff contended in the surveys that these computers significantly enhance the learning process for visually impaired students. Conversely, Jose and Leyla, who are specialized personnel in the library's entertainment spaces, provided various responses concerning these areas. The following quotes are translated from interviews in Spanish:

“The only way for blind people to attend movie spaces is with descriptive audio. However, what does it happen with some original movies? Descriptive audio only explains how the director made the movie, but it does not narrate how the events are being presented in the movie”

(Jose, (2022, October 27th) Personal communication. [Librarian])³

“All the audiovisual media have closed captions, however, we have to improve how we propagate to this population all the cultural agenda that the library has for them to feel welcome”

(Leyla, (2023, February 17th) Personal communication. [Librarian])⁴

³ The original quote said: “La única forma para que las personas ciegas puedan usar eso (movies) es el audio descriptivo, pero, ¿qué es lo que pasa a veces con algunas películas originales? El audio descriptivo lo que hace es que el director dice cómo hizo la película, más no como tal como se están presentando los hechos en la película”

(Jose, (2022, October 27th) Personal communication. [Interview])

⁴ The original quote said: “todos los audiovisuales tienen los closed captions, de todas maneras, si tenemos que trabajar más en cómo difundir en esta población toda la agenda cultural que tiene la biblioteca para que ellos se acerquen”

(Leyla, (2023, February 17th) Personal communication. [Interview])

Library staff present contradictions in their answers, despite being connoisseurs of entertainment spaces. They claim to have inclusive policies by implementing closed captions, but fail to consider their appropriateness for people with disabilities. This inconsistency may stem from various factors, including the sense of authority they possess as workers and their reluctance to openly criticize the library's decisions or practices.

Category 2: Inclusive Resources' Impact on Librarians, Teachers, and Students' Academic Support

This name was given according to the common pattern of all surveys and complementary interviewees regarding knowledge and experiences with inclusive resources. The responses of the librarians, teachers, and students were related to the extent to which they were aware of the resources. As Duarte (2020) claimed “the continuous training of professionals who work in specialized educational assistance to students with visual impairments through the production and use of texts in braille is essential to guarantee this segment the essential access to autonomous knowledge” (p.18). In that sense, it is remarkable to evaluate how qualified the personnel are to support students' learning along with the inclusive material the library offers.

To support the analysis of category number two, an examination of selected excerpts obtained through semi-structured interviews during the

research process was conducted. As Braun and Clarke (2006) pointed out, the exploration of vivid data in thematic analysis greatly strengthens the research investigation. The analysis consisted of two excerpts from librarians, two from educators who have experience teaching visually impaired students, and three from students with visual impairments. These extracts are arranged by sections corresponding to the order in which the population was mentioned.

"We are not inclusive in that aspect, there is not any material."

(Ariadna, (2022, October 06th) Personal communication. [Librarian])⁵

"No, I do not know (if there is Braille material in the library). I do not think it (the library) has any."

(Juana, (2022, October 21th) Personal communication. [Librarian])⁶

Despite librarians acknowledging the absence of braille materials and its impact on the library's inclusivity, some of them appear disinterested in actively seeking information about the existence of such materials. Regardless of their specific roles within the library, all librarians should possess a basic understanding of how to locate materials, have a rough estimate of available resources, or at least be able to provide some general information on the subject. Wickramarachchi

⁵ The original quote said: "Nosotros no somos inclusivos en ese aspecto, no hay mucho material"
(Ariadna, (2022, October 06th) Personal communication. [Interview])

⁶ The original quote said: "No, desconozco (if there is Braille material in the library). Creo que (the library) no tiene"
(Juana, (2022, October 21th) Personal communication. [Interview])

(2021) emphasizes that librarians have a responsibility to go beyond their traditional roles and adopt a collective mindset. This approach would help address knowledge gaps within these spaces and promote inclusion.

It is important to note that the excerpts provided represent only a subset of those interviewed. In conversations with other librarians, it became evident that the library recognizes the current lack of braille materials and has proactive plans to address this deficiency with the goal of meeting the needs of visually impaired patrons. This indicates that some librarians are demonstrating a greater level of interest and awareness in improving the inclusivity of the library. Through these interviews, it is evident that the library is actively seeking to improve its services and accessibility for all users, including those with disabilities.

Below are extracts from the interviews conducted with the teachers. We inquired about the modifications made to class materials and whether they utilize or are aware of the resources available at the library for their visually impaired students. Furthermore, questions were posed to explore the connection between material preparation, personal readiness for teaching visually impaired students, and the library's involvement in this preparation.

"In fact, I did not look for the material in libraries, I prefer to design it. I do not know what is in the library, but the time that I would spend looking for material in the library, I prefer to spend designing it."

(Ryand, (2022, November 28th) Personal communication. [Teacher])⁷

"I decided to take a course offered by a separate entity ... I was more interested in the material, in the support of the separate entity than in the library material."

