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TEMA:

The Braille System as a Didactic Strategy for Teaching Vocabulary in Blind Students at Centro de Apoyo Pedagógico Especial Imbabura

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Línea de investigación: Gestión, calidad de la educación, procesos pedagógicos e idiomas

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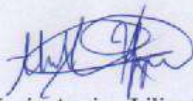| DATOS DE CONTACTO			
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DEDICATORY

I dedicate this undergraduate work to my parents, Dora Aguirre and Marco Yazán, who are my engine to move on daily. Thanks to their effort, I achieved academic goals like this one. Therefore, they are my whole world because they taught me how to face all obstacles that life presents me and how to be determined and trust myself. For that, I am truly thankful, and I never stop being grateful for having them like my parents. You, Mom and Dad, are the lovely light guiding me on every step. Again, thank you for your endless love and always supporting me. I love you forever.

- *Thalía Yazán*

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"The fruit of your own hard work is the sweetest."

Deepika Padukone

ABSTRACT

The present research work was developed to examine the effectiveness of the Braille system as a didactic strategy in conjunction with the Lexical approach to teach A1 English vocabulary to blind students. The research topic was born from the problem of scarcity of appropriate strategies, activities, and didactic material to teach English at Centro de Apoyo Pedagógico Especial Imbabura. This inquiry was mixed, and the data was collected through instruments, an interview, and a survey applied to the study group. The theoretical foundation describes two research variables: the Braille reading and writing system and teaching vocabulary. The results showed that using the Braille system is a solution to work on the weaknesses in English teaching blind individuals, emphasizing reading and writing skills to acquire lexis. Therefore, the importance of this study lies in the creation of a guide for teachers which compiled essential aspects in three sections: the first was related to teaching Braille to the educator, the second one was about creating Braille didactic material, and the last section included strategies, lexical activities, and material to be used in English vocabulary lessons, all those components together directed educators and students to enhance the teaching-learning process.

Keywords: Braille system, teaching vocabulary, lexical approach, blind students, guide, strategy.

RESUMEN

El presente trabajo de investigación fue desarrollado con el fin de examinar la efectividad del Sistema Braille como una estrategia didáctica en conjunto con el enfoque léxico para enseñar vocabulario en inglés A1 a estudiantes no videntes. El tema de investigación nació del problema de la escasez de estrategias, actividades, y material didáctico apropiados para enseñar inglés en el Centro de Apoyo Pedagógico Especial Imbabura. Esta investigación fue mixta, y la información fue recolectada a través de instrumentos, una entrevista, y una encuesta aplicada al grupo de estudio. La fundamentación teórica describe dos variables de investigación: el sistema de lecto-escritura Braille y la enseñanza de vocabulario. Los resultados mostraron que la aplicación el sistema Braille es una solución para trabajar en las debilidades en la enseñanza de inglés en individuos no videntes, enfatizando las destrezas de lectura y escritura para adquirir léxico. Por lo tanto, la importancia de este estudio radica en la creación de una guía para docentes, la cual recopiló los aspectos más esenciales en tres secciones: la primera fue relacionada a enseñar Braille al educador, la segunda fue sobre el crear material didáctico en Braille, y la última sección incluyó estrategias, actividades léxicas, y material a ser usado en las lecciones de vocabulario en inglés, todos esos componentes juntos dirigen al educador y estudiantes a mejorar el proceso de enseñanza-aprendizaje.

Palabras clave: Sistema Braille, enseñar vocabulario, enfoque léxico, estudiantes no videntes, guía, estrategia.

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LIST OF ABBREVIATIONS

EPI: English Proficiency Index.

ANVI: Asociación de No Videntes de Imbabura.

WHO: World Health Organization.

CEPAL: Comisión Económica para América Latina y el Caribe.

CONADIS: Consejo Nacional para la Igualdad de Discapacidades.

AFB: American Foundation for the Blind.

NICHD: National Institute of Child Health and Human Deve

INTRODUCTION

Language Context

The reality of Ecuador, a country with English as a foreign language, is worrying. According to the last report of Education First about the English Proficiency Index (EPI) in 2021, Ecuador has a very low proficiency in English, and it is in position 18 of 20 countries in Latin America. Furthermore, the national curriculum includes a few hours of this foreign language at all levels. Indeed,the hours in the English area were reduced from 5 to 3 in public education. Lastly, with the Ecuadorian curriculum, acquiring English language skills takes a long time, and students see it as a subject to be approved under obligation rather than as something essential for the professional field.

Problem description

Regular scholars present difficulties in English learning because the Ecuadorian educational system needs to adapt to their needs. Now, imagine how the situation is going with vulnerable scholars (Florian, 2008) mentions that there is the discriminative treatment for the students if the particular class is not well set and the preceptors are not well trained to follow the unborn trends in inclusive education. In the classroom, every pupil is unique and has particular musts that the schoolteacher must satisfy because talking about inclusion means appreciating, accepting, and feeling comfortable with individual differences.

Besides, despite English being one of the subjects taught in Ecuador, the curriculum and syllabus may not be adequately designed for blind students. Hence, they decide to be part of special educational units or organizations where they can find others in the same condition. On the flip side, even though access to education in regular schools with the "same opportunities" is possible for scholars with exclusive educational needs like visual impairment, there are no English materials coded in Braille. Without that material, students with this condition cannot get close to the written and reading language through the Braille system and properly develop writing and reading skills.

Another problem is related to the teacher's methodology; more specifically, there are no suitable pedagogical strategies to teach a foreign language to blind individuals. In its beginnings, the Audio-Lingual Method was the only way to teach; it is "the language that was taught by systematic attention to pronunciation and by intensive oral drilling of its basic structures" (Chakrabarty, n.d.). In other words, it is about an intense oral practice that was not enough for visually impaired or blind learners because they also needed to practice reading and writing.

In brief, this traditional methodology can be suitable in a certain sense because it refers just to the spoken language. However, it can be boring for students and unfair if they want to develop other English skills, such as writing and reading. Blind students face visual challenges rather than hearing impairments, making listening and speaking English skills the most significant potential for them to excel. However, they need didactic strategies to learn the target language and increase their Vocabulary effectively, not only by the Audio-Lingual Method.

Delimitation of the Problem

The Centro de Apoyo Pedagógico Especial Imbabura presents limitations in the scarcity of nearby didactic material that favors the teaching-learning process of the English language. Therefore, the lack of material written in Braille has generated demotivation to learn English because they have books transcribed into Braille in their mother tongue but not in the foreign language. Also, they are missing proper strategies and activities where visually impaired and blind people are involved actively because only oral teaching does not allow them to develop enough Vocabulary and all it involves effectively.

Justification

According to the Constitution of the Republic of Ecuador, education is an inescapable right; therefore, people with visual disabilities are not exempt from enjoying an inclusive education in different matters, such as English as a Foreign Language. According to the National Institute for the Blind (2020), the basic standards of skills in foreign languages that stand out are reading and writing, fundamental components for increasing Vocabulary.

This research carried out worth the use of the Braille system as a didactic strategy for the acquisition of Vocabulary in visually impaired learners from Centro de Apoyo Pedagógico Especial Imbabura through some strategies and activities found during the academic research and detailed in the proposal. In addition, this research work was justified by pretending that students feel motivated to conduct writing practices in a second language since it stimulates their intellectual development, memory, imagination, and creativity.

As everyone knows, this language is international because people around almost the world speak it, so if they learn it, their perspective of English learning will completely change. Another point to consider is feeling motivated to continue improving the language, "in the particular case of students with visual disabilities, mastery and functional use of the reading and writing code used by the student is of vital importance for success in learning a foreign language" (Santana Rollán, 2013). In this way, English learning is achieved for both the student and the teacher, thus demonstrating that a disability is not a barrier to learning a new language, working, if possible, on its four skills: listening, speaking, reading, and writing, and emphasizing in the acquirement of Vocabulary.

Further, it is pertinent to mention that the beneficiaries of this project were visually impaired students and the Centro Popular Especial de Imbabura educational community. They will be the ones who will change the statistics of English level in blind people in Imbabura province. Then, they will have the opportunity to excel in any field thanks to learning this language, which opens many doors in this increasingly globalized world, where English is an international language that gets closer and closer to people, connecting them with different cultures and exchanging knowledge.

Finally, the need for this research work was born to focus on a vulnerable group to achieve a change in their lives and give them hope and motivation to learn English because, despite their condition, there are ways in which they can achieve that goal, it is just a matter of finding appropriated strategies and materials, thus obtaining a better life condition and integral development.

Objectives

General objective

Explore the effectiveness of using the Braille system as a didactic strategy to teach A1 English vocabulary to blind students at Centro de Apoyo Pedagógico Especial Imbabura.

Specific objectives

- Quote the theoretical bases of the Braille system as a didactic strategy to teach A1 English vocabulary to blind students at Centro de Apoyo Pedagógico Especial Imbabura.

- Identify topics related to A1 English vocabulary to be included in the proposal.

- Propose a handbook for teachers that introduces the Braille system as a didactic strategy with lexical activities and didactic materials that promote vocabulary building.

CHAPTER I: THEORETICAL FRAMEWORK

This chapter details the theoretical foundation of the research project The Braille System as a Didactic Strategy for Teaching Vocabulary to Blind Students at Centro de Apoyo Pedagógico Especial Imbabura.

1.1. Centro de Apoyo Pedagógico Especial Imbabura

1.1.1. Brief history

The Centro de Apoyo Pedagógico Especial Imbabura was created in 1993, and it used to be located at Edificio El Torreón, near Pedro Moncayo Park. Initially, its primary purpose was to bring blind or visually impaired people of Imbabura province together to train them and include them in the labor area. Students from there received better support for educational matters, too.

Around 1995, Dona, a Swedish volunteer, visited this center to teach the Braille system use, walking stick, abacus, and functions for daily displacement. Later, in 2005, the Federación Nacional de Ciegos del Ecuador made a proposal focused on literacy for older adults; however, the number of people was increasing, including children, so the aim changed and spanned everyone to insert them into society. Opening a branch in Intag destined to train children to send them to fiscal or regular schools was possible.

As years passed, this center became a light for those not typically included in society because of their condition. In other words, it made it possible to give academic reinforcement to blind or visually impaired students to join them in formal education through techniques for social performance. At the same time, teachers receive training about the Braille system and the use of the abacus. Currently, the center is a fundamental pillar to creating an inclusive society, where people assume responsibility for the rights of those vulnerable groups due to feeling comfortable with them; that is inclusion.

1.1.2. Location and infrastructure

Nowadays, the Centro de Apoyo Pedagógico Especial Imbabura is located near the Mayorista market, next to Centro de Salud Médica de la Policía. Asociación de No Videntes de Imbabura provided this building, and it is a small place with an old infrastructure that does not effectively satisfy the needs of people with visual impairment. Despite this, students count on recreational areas and have access to a learning space and some materials. In addition, there is a kitchen where adults prepare healthy food during meetings to receive kits or help from supporting organizations such as AYUDA EN ACCION PRODECI and TIERRA PARA TODOS.

1.1.3. Authorities

Some years ago, Noemi Trejo, president of Asociación de No Videntes de Imbabura (ANVI), had the enormous challenge of dealing with the significant changes in a more exigent education for children with visual disability. Additionally, the center has one English teacher and two Braille teachers who reinforce different knowledge areas.

1.2. Disability in the world

1.2.1. Definition

Throughout history, people with disabilities have felt isolated because of their temporary or permanent condition of limitations due to biological or acquired causes. The World Health Organization WHO (2021) affirms that "people with disabilities also face obstacles, stigmatizing, and discriminatory realities when accessing services and health or health-related devices." Then, discrimination against people with disabilities is a prevalent issue, leading to unequal treatment daily in educational, work, and social fields and denial of essential services they need for their well-being.

Disability develops in society as a manifestation of the differences that make human beings unique. However, their injection turned into a long process that accumulated years of struggle in favor of obtaining equality and fairness. According to WHO (2021), disability is a multifaceted condition that arises from the intricate interplay between human characteristics and the attributes of the surrounding environment in which a person resides.

It is essential to consider that talking about disability is not only talking about mental and physical effects but is also related to the economic and social vulnerability of people, as explained by Comisión Económica para América Latina y el Caribe CEPAL the conditions such as poverty, armed conflicts, urban violence, and gender-based violence are significant contributors to disabilities. It refers to the fact that most people with disabilities belong to rural areas; disability is not always genetic, and an accident or some chronic disease can provoke it. To end, the most common disabilities in suffering some exclusion or deprivation in the social, economic, health, and educational spheres are motor and visual impairment.

1.2.2. Disability in Latin America

In the Latin American context, the convention on the people's rights with disabilities and its Optional Protocol (2006) in its literal e) mentions "recognizing that disability is a concept that evolves and that results from the interaction between people with disabilities and the barriers due to the attitude and the environment that prevent their full and effective participation in society." Then, many organizations worldwide and in Latin America have carried out campaigns and projects aimed at removing the barriers of exclusion and deploying the inclusion of these people with any disability in the economic field, social, educational, and political with priority treatment. (Naciones Unidas, 2012)

Ecuador, a Latin American country, has many people with any disability. According to the Disability statistics report of January 2022 made by Consejo Nacional para la Igualdad de Discapacidades (CONADIS), there are 471,205 people with a disability that can be physical, intellectual, auditory, visual, or psychosocial. Specifically, 11.54% of people have visual impairment.

To end, disability is not an impediment that limits carrying out daily activities like any person; being or having a disability does not give other people the right to establish that they are unable to follow and achieve a goal, a dream such as education, a job, or a family. Lastly, education is a space in which knowledge and values go towards diversity; rethinking the methodology and adapting it, giving greater priority to these people, would help eliminate inequality.

1.3. Visual impairment

1.3.1. Definition

People with visual impairment have low vision, which does not allow them to do activities normally, and the worst case could be losing sight. In their book, Douglas, G., & McLinden, M. (2004) stress that visual function encompasses various elements, such as visual sharpness (capacity to discern detail), focusing ability (capacity to adjust focus), the extent of observable surroundings (area of vision), color perception, and light sensitivity adaptability. Since any of these aspects fail due to causes related to heritage, congenital, consequence of accidents, or because of disease, the performance in tasks of individuals is affected badly.

Consequently, a visual acuity ranging from <6/18 to 3/60 after correction in both eyes is called low vision, and <3/60 is considered blindness, even though individuals with better acuity may still experience a visual impairment if they display a significant loss of visual field. Notably, most people with visual impairments, including those labeled as "blind," possess some remaining vision, which maximizes performing daily tasks and engaging in various activities (Douglas, G., & McLinden, M. 2004).

1.3.2. The main categories of visual impairment

Visual impairment refers to loss of sight classified into two categories: partially sighted individuals officially registered with a moderate level of sight impairment. In contrast, registered blind individuals suffer from severe sight impairment, rendering activities dependent on eyesight impossible (University of Cambridge Disability Resource Centre, 2022). Indeed, some apps simulate different vision problems to understand what the world looks like for disabled people, such as the case of El distintivo Tengo Baja Vision.

1.4. Education for blind learners

Students with special educational needs require an inclusive education where their limitations are not seen as a big trouble. On the contrary, they must feel accepted and comfortable with the educational system, which should adapt to their needs. In contrast, teachers, classmates, and the entire scholarly community respect the differences and uniqueness of each learner.

Fortunately, integrated education has been possible for blind learners, which means they are placed in a regular classroom, receiving assistance, the same opportunities, and learning experiences while interacting with their peers. Hence, according to Mani, M. N. G., (1998), through adequate technical support, guidance provided to mainstream teachers, and an inclusive educational setting, visually impaired children can demonstrate their true capabilities, leading to better social acceptance among their sighted peers. Then, a successful education for blind individuals requires specialized teachers who provide materials and specific instruction in unique skills for blindness, such as Braille reading and writing, auditory perceptual, orientation, and mobility training.

1.4.1. Teaching strategies for blind learners

The first thing a teacher must do when teaching is to identify the learner's needs and then apply methods and approaches to facilitate and engage students in the learning process effectively. In fact, by providing blind children with appropriate materials in suitable formats and at the right time, they can readily absorb over 80% of the teachings and experiences within a regular classroom setting. Consequently, creating the ideal educational environment becomes crucial in integrating blind children into a practical and successful reality (Mani, M. N. G., 1998). Lectures, discussions, collaborative learning, role-playing, and technology interaction, among other teaching strategies, create dynamic and inclusive education. That is why effective teaching often involves a combination of these strategies based on the subject matter, student needs, and learning objectives.

1.4.2. Didactic strategies

Strategy

According to (Falus, 1998, 274), a strategy is a "complex system of methods, tools, organizational styles and forms aimed at achieving goals which is based on a coherent theoretical basis, and which has a particular syntax and is realized in a particular learning environment." Therefore, it serves as a roadmap that guides an individual toward accomplishing desired outcomes. In addition, Enikő, S. M. (2013) expresses that:

A strategy is a long-term definition of a general direction that encompasses design, supervision, and management, as well as the system of the applied processes and their appropriate instructions. In general, the management and supervision of several areas of the economy and society presuppose the design, organization, direction, monitoring, and evaluation of the given activity, namely, the development of a comprehensive strategy considering the functioning and operation of the entire system. Therefore, strategy is a category in a general methodological sense.

In conclusion, didactic strategies, also known as teaching strategies or instructional methods, refer to the various approaches and techniques employed by educators to facilitate learning and promote understanding efficiently. For that reason, their application in education through interactive activities allows them to create a dynamic learning environment. Ultimately, the thoughtful incorporation of didactic strategies empowers learners, equipping them with the skills and understanding needed to thrive academically and in their societal self-actualization.

1.4.3. Didactic materials for blind students

Some didactic materials are educational resources focused on accessibility, providing alternative formats and features that enable blind students to access information properly. Providing them tailored to the needs of blind students promotes an inclusive learning environment and ensures they have equal access to educational opportunities. The materials specified below are crucial in empowering blind students to actively participate in their education and achieve academic success.

The Small Audiovisual Touch Media: These are the materials that the teacher uses

in the classroom.

Real or Natural Materials: They are in nature and that the educator must have in the classroom—for instance, plants, animals, and fruits, among others.

Material of Experience or Experiences and Excursions*:* It is the actual material or natural and is the one that allows the student to know an object in the form directly. The educator must plan these excursions because you have to see if the place is appropriate for the actual observation of the material; it also helps the student in its orientation space, sensory education, social education, and cultural training.

Prepared or Elaborated Material*:* It is done by the teacher or parent of the family— for example, models, graphs, maps, and diagrams.

Permanent Work Materials: It is the stationery material that is used for activities in all subjects—for example, punch, abacuses, and rulers. (Pilco Amaguaña, 2015)

1.5. The Braille System

1.5.1. Definition

It is a way to read and write using a special ruler with cells for each letter. In other words, it is "a system of raised dots that can be read with the fingers by people who are blind or who have low vision. Teachers, parents, and others who are not visually impaired ordinarily read Braille with their eyes" (American Foundation for the Blind, 2020). Braille system is also considered like a code and an alphabet that can be written and read in some languages such as Chinese, Spanish, Arabic, and English. Learning it is easy because it is just about knowing the punctuation for each letter, prefix, and sign. Finally, it is fundamental to highlight that Braille is written from right to left while it is read from left to right.

1.5.2. The Origin of the Braille System

In 1829, century XIX, a professor invented a peculiar writing and reading method for blind people. It formed words from the combination of dots printed in relief. This system improved as time passed until it adapted to other matters like science and music. Curiously, the name of this system is due to its inventor, Louis Braille. Indeed, "the writing system he invented, at the age of fifteen, evolved from the tactile *Ecriture Nocturne* (night writing) code invented by Charles Barbier for sending military messages that could be read on the battlefield at night, without light" (AFB, 2020). People write in Braille from right to left and then read from left to right; practice makes it easier to have those skills.

1.5.3. Who was the creator of the Braille System?

Louis Braille, the creator of the Braille system, was born on January 4, 1809, in Coupvray, France, and died in Paris on January 6, 1852, because of a terrible disease, tuberculosis. To his misfortune, he became blind just as a child, but in 1818, as a younger, he entered the National Institute for Blind Youth in Paris. Later, as a professor focused on teaching blind people, he modified the writing system devised by French army captain Charles Barbier in 1821 for encrypted messages. In 1932, the London Conference of Educators of the Blind incorporated the dot system, adopting the Braille alphabet with some alterations, and named it Standard English Braille. Over time, this method has been adapted to suit numerous languages and extended to encompass musical notation, mathematics, and scientific notation. (Irusta, 2017)

1.5.4. Alphabet in Braille

Fundamentally, six dots conform to the whole alphabet, but each letter from it has a series of dots. "Each of them differs from the rest by the number and location of six dots within maximum limits of three in height and two in width. In addition, numbers and punctuation marks are also represented" (Irusta, 2017). Furthermore, that is how each word or sentence is formed through dots. Indeed, unlike the Spanish alphabet, which has 27 letters, the English alphabet has 26 (5 vowels and 21 consonants) because there is no letter "ñ," and its pronunciation when spelling results in confusion.

Figure 1

English braille alphabet
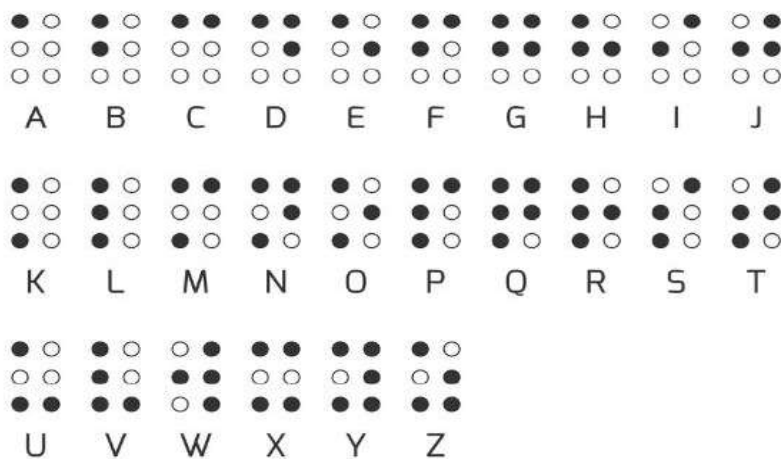
Source: *https://www.vectorstock.com/faq/member/free-license*

1.5.5. What does Braille appear like?

In simpler terms, Braille symbols are created using small units called braille cells. According to (AFB,2020), each "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". Moreover, it is relevant to punctuate again that a single cell can represent an ABC letter, number, or whole word. Then, many books have been written in Braille.