(Claudia, (2022, November 29th) Personal communication. [Teacher])⁸

It was evidenced that teachers of students with visual impairment are not aware of the services offered by the library for the development of their classes. In addition, according to the interviews, we can affirm that commitment to their students is a fundamental key in their educational process. This represents a great passion for teaching, which presents hope for the improvement of inclusive spaces. The commitment of teachers is related to the passion for teaching and the same passion serves as motivation (Celik and Yildiz, 2019). Additionally, the engagement of teachers to their students and to the role of teaching is reflected in their performance as teachers and is also reflected positively in their professional training (Siri et al., 2020). However, despite their commitment, they do not use the braille material in the library as support. Therefore, it does not represent a fundamental role in their teaching process.

⁷ The original quote said: "De hecho no es que yo busque el material en las bibliotecas, yo prefiero diseñarlo. De la biblioteca desconozco que haya y que no haya, pero el tiempo que yo puedo gastarme buscando el material en la biblioteca, prefiero invertirlo diseñando"

(Ryand, (2022, November 28th) Personal communication. [Interview])

⁸ The original quote said: "Decidí tomar el curso ofrecido por *la entidad aparte* ... Me interesé más por material, por el apoyo *de la entidad aparte* que por el material de la biblioteca"

(Claudia, (2022, November 29th) Personal communication. [Interview])

Finally, the students' responses were analyzed. During the interview, they were asked about the frequency with which they went to the library, the type of resources they used, and whether the resources they accessed met their needs without limitations. This group was questioned since the intention of the article is based on the experiences they had with the library material. In the interview process, their responses were important in the nature of the study, since the research had a strong emphasis on this population (Bolderston, 2012).

"If you totally lose your eyesight, it would be really limited to get the books you really need because they are only available virtually."

(Laura, (2022, November 21th) Personal communication. [Student])⁹

"I often have to strain my eyes to access the materials".

(Juliana, (2022, November 22th) Personal communication. [Student])¹⁰

"Most of the books that you need, let's say for studying, are mostly digital. To convert them (print them in braille ink) you have to carry them to the machine that the separate entity has to convert them to physical."

⁹ The original quote said: "si uno pierde totalmente la vista, sería muy limitado tener los libros que uno realmente necesita porque estos solo se encuentran de manera virtual".

(Laura, (2022, November 21th) Personal communication. [Interview])

¹⁰ The original quote said: "muchas veces debo esforzar la vista para acceder a los materiales".

(Juliana, (2022, November 22th) Personal communication. [Interview])

(Luisa, (2022, November 21th) Personal communication. [Student])¹¹

Students' lack of engagement with the library stems from the considerable effort required to access its materials. Instead, they seek support from external entities that provide assistance in obtaining the required resources. However, these external entities face limitations in supporting leisure reading, especially for Braille books, as they require specialized sheets and designated printing days to minimize noise disruptions during academic periods. This situation leads to dissatisfaction among students with the library's services, despite its significance in granting access to a diverse range of materials (Nanjunda, 2017). Consequently, students predominantly resort to another external entity to access the library's digital offerings.

Conclusions

In this research paper, we undertook the first attempt to classify the braille material discovered in the selected library. As a result, this research provides compelling evidence to advocate for greater availability of braille material. The research indicates that Article 03 of the 015 agreement is only partially fulfilled, as the library does have Braille books. However, the material offered consists primarily of children's stories, which the students do not use as developmental support in their classes.

¹¹ The original quote said: "La mayoría de los libros que uno necesita digamos ya sea para estudiar se encuentran más que todo digital. Para convertirlos (print them in braille ink) hay que llevarlos a la máquina que tiene una entidad aparte para convertirlos en físico"

(Luisa, (2022, November 21th) Personal communication. [Interview])

In addition, the use of braille material is partially considered by the educational community. As it could be evidenced in the different interviews, part of the staff could not give concise information about the type of books, or in which section they could be found. Even one of them had not read, or looked for a library book with a braille writing system. This represents the lack of importance given in the library to these communities or the lack of regularity of this population in the library.

Additionally, an unexpected finding was the request for specific strategies to engage this, since librarians have registered low attendance of visually impaired students. It can be assumed that even with improved resources for the visually impaired in the library, there is no guarantee that their attendance will increase. Therefore, it is vital to devise tactics to promote activities and spaces tailored to their needs. This approach could lead to increased attendance.

There remains a crucial opportunity to expand and enhance the collection to better serve the broader visually impaired community. By acknowledging the significance of this preliminary classification effort, we invite future initiatives to diminish the accessibility gaps, since further investigations play a vital role in formulating regulations and laws for both public and private organizations, ensuring adherence to inclusivity standards in everyday environments that are crucial for facilitating the learning process. Research contributions have the potential to genuinely promote inclusive spaces and eliminate barriers faced by students with diverse needs.

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