1.5.6. Writing in Braille

Within this system, there are both uncontracted and contracted Braille. When individuals are children and start learning to write in Braille, they must know the spelling of words, which is the uncontracted Braille version. For instance, (AFB,2020) affirms that "some books for young children are written in uncontracted braille although it is less widely used for reading material meant for adults." Nevertheless, some blind adults prefer uncontracted Braille because it is helpful to categorize items when they begin Braille learning.

In the following figure, there is an example of uncontracted Braille:
Figure 2

Simple sentences are decoded in uncontracted Braille
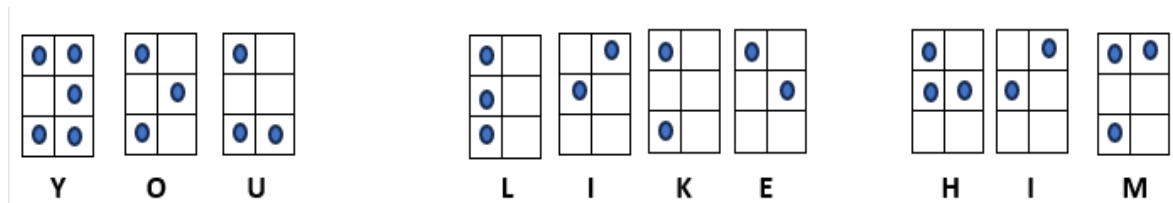
Note: Own elaboration. Source: Survey June 2023

On the other hand, with practice, adults can use contracted Braille when writing, which means an abbreviation of words. Indeed, "the standard system used for reproducing most textbooks and publications is contracted Braille. In this system, cells are used individually or in combination with others to form a variety of contractions or whole words" (AFB, 2020). For instance, the following figure illustrates the previous information mentioned.
Figure 3

Simple sentences "You like him" decoded in uncontracted Braille
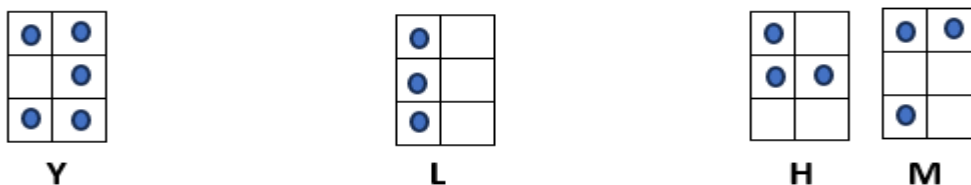
Note: Own elaboration. Source: Survey June 2023

Regarding the prior illustration, it shows the short form of every word; y and l are letters utilized to refer to you like. In the same way, the abbreviation of the word him is the letters h and m properly. Generally, these contractions are used to spend less paper when printing books in Braille.

1.5.7. Impact of the Braille system on blind people

The Braille system has impacted meaningfully the lives of blind people worldwide because it allows blind individuals to gain the ability to read, write, and access information in an independent way, encouraging them to be involved more fully in education, work, and social interactions. Moreover, the technology made possible the creation of an incredible invention, the Braille writer machine that "has six keys, a space bar, a line spacer, and a backspace. The six main keys are numbered to correspond with the six dots of a braille cell" (AFB, 2020). Ultimately, the Braille system offers a different vision of learning where the knowledge is carried out; physical limitations do not matter because there is always a way to learn.

Figure 4

Braille printer

Note: Own elaboration. Source: Survey June 2023

1.5.8. The Braille system as a didactic strategy

Braille can be effectively employed as a didactic strategy in language teaching for individuals who are blind or visually impaired. Braille can be utilized in the following ways:

- ***Associate the word with tactile sensation***

Braille is a primary tool for teaching individuals who are blind how to read. Teachers use Braille materials, such as Braille books or worksheets, to introduce letters, words, and sentences. The systematic introduction of Braille symbols allows learners to develop reading skills, decoding abilities, and comprehension.

- *Writing and Spelling*

Braille serves as a means for learners to practice writing and spelling. Students can transcribe their thoughts and ideas into Braille by using a Braille slate and stylus or a Braille writer. Engaging in writing activities using Braille helps develop language production skills and reinforces spelling and grammar concepts.

- *Language Development*

Braille enhances language development in various ways. Teachers can create Braille word cards, flashcards, or sentence strips to support vocabulary acquisition, construction, and language comprehension. Using Braille labels or Braille-enhanced objects can reinforce the association between objects and their names.

- *Literacy Skill Building*

Braille can be integrated into literacy skill-building activities, such as reading comprehension exercises, writing prompts, and grammar drills. Teachers can design Braille-based exercises that target specific language skills, including grammar rules, sentence structure, punctuation, and word usage.

- *Braille Games and Activities*

Teachers can design interactive Braille games and activities to engage learners in a fun and engaging manner. Those include Braille puzzles, word games, storytelling with Braille, or Braille-based board games. Such activities promote language practice, cognitive skills, and social interaction.

- *Independent Reading and Writing*

Once learners gain proficiency in Braille, they can independently access Braille materials, including books, articles, and online resources that promote self-directed learning, broaden their exposure to various texts, and cultivate a love for reading and writing in Braille.

- *Integration with Assistive Technology*

Braille can be integrated with assistive technology devices, such as electronic Braille displays or refreshable Braille notetakers. These devices enable learners to access digital content in Braille format, further expanding their reading, writing, and language learning opportunities.

In conclusion, by incorporating Braille as a didactic strategy, educators can effectively cater to the specific needs of individuals who are blind or visually impaired, fostering their language skills, literacy, and overall language development.

1.6. Teaching Vocabulary

The amount of vocabulary students can learn in the classroom is enormous; however, it is not just about what a word means but about internalizing the whole conception of words. The materials, contexts, and situations are vital in vocabulary lessons, as the focus extends beyond individual words to encompass more extensive language units like collocations, phrases, expressions, and complete sentences, including strategic and varied Vocabulary used in conversations or writing (McCarten, J., 2007).

For teaching vocabulary, the materials can assist teachers in different ways to enhance vocabulary instruction. For instance, offering well-defined vocabulary lessons, emphasizing the target vocabulary set through focused practice and regular review, and providing lists of Vocabulary to be learned in the class. Furthermore, Mc Carten, J. (2007) stresses, "show students what is useful to learn about the forms of nouns or verbs, or how prefixes and suffixes can help build vocabulary knowledge quickly." Then, learners can acquire other vocabulary to gather the language.

1.6.1. Vocabulary learning strategies

The Vocabulary learning strategies are those helpful techniques and approaches the individual uses to acquire and retain new words and their meanings. These can be obtained by repetition and practice, dictionary use, flashcards, engaging conversations, and vocabulary app use. McCarten, J. (2007) stated the following:

One of the first vocabulary learning strategies for any classroom is how to ask for words you do not know in English and how to ask the meaning of English words you do not understand, so phrases like "What is the word for … in English?," "How do you say …?," and "What does … mean?" are helpful to teach at the basic levels. As students progress, another proper strategy they can use is to paraphrase: "It is a kind of …," "It is like a …," and "It is for …-ing X," among others. Focusing on these strategies puts Vocabulary learning firmly on the classroom agenda. (p. 20)

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In summary, vocabulary learning mainly revolves around retention, requiring students to encounter, vocalize, and write newly acquired words multiple times before considering them truly learned. Also, arranging Vocabulary in meaningful ways enhances the ease of learning and internalizing it to make it personal. Finally, the materials offer chances for students to use the Vocabulary in a meaningful context, expressing genuine information about themselves and their experiences through speaking and writing.

1.6.2. The lexical approach

In essence, a lexical approach to teaching primarily emphasizes assisting students in acquiring Vocabulary. Nevertheless, the central focus of this approach lies in helping learners build their word knowledge.

Besides, it is essential to highlight that it is an approach rather than a method because methods refer to structured systems for organizing lessons. In contrast, approaches are more concerned with the overall instructional focus and less on the lesson's specific structure. Teachers must recognize this distinction, as there might be hesitancy in embracing a more lexical approach due to concerns about overhauling their teaching style. In truth, a lexical approach can be incorporated into any teaching methodology, be it grammar-translation or task-based learning. The only modification lies in shifting the linguistic emphasis of the lesson (Lackman, K., 2011).

The lexical approach seeks to equip students with a rich and functional vocabulary, making them more proficient and confident language users. Moreover, In the lexical approach, learners are exposed to authentic language usage, including idiomatic expressions and phrasal verbs, which enables them to develop a more natural and fluent command of the language. This approach also highlights the importance of learning Vocabulary in chunks or word combinations to enhance communication and fluency.

Features of the lexical approach

The main feature of the lexical approach lies in its emphasis on single words and chunks of words. One of the contributing factors to this phenomenon is that individual terms, significantly frequently used, may alter their meaning depending on the specific words they are combined within a chunk or phrase (Lackman, K., 2011). For example, the word "like" in sentences such as *I like (verb) singing in my bathroom*, *That looks like (preposition) my pencil*, and *Like (conjunction) any friend will help you*.

Furthermore, there are three sorts of chunks in the lexical approach. The first one is collocations, which are combinations of words belonging to the four main parts of speech that typically occur together, although only sometimes restricted to two words (e.g., take in, first time, and a little bit). The second is fixed expressions, phrases that remain unchanged or can undergo minimal modification. Most fixed expressions are idiomatic or used in polite speech (e.g., How is it going?). The last one is semi-fixed expressions with at least one slot

where various words or phrases can be inserted. For example, "Have you taken into account..." provides a slot that can accommodate different words or phrases. Lackman, K. (2011) Lastly, research indicates that learners tend to recognize and retain words in groups or chunks, especially those they identify as variable, consciously or unconsciously.

Implications for teaching

Teachers must understand that "learners are constantly acquiring new lexical items whenever they come in contact with the language, be it listening to the teacher talk in class, watching a film, or using the internet" (Lackman, K., 2011); therefore, it is learned incidentally.

The author mentioned previously stresses that:

The most critical learning strategy we can give students is to train them to NOTICE

lexical chunks during their exposure to the language. First, we have to raise their

awareness of the fact that language consists of lexical structures; after that, we need to

define the main types of lexical structures (collocations, fixed and semi-fixed

expressions), and finally, we need to develop some activities that help them notice the

lexical chunks in spoken and written texts. (Lackman, K., 2011)

In that way, not only do students gain awareness of specific collocations, but they should also develop the ability to draw broader conclusions about lexical structures.

Lexical approach activities

There are many lexical approach activities to teach Vocabulary, such as:

- **Find someone who…**

This introductory activity is a conventional exercise modified to highlight various lexical structures. It exemplifies how The Lexical Approach is not a rigid method but rather an adaptable approach that can be seamlessly integrated with existing teaching methods and activities. In this instance, it simply entailed incorporating the lexical chunks into "find someone who..." instructions. This activity can also be easily applied to other lexical chunks (Lackman, K., 2011).

- **Gapping Songs**

Songs offer a wealth of lexical items, especially frequently used semi-fixed expressions. When creating gap-fill exercises with song lyrics for listening activities, the gaps prompt students to concentrate on valuable lexical chunks rather than isolated words. This activity expands Vocabulary in a meaningful way as well as improves pronunciation and intonation (Lackman, K., 2011).

- **Giving clues**

Additionally, you can prompt students to identify specific constructions by providing hints or clues. Alternatively, if you prefer to simplify the task, you can give the students a written copy of the lyrics along with the instructions. For example, a teacher can ask questions related to lyrics. (Lackman, K., 2011).

- **Lexical chunk dictation**

This activity offers a simple and efficient way to direct students' attention to specific lexical chunks in a text. Dictate a series of clues about the structures in the text, offering hints about their form and meaning, such as "A noun plus noun collocation for a type of weather" (morning fog). Once all the clues are dictated, students collaborate in pairs to locate these chunks in the text. To add fun, you can turn it into a competition to see which pair can find all the chunks first (Lackman, K., 2011).

In conclusion, incorporating the Braille system into lexical approach activities for blind individuals can significantly enhance language learning for visually impaired students. The effectiveness of each activity depends on the creativity of teachers.

1.7. Teaching Vocabulary to blind learners

1.7.1. Vocabulary instruction

To begin, National Institute of Child Health and Human Development NICHD (2000) concluded that there is no single research-based method for teaching Vocabulary. After analyzing, they recommended mixing indirect and direct instruction methods. Therefore, vocabulary instruction is exceptionally beneficial for students who read Braille because, in a few words, it refers to repeated exposure to target words.

When teachers can afford to teach Vocabulary, they need to consider the meaning, spelling, and pronunciation of words for children to remember. Regarding acquiring it with direct and indirect instruction, Linda Diamond and Linda Gutlohn (2006) affirm that beyond focusing on single words, the vocabulary increases incidentally because of indirect encounters with the words and deliberately through direct teaching and particular techniques for learning new words. Therefore, every word to be learned should be meaningful.

In the case of teaching Vocabulary to blind individuals, the meaning of words must be touchable or have to include objects or things that represent every word. Savaiano et al. (1938) reported that the target words represented in Braille are more effective in enhancing vocabulary building than only using auditory instruction. Thus, direct instruction is more efficient because the target word is presented for them to memorize and use later.

In conclusion, teaching Vocabulary is a complex process beyond simple dictionary definitions and parts of speech. It includes indirect exposure to words in different contexts, intentional, explicit instructions in specific words, and word-learning strategies.

Active and passive Vocabulary

Both the active and passive Vocabulary are significant. The only difference between them is that the first is vital vocabulary learners must use and know using visual ways such as real things, body language, or miming. In contrast, the passive one must be understood by students but not necessarily used in real-life contexts or situations, giving examples or using translation.

1.7.2. Teaching Vocabulary through the Braille System

A major problem is related to the fight against becoming blind progressively. In addition, it refers to the hidden forms of inequality reflected in the lack of schooling. It shows that quality education is not yet available to blind people. Moreover, learning new Vocabulary involves various factors related to the teaching way. However, according to Ramadan (2022), "the more enjoyment and excitement students realize when learning new vocabulary, the more likely this vocabulary will stick in their minds." So, how teachers reach the schoolers by using dynamic and particular strategies is essential to establish a solid and long-term vocabulary.

CHAPTER II: METHODOLOGY

This chapter presents the research methodology. It includes information about the study group, the type of research, methods, data collection techniques, instruments, and the population; all these components were considered to develop the project The Braille System as a Didactic Strategy for Teaching Vocabulary in Blind Students at Centro de Apoyo Pedagógico Especial Imbabura and thus utilized to answer the research questions.

2.1. Description of the study group

As the population is small, this research was mainly conducted with blind students who manage the Braille system from Centro de Apoyo Pedagógico Especial Imbabura. In addition, the English teacher was involved in applying the research instruments to get valuable data for the inquiry. Finally, the center coordinator's participation was relevant because she provided helpful information about the educational community and the center's history.

2.2. Research Approach

This research uses a **mixed approach**. It involves qualitative and quantitative research methods and combines elements that provide a more precise understanding through specific techniques and instruments detailed below.

On the one hand, according to Punch (1998), qualitative research is "empirical research where data are not in the form of numbers. It means that data is based on something that is experienced or observed as opposed to being based on the theory". The essence of this kind of research is that data is described in words rather than numbers. In this case, the qualitative part of this work is mainly the theoretical framework that included vital information on every item involved in teaching vocabulary, the Braille system, and visual impairment, for then developing instruments to get qualitative data.

On the other hand, according to Interaction Design Foundation IDF (n.d.), quantitative research is "the methodology which researchers use to test theories about people's attitudes and behaviors based on numerical and statistical evidence. Researchers sample a large number of users (e.g., through surveys) to indirectly obtain measurable, bias-free data about users in relevant situations". In this case, the quantitative part of this inquiry is the results obtained by applying the instruments that provided percentages and numerical data as a starting point for triangulating and discussing the information.

2.3. Type of research

This research is descriptive since it explains and describes a determined study group within a specific condition: the visually impaired learners. "The goal of descriptive research is to describe a phenomenon and its characteristics" (Gall, Gall, & Borg, 2007, as quoted in Nassaji, H., 2015). This research places a greater emphasis on the "what" aspect rather than the "how" or "why" of occurrences. In this case, describing the aspects and particularities of the problem to find a solution allowed us to connect both the theoretical part and methodology to design the proposal to attend to those necessities in education for blind people.

2.3. Methods, techniques, and instruments

2.3.1. Methods

As this exploration uses qualitative research, it used the **inductive method,** which goes from particular to general, for the analysis and discussion, respectively, because every specific interpretation of questions supported a broad vision for the development of the proposal. Additionally, this research copes with a deductive method used in the analysis within the theoretical framework because it provided an overview of prominent themes divided into small sub-themes with equal importance for developing the following chapters.

2.3.2. Techniques and instruments

The techniques utilized for the data collection were the interview and the survey. On the one hand, the interview was structured because it contained standardized questions that were already planned. Its instrument was a questionnaire with six questions used to know the perceptions of the English teacher at Centro de Apoyo Pedagógico Especial Imbabura about using the braille system in English teaching. On the other hand, the survey directed to students was qualitative and analytical; the instrument was a semi-structured questionnaire with closed and open questions to get statistics about the student's perspective on English learning.

2.4. Research questions

- How does the Braille system function as a didactic strategy to teach Vocabulary to blind students at Centro de Apoyo Pedagógico Especial Imbabura?

- What approach, strategies, and activities should be appropriate when teaching English vocabulary A1 to blind students at Centro de Apoyo Pedagógico Especial Imbabura?

2.6. Participants

The population of this project is students and the teacher at Centro de Apoyo Pedagógico Especial Imbabura. The number of visually impaired or blind students is tiny; for this reason, it was not necessary to take a sample of them. In the same way, the educational center counts on a single English teacher who has been volunteering there for more than a year; he is in charge of teaching the target language to students. So, the teacher and students are the most critical participants in this research, even though the coordinator provided relevant data to the center.

Table 1

Study population

Institution	Number of students	Number of teachers
Centro de Apoyo Pedagógico Especial Imbabura	6	English teacher: 1

Note: Data provided by Nohemi Trejo, the coordinator at Centro de Apoyo Pedagógico Especial Imbabura.

2.5. Procedure

The first step was to compile the theoretical framework to know what information was expected to be obtained and what instruments were suitable to achieve that. After analysis, two instruments for data collection were designed to carry out this inquiry: an interview directed at the English teacher and a survey for the visually impaired students, respectively. The questionnaires for each instrument were reviewed by one teacher of the English major from the Universidad Técnica del Norte, who provided feedback about them and recommended making tiny changes to improve the instruments. With enhanced instruments, the teacher validated them for their later application to the study population.

Therefore, the survey was applied to six students, and the researcher interviewed them individually; because of their condition, the questions were asked loudly, and students' answers were registered in the survey. Also, the interview with the English teacher lasted around eight minutes. Once the data was collected, its analysis began using the Microsoft Excel app, where the results were shown in percentages through graphs. It allowed the researcher to examine the data deeply, interpret it, and finally write a discussion of the results presented at the end of the section.

# CHAPTER III: RESULTS AND DISCUSSION

This inquiry was carried out in the Centro de Apoyo Pedagógico Especial Imbabura, an educational institution in Ibarra where visually impaired and blind individuals receive pedagogical support in different subjects as well as get help from national associations that provide food, clothes, among other resources. This chapter details the results obtained from the application of instruments, the analysis of the questionnaire results, the information from the interview, and a discussion of the results. The instruments are in the appendix.

3.1. Student Survey Analysis

Within the quantitative part, a semi-structured questionnaire was directed to six students from the Centro de Apoyo Pedagógico Especial Imbabura; the survey had nine multiple-choice questions and two open-ended questions. Its main objective was to collect information about students' experience as English learners at the center. Also, the statistical results are presented below in pie charts and bar graphics. Finally, the interpretation and analysis of the survey questionnaire were also supplied.

Figure 5
*The age range of students at Centro de Apoyo Pedagógico Especial Imbabura*
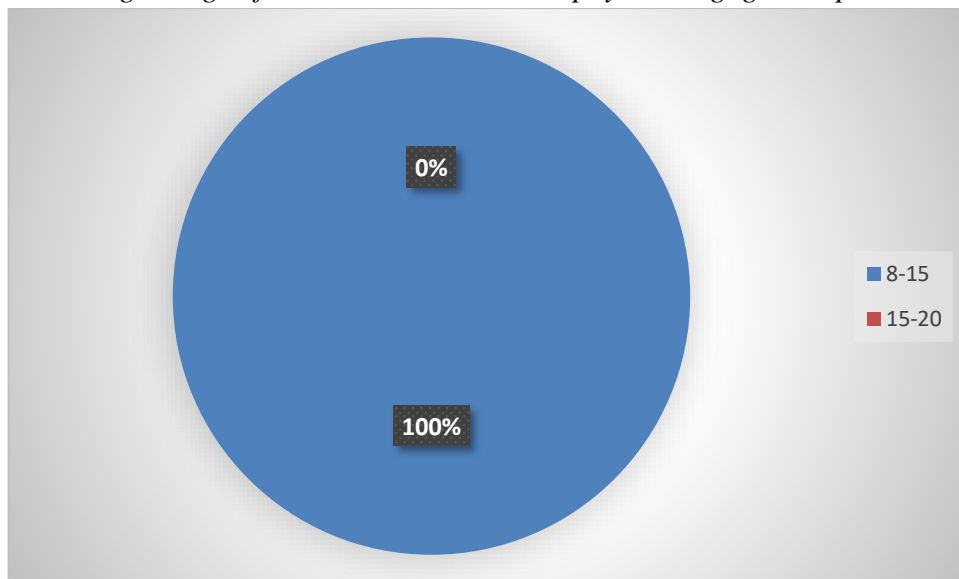
Note: Own elaboration. Source: Survey June 2023

Interpretation
The figure above shows the age range of visually impaired and blind students aged eight to fifteen, and they are between the stages of preadolescence and adolescence. Also, it means they are in higher primary general education but in different courses from eight-level to tenth-level in school. Therefore, they have different cognitive, academic, social, and personal development; in a few words, there are diverse needs. In addition, 8-15-year-old learners tend to use their imagination to solve problems. At the same time, teachers take advantage of that to satisfy those educational needs and achieve objectives established in every lesson.

Figure 6

*How much do students like English?*
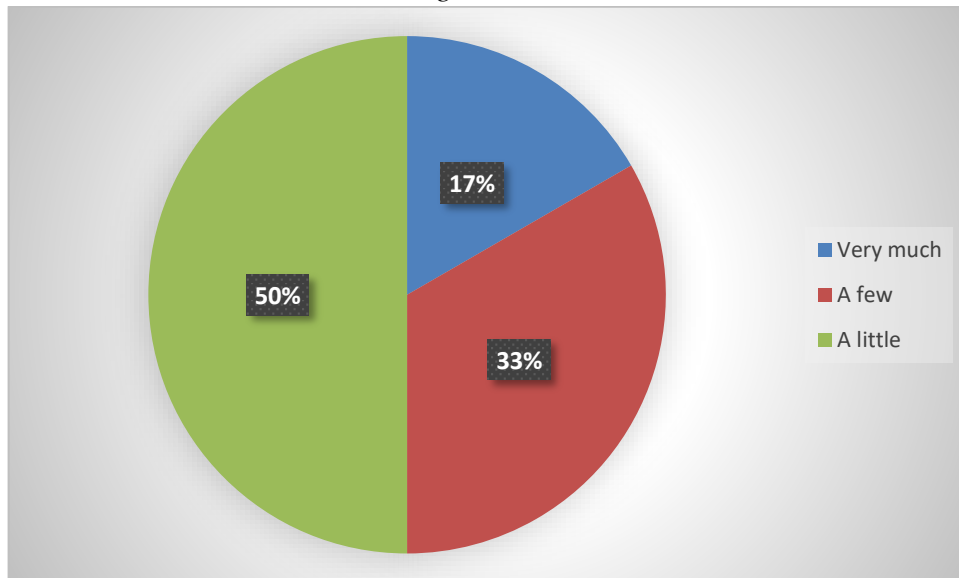
Interpretation

The Ecuadorian reality is that most people do not like English, and just a tiny part of the population enjoys learning it; however, acquiring it offers better opportunities in different fields, especially in labor and education. In this case, this pie chart shows that half of the learners like a little the target language, whereas the minority expresses they like English very much, and finally, more than a quarter of the study group like it a little. All indicate that students are not motivated to learn English, probably because of some external factors that affect them negatively.

Figure 7

English classes in Braille system
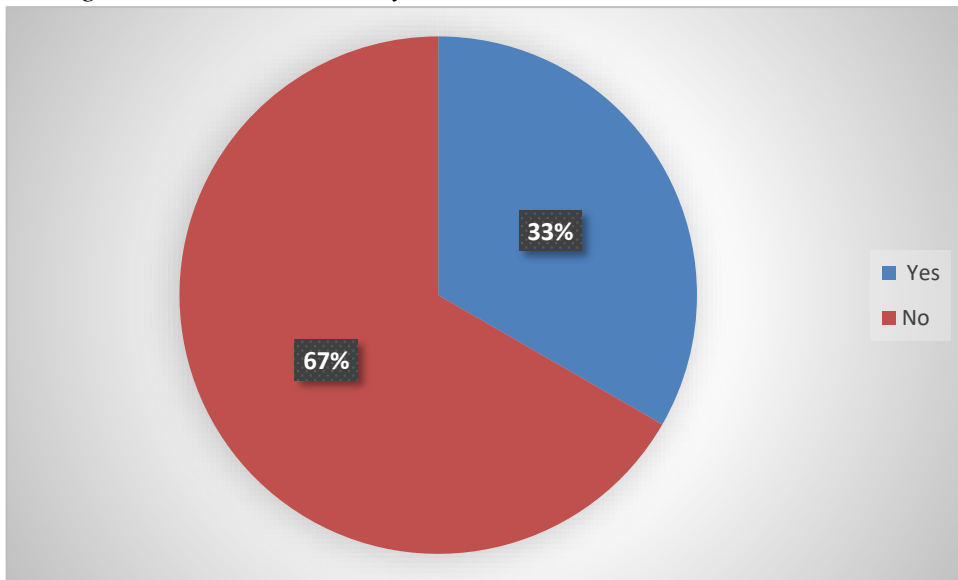
Interpretation

This graph reveals that most learners' English classes are outside the Braille system. However, using this system in English classes can be a valuable and inclusive approach for visually impaired students and brings some benefits. For instance, Braille engages multiple senses, providing a tactile, kinesthetic, and auditory experience that enhances language learning and memory retention. Another benefit is that Braille builds Vocabulary, facilitating the learning of new English words and expressions and helping students develop a rich vocabulary. Finally, the last advantage of using Braille is that it promotes a teacher-student collaboration where educators can collaborate with visually impaired students to create Braille materials, encouraging active involvement and ownership in the learning process.
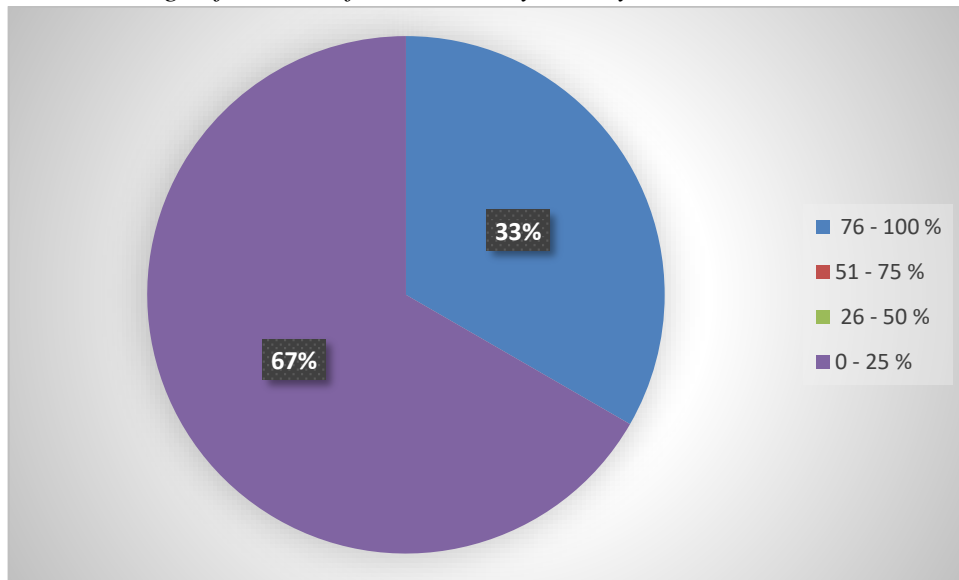
Figure 8

Manage the Braille system.
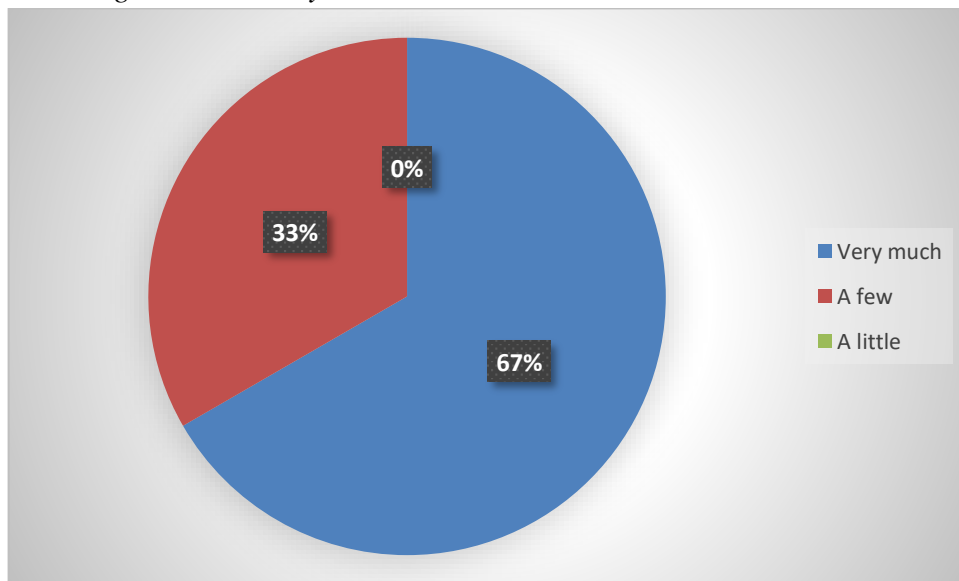
Note: Own elaboration. Source: Survey June 2023

Interpretation

For using the Braille system when teaching and applying the correct strategies and doing activities oriented to teach Vocabulary, it is essential to consider how much the learners manage this writing-reading system. In this case, the figure shows that more than half dominate it very much while the rest of the students handle it a little. It means reinforcement is mandatory to level the less skilled individuals to empower the learning environment. In summary, managing the Braille system in English learning is essential for developing English language skills, participating actively in language activities, and unlocking opportunities for personal and professional growth. As educators embrace Braille as a valuable tool, they ensure that all students can access the benefits of language learning and thrive in their language journeys.

Figure 9

*Percentage of the use of the Braille system by the teacher to teach the language*

Note: Own elaboration. Source: Survey June 2023

Interpretation

This figure shows that most respondents answered that the percentage of English teacher who utilizes the Braille system to teach the target language is tiny; actually, it is only 25 %. In contrast, the rest of the learners state that the teacher uses this system 76 to 100%. Consequently, even though the data collected results are contradictory, in general terms, it indicates the educator knows about this didactic strategy. It is suitable for gaining valuable experience in designing and delivering inclusive lessons, which include didactic strategies.

Figure 10

*Activities that English teacher commonly uses in class*
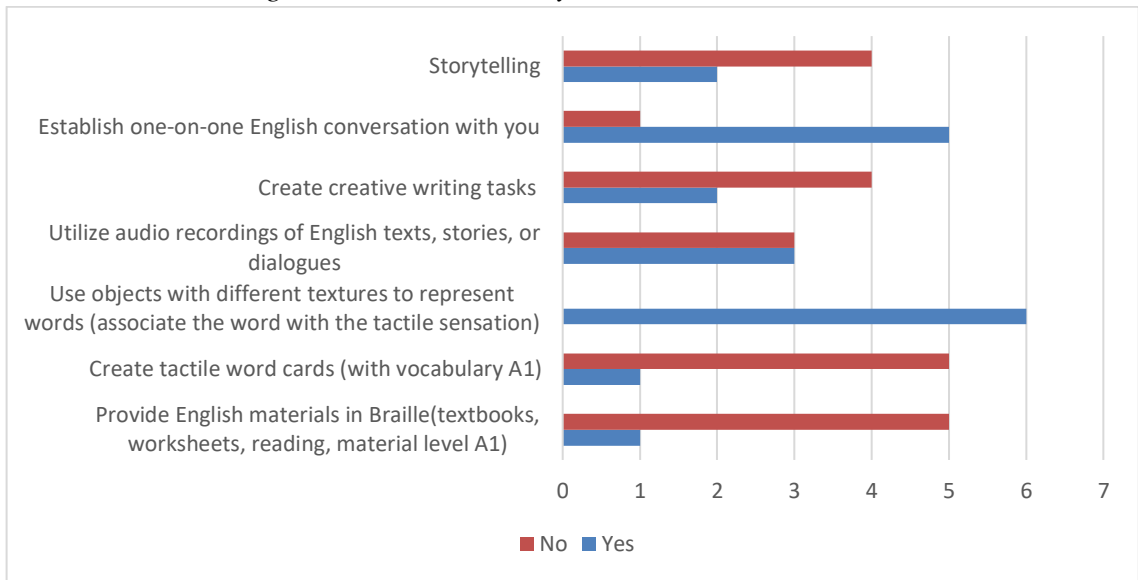
Note: Own elaboration. Source: Survey June 2023

Interpretation

The bar graph above displays the results of classroom activities English teachers commonly use. Regarding colors, the blue bars show that all activities are executed unless with sure students. Conversely, the red bars designate those not used by the educator in English learning. In a few words, the figure indicates individual assistance for each visually impaired and blind student.

On the other hand, concerning the list of activities detailed in the graph, they are good to keep, but they need to be improved or become more applicable for all the study groups to get better results when teaching English.

Figure 11

*Number of words students learn by lesson*
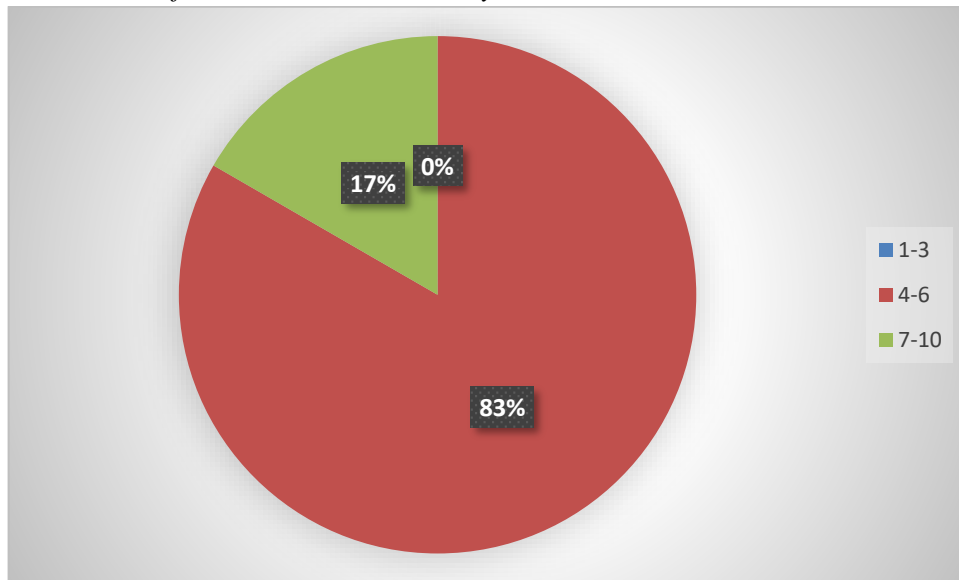
Note: Own elaboration. Source: Survey June 2023

Interpretation

The number of words a teacher should teach in a lesson can vary depending on the student's age, language proficiency, lesson duration, and the complexity of the words. There is no one-size-fits-all answer, but younger learners or beginners may benefit from learning fewer words (e.g., 5-10) per lesson and assuming that the results observed in the figure above are expected and are directed to support the theoretical framework and help the development of the proposal. Lastly, it is better to introduce a smaller set of words that students can confidently learn and apply rather than overwhelming them with too many words that may need to be fully understood. Effective language learning often involves gradual and strategic vocabulary expansion over time.

Figure 12

*Contents students would like to learn in English classes.*
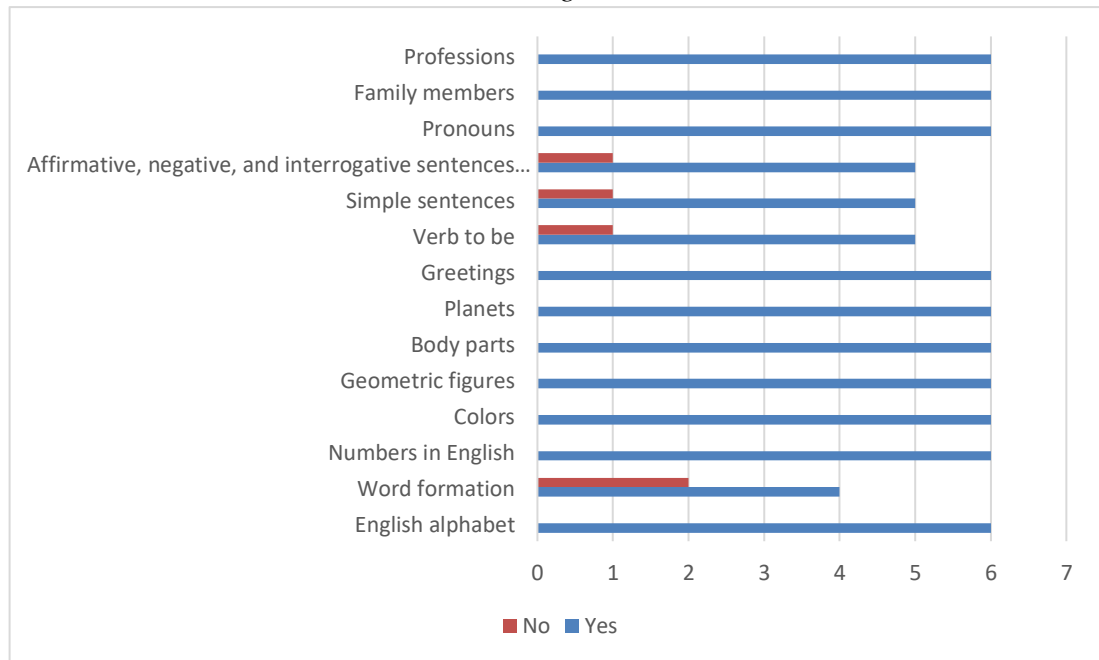
Note: Own elaboration. Source: Survey June 2023

Interpretation

The results are apparent; most respondents agree to learn the topics listed. However, there is an exception in topics such as affirmative, negative, and interrogative sentences in present simple, simple sentences, the verb to be, and word formation. They seem difficult to learn for students, so only the basic structures related to them were considered in the proposal. Likewise, it should be noted that those contents belong to level A1, established within the Common European Framework of Reference for Languages (CEFR). Indeed, a person with English level A1 receives the name of beginner, and "he/she can understand and use very frequently-used everyday expressions as well as simple phrases to meet immediate needs. He/she can introduce him/herself and others and can ask and answer questions about personal details" (British Council, 2023). Finally, all this information is helpful in this inquiry.

Figure 13

Activities students would like to do using the Braille system to increase Vocabulary.
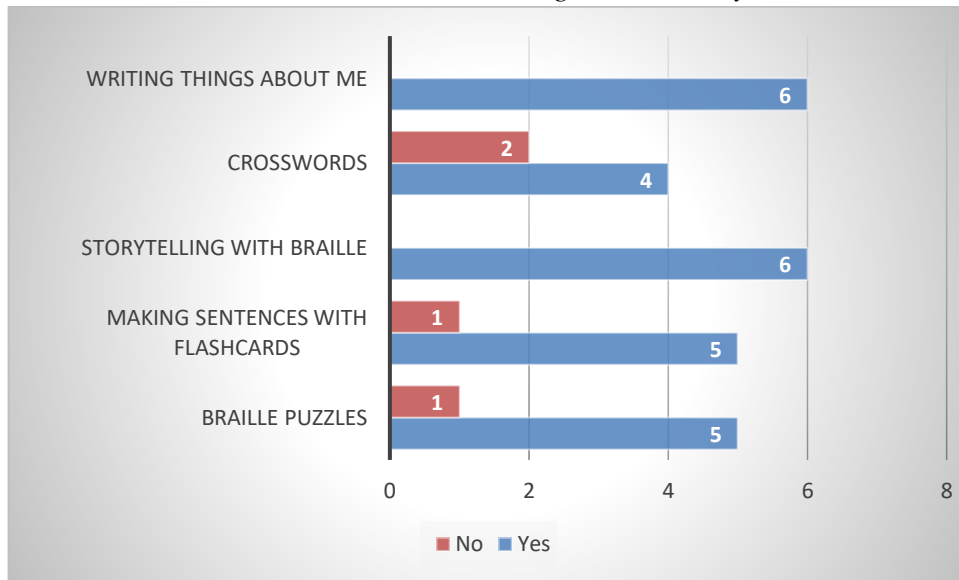
Note: Own elaboration. Source: Survey June 2023

Interpretation

After choosing the contents to be taught, it is vital to select specific practical activities to increase Vocabulary. So, this figure shows the student's preference about what they would like to do in class. For example, the majority stated they would do all the activities presented in that question. Nevertheless, there are more specified in the theoretical framework; instead of those that are hard to achieve, there are others included in the proposal to replace them. Finally, it is about creativity and imagination to adapt any activity in teaching Vocabulary through the Braille system.

- **Open-ended questions**

The analysis of the data collected from the questions is below:

Question 1. Why learning English is important for you?

Students from Centro de Apoyo Pedagógico Especial Imbabura agreed that learning English is meaningful for each of them because they want to talk with native speakers from foreign countries and socialize with them while knowing about their culture. Likewise, learners stated they could assist in international exchange programs, do interviews, and get better labor opportunities.

Based on the information provided by students, their thoughts come from an internal motivation and desire to travel around the world, and their limitations are not a motive to give up on English learning.

Question 2. Do you think an English glossary in Braille will improve your English skills? Explain your answer.

Most visually impaired and blind students expressed that this English material in Braille will increase mainly their Vocabulary. In contrast, they learn the spelling, meaning, and when to use each word or chunk of language.

That is, students stated they find helpful English material decoded in Braille to improve their English skills and performance at school because if they know how to say certain things in the target language, they could share their ideas with fluency.

3.2. Teacher's interview analysis

Finally, this section details the qualitative part, a semi-structured questionnaire of six questions for the English teacher at Centro de Apoyo Pedagógico Especial Imbabura. It should be highlighted that the interview was face-to-face at the center and lasted around 8 minutes. Overall, the teacher delivered valuable information on each question related to his teaching experience at the center and mentioned data about strategies he applies with his students. Finally, all data collected is analyzed to interpret the interview results; everything stated by the teacher was later transcribed and presented below.

Question 1. According to your experience, what English level, based on Common European Framework Reference, do visually impaired students have?

The interview applied to the English teacher, Carlos Játiva (2023), who mentioned, "When I was teaching here, I was studying the levels of students, and I think they are in an A1 level because they just know a fundamental knowledge. We are improving; they can say they belong at that level because they can do some little sentences".

That is, the English teacher continues developing basic Vocabulary in students according to the level of his students. Also, as the teacher was teaching previously, he could assess the student's level. It suggests that he has experience evaluating their language proficiency and is conscious that they have progressed beyond just identifying basic Vocabulary because they can now construct simple sentences in English.

Question 2. What strategies do you know to teach English Vocabulary to visually impaired learners? Could you tell me the activities you include in those strategies?

In this question, the teacher mentions, "The strategies I like to apply are communicative; I mean, when we talk about communicative language teaching, we often have to talk; also, the audio-lingual, only hearing, and that is what they like more. I usually take notes with them, but I try they practice more because it is a practice language. So, the strategies I use belong to those approaches".

Based on the information provided by the teacher, his classes focus on Communicative Language Teaching (CLT) as an approach and audio-lingual as a method. According to Richards, J. C. (2005), "communicative language teaching sets as its goal the teaching of communicative competence." Therefore, the strategies in CLT offer to identify the different purposes of language use, whether in formal or informal spoken language. For their part, methods based on audiolingual keep being the same in education for blind people because they are excellent listeners.

Question 3. Do you follow a syllabus? If not, how do you organize or choose the topic to teach?

Regarding this question, the teacher expressed, "I do not use a syllabus because we have some students of all ages who are in different grades, so I do not use it. When I organize and select a topic, I usually use one that is new for some students and practical for others. For example, we are practicing some verbs that they can learn more, and also some adjectives that are useful for grammar and Vocabulary. Therefore, I usually also take some topics they want to review, and they have seen this as a way to make present sentences they say they want to practice right now, so I use all the class to practice that; for example, the youngest practice with verbs while doing short sentences whereas the oldest ones do a little more using complex sentences".

The information offered by the English teacher shows that the curriculum and the syllabus are flexible; in a few words, they can be modified according to students' needs. For this reason, there are curricular adaptations; the English teacher considers individual differences to carry out an effective learning process for each learner, which means they count on personal assistance.

Question 4. Do you apply the braille system for English teaching? If yes, why do you think the English material decoded Braille is useful in vocabulary acquisition?

The teacher answered: "First, I am not an expert in managing Braille; I am still learning and doing my best. Second, I usually apply the Braille system with some students because they know it, and also, it is beneficial because it is like writing for us." Later, he expressed his position regarding the second question, sharing that all English material in Braille will undoubtedly benefit the building of Vocabulary in visually impaired and blind students. As such, all indicates that the role of material is crucial in the teaching-learning process.

Question 5. Do you have enough Braille material to teach English Vocabulary?

In this question, the English teacher mentioned he needed more braille material. He thinks that even though it is challenging to make braille material because you do not have things like visuals, teaching English Vocabulary using this system is indispensable.

Question 6. In general, what are the challenges you face in English teaching to visually impaired learners?

Based on the English teacher's experience, he states, "There are some challenges, but the first one is that there is no preparation for this, so when you come to the center, you have to find the way to teach effectively, but what happens if you do not know how to teach or you do not have the practices at regular schools, or you worked with children before, so it is tough, and that is the second point, it is not only difficult to teach them, but it is the preparation for teaching blind people, so it is not the usual way in which you can say these sort of things or sentences, it is not, it is to explain more to them, with the experience you have to learn how these children learn but it is challenging." It shows how educators must assume different roles when teaching and face enormous challenges.

3.3. Discussion

On the one hand, based on the survey applied to the visually impaired and blind students at Centro de Apoyo Pedagógico Especial Imbabura that collected data about their experience in English learning, the results indicate they need more motivation to learn the language because the majority just like it a little; even though they consider learning it is crucial for them, their reasons specified in the why they want to talk English can increase the desire to achieve that goal. Consequently, being conscious that they manage the Braille system is an excellent advantage in vocabulary building for beginners. Nevertheless, the weakness directs their teacher who does not use the Braille system enough to teach English. In response, the alternative students expressed lies in adding more activities than the teacher commonly uses in class, such as creating tactile word cards, storytelling, and incorporating English materials in Braille. Finally, since learning Vocabulary involves meaning, form, use, and pronunciation, the number of words to learn in each lesson should be as small as 4 to 6 words or chunks.

On the other hand, the interview applied to the English teacher at Centro de Apoyo Pedagógico Especial Imbabura yields results that show the main factor limiting effective language teaching is the lack of English material in Braille. Indeed, as stated in chapter two, the didactic material provided by educators is vital to visually impaired and blind learners absorbing the teaching knowledge. In addition, the combination of adequate strategies based on student needs and creative activities carried out by the English teacher can improve each student's progress when learning the target language. Therefore, it is not enough only strategies of Communicative Language Teaching and Audio-lingual methods that focus on listening, repeating, and emphasizing the spoken language; it is more than that; vocabulary acquisition means practicing writing and spelling too.

Consequently, after analyzing the data collected, it is necessary to develop a guide for teachers who have the enormous challenge of teaching English, explicitly teaching Vocabulary to visually impaired and blind students, taking into account the Braille system as a didactic way to achieve that using lexical strategies found during research as well as activities that response to those needs of students at Centro de Apoyo Pedagógico Especial Imbabura.

CHAPTER IV: ACADEMIC PROPOSAL

4.1. Title

BraiLex: Handbook for teaching A1 Vocabulary to visually impaired and blind students

4.2. Rationale

Teachers must constantly face enormous challenges when teaching, assume different roles, adapt to the learning environment, and do what is in their power and scope to achieve an excellent teaching-learning process for each student. It is good to mention that every learner has needs the teacher should satisfy. For instance, visually impaired and blind students their needs must be addressed with an inclusive education, and teachers must practice it. There are various ways and strategies to achieve it; however, this proposal presents one based on the Braille System.

Indeed, this handbook's importance lies in providing English teachers with a guide to teach A1 English vocabulary efficiently to visually impaired or blind learners using proper strategies, lexical activities, and didactic materials based on the Braille system because by engaging the sense of touch, blind individuals can independently explore English vocabulary, leading to enhanced word recognition and vocabulary acquisition. Overall, the Braille system enables blind students to navigate the complexities of the English language with greater autonomy, fostering a sense of inclusion and empowerment in the learning process.

4.4. Objectives

4.4.1. General

Design a didactic guide combining the Braille system and the Lexical Approach to teach A1 English vocabulary to visually impaired Centro de Apoyo Pedagógico Especial de Imbabura students.

4.4.2. Specific

- Provide a section on the preparation and practice of the Braille system for teachers.
- Describe briefly the definition and strategies of the Lexical Approach.
- Provide a section on developing Braille didactic material for teachers.
- Identify which strategy, lexical activity, and material are helpful to teach A1 vocabulary.

4.7. Development

The following proposal was created based on the information from the theoretical framework and the results found in the data collection. It has a cover, a motivational part at the beginning and the end of the handbook, a first section to train English teachers in the Braille System as well as know about the Lexical Approach, a secondary section about how to create Braille didactic material, and finally a third section for teachers and students with five lessons about learning vocabulary through the Braille alphabet, every lesson includes strategies, lexical activities, an objective, essential vocabulary, lexis, teacher and student activities, resources, in general, everything to teach A1 English vocabulary. The guide is attached in PDF format; however, the link to access it is below:

https://www.canva.com/design/DAFrobkN-HE/4c7Qe
lqxxLNj3D0H59bzw/edit?utm_content=DAFrobkN-
HE&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton

BraiLex:

Handbook for teaching A1 Vocabulary to visually impaired and blind students
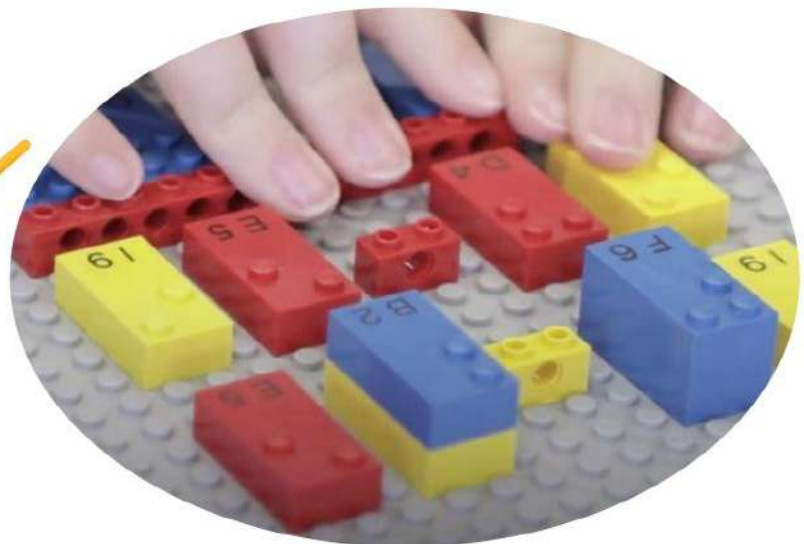
Universidad Técnica del Norte
Facultad de Educación, Ciencia y Tecnología
Pedagogía de los Idiomas Nacionales y Extranjeros

PAUSE & REFLECT

THE LESS WE SEE
WITH OUR EYES
THE MORE WE SEE
WITH OUR HEARTS

SECTION 1

FOR TEACHERS

Universidad Técnica del Norte
Facultad de Educación, Ciencia y Tecnología
Pedagogía de los Idiomas Nacionales y Extranjeros

INTRODUCTION TO THE BRAILLE WORLD

WHY LEARN BRAILLE?

If you want to learn about the Braille system, this handbook will achieve it! This section for teachers and students is designed to help you explore the magic of Braille and its use in learning English vocabulary. With helpful resources in this handbook, you can use the Braille system as a didactic strategy to enhance your language skills. So why wait? The first step is discovering this fantastic system's power by exploring Braille's exciting world!

WHAT IS BRAILLE?

Braille is a tactile writing and reading system designed for people who are blind or visually impaired. It allows individuals to read and write using a series of raised dots arranged in specific patterns representing letters, numbers, punctuation marks, and other symbols. Each Braille character, or "cell," consists of a grid of six dots arranged in two columns with three dots in each column.

Braille is vital for promoting literacy and providing access to information and education for blind and visually impaired individuals. It is widely taught and used worldwide, and efforts continue to make Braille materials more accessible in various formats, including digital Braille books and electronic devices.

The Braille Cell
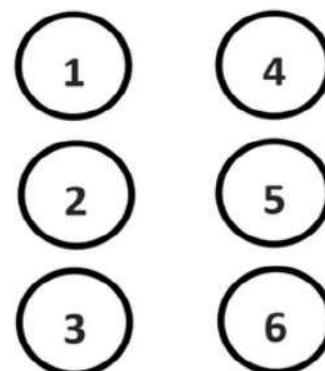
WHO WAS THE SMART GUY BEHIND THIS ASTONISHING INVENTION?

The Braille system was developed by Louis Braille, a Frenchman who was blind himself, in the early 19th century. His method of raised dots allows blind individuals to access written information independently. Braille is not a language but a system that can transcribe many languages, including English, French, Spanish, and others.

1
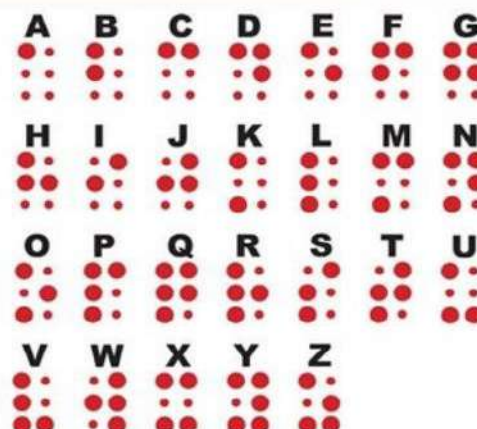
THE BRAILLE ALPHABET
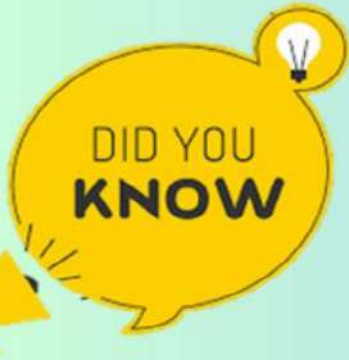
The Braille System is written from right to left and read from left to right, with the punctuation marks assigned as 1, 2, 3, 4, 5, and 6 in the **generator symbol.**

For **writing**, we start from the right, from top to bottom 1, 2, and 3; then from the left, from top to bottom 4, 5, and 6.
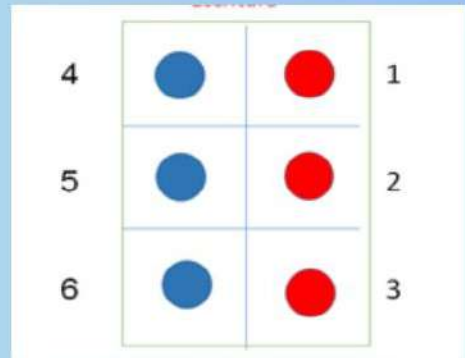
For **reading**, we start from the left, from top to bottom 1, 2, and 3; then from the right, from top to bottom 4, 5, and 6.

DID YOU KNOW

GENERATOR SYMBOL

Location of points for **Reading:**
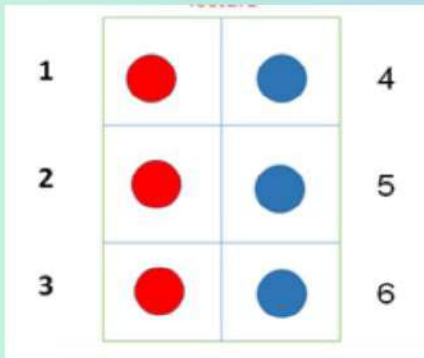
Location of points for **Writing:**

PUNCTUATION FOR EACH LETTER OF THE ALPHABET

LETTER	PUNCTUATION	LETTER	PUNCTUATION
A	1	N	1,3,4,5
B	1,2	O	1,3,5
C	1,4	P	1,2,3,4
D	1,4,5	Q	1,2,3,4,5
E	1,5	R	1,2,3,5
F	1,2,4	S	2,3,4
G	1,2,4,5	T	2,3,4,5
H	1,2,5	U	1,3,6
I	2,4	V	1,2,3,6
J	2,4,5	W	2,4,5,6
K	1,3	X	1,3,4,6
L	1,2,3	Y	1,3,4,5,6
M	1,3,4	Z	1,3,5,6

THE BRAILLE ALPHABET

THEN, HOW DOES THE BRAILLE ALPHABET LOOK LIKE WHEN READING?

a	b	c	d	e	f	g	h	i	j

k	l	m	n	o	p	q	r	s	t

u	v	w	x	y	z	capital	—	and	letter	number

IMPORTANT

To indicate a word kept in capital letters, you must use the respective punctuation twice at the beginning of the term.
Example:
MY NAME   IS GEORGE

| / | ? | ! |

| " | " |

| (|) |

| . | , | ; | : |

| ' | < | > |

| @ | # | + | - | * |

SIGNS

Punctuation Marks

! Exclamation	● Full Stop
, Comma	? Question Mark
; Semi Colon	: Colon
/ Slash	''' Quotation Marks
() Round Bracket	— Dash

3

WHAT ABOUT THE NUMBERS?

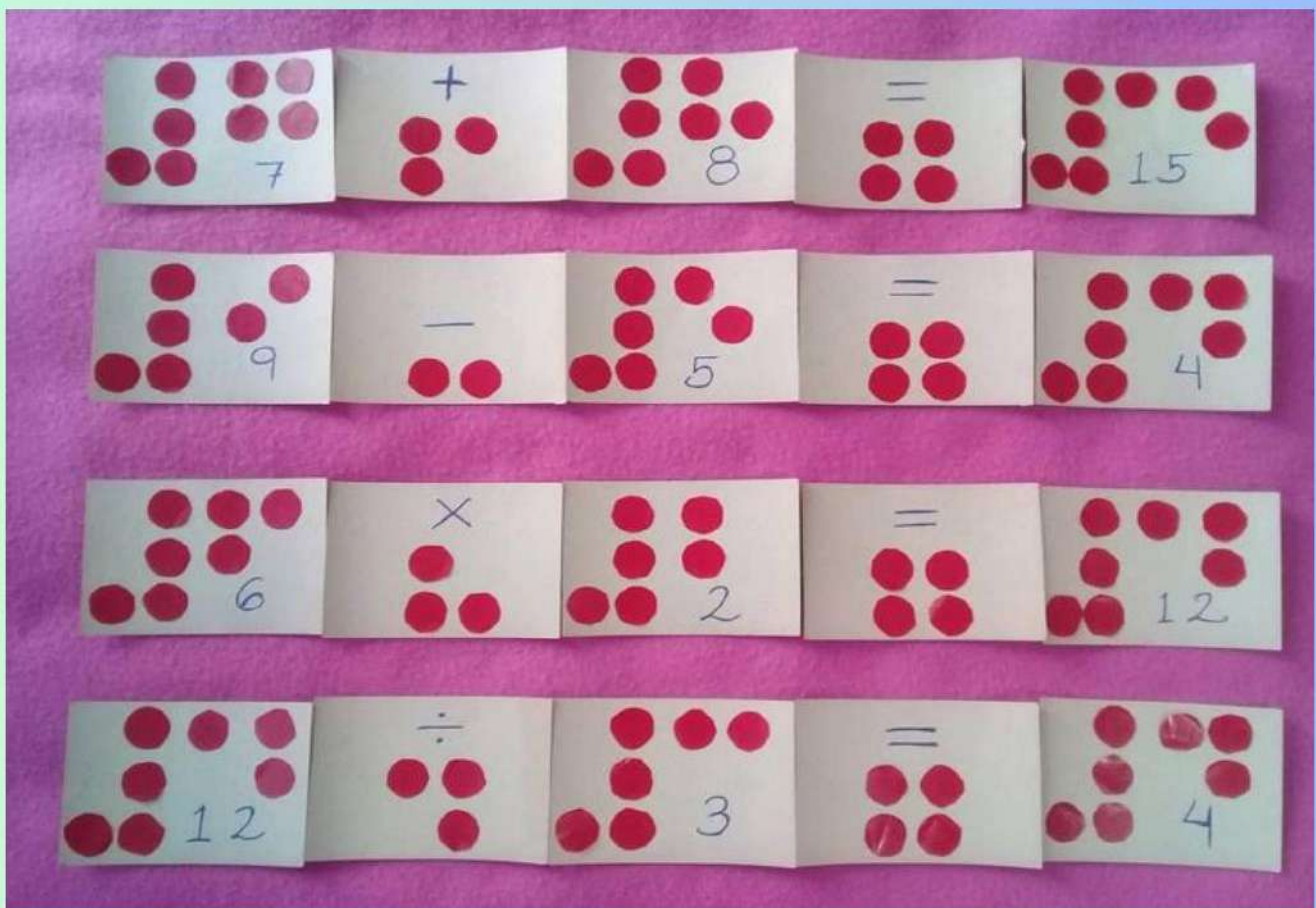*To write numbers, you must not forget to use the NUMERICAL INDICATOR before the number:*

Braille	Number		Braille	Number	
⠿	1		⠿	6	1 is ⠼⠁
⠿	2		⠿	7	2 is ⠼⠃
⠿	3		⠿	8	3 is ⠼⠉
⠿	4		⠿	9	10 is ⠼⠁⠚
⠿	5		⠿	0	100 is ⠼⠁⠚⠚

What do mathematical operations look like?

7 + 8 = 15

9 − 5 = 4

6 × 2 = 12

12 ÷ 3 = 4

NOW, TIME FOR PRACTICING!

ACTIVITY 1: CREATING A SIX DOT CELL

MATERIALS

- 1/2 dozen egg carton
- Scissors, marks, paper
- 6 eggs or balls

STEP 1:

Use the scissors carefully and cut the egg cartoon.

STEP 2:

Put the numbers respectively for writing and reading way.
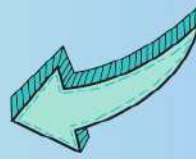
1	4
2	5
3	6

FINAL STEP:

Use 6 eggs or paper balls and put them in each cell. You can practice and memorize the punctuation marks for the alphabet, signs, and numbers. Have fun!

please follow the instructions

5

TIME FOR PRACTICING

Letter		D	O		T	S	
A	1	2	3	4	5	6
B	1	2	3	4	5	6
C	1	2	3	4	5	6
D	1	2	3	4	5	6
E	1	2	3	4	5	6
F	1	2	3	4	5	6
G	1	2	3	4	5	6
H	1	2	3	4	5	6
I	1	2	3	4	5	6
J	1	2	3	4	5	6
K	1	2	3	4	5	6
L	1	2	3	4	5	6
M	1	2	3	4	5	6
N	1	2	3	4	5	6
O	1	2	3	4	5	6
P	1	2	3	4	5	6
Q	1	2	3	4	5	6
R	1	2	3	4	5	6
S	1	2	3	4	5	6
T	1	2	3	4	5	6
U	1	2	3	4	5	6
V	1	2	3	4	5	6
W	1	2	3	4	5	6
X	1	2	3	4	5	6
Y	1	2	3	4	5	6
Z	1	2	3	4	5	6

Dot numbers		Letter
1, 4, 5		
2, 4		
1, 2, 5		
1, 2		

1, 2, 4, 5		
1,2,3,4		
1,2,3,5		
2,3,4		

1,3,6		
1,3,4,6		
1,3,5,6		
1,3,4,5,6		

6

TIME FOR PRACTICING

3. Circle the correct Braille letter that represents the print letter on the left.

4. Circle the correct print letter that represents the Braille letter on the left.

	A	B	C
A			
B			
C			
D			
E			
F			
G			
H			
I			
J			
K			
L			
M			
N			
O			
P			
Q			
R			
S			
T			
U			
V			
W			
X			
Y			
Z			

Braille			
	I	C	A
	F	P	Y
	C	Q	I
	W	H	F
	A	I	E
	D	J	F
	R	T	H
	O	H	J
	I	R	G
	H	Q	B
	P	K	M
	L	S	O
	M	Y	O
	V	M	N
	C	X	O
	K	F	D
	J	R	L
	R	M	U

5. Answer the questions by coloring in the correct Braille dots for each letter. Then write the print letter under each Braille letter.

- What is your name?

- Where do you live?

- What do you like to do for fun?

- What is your favorite color?

- What is your favorite fruit?

- Did you like to learn Braille?

TIME FOR PRACTICING WRITING AND READING!

EQUIPMENT FOR WRITING BRAILLE

Cardboards

Braille slate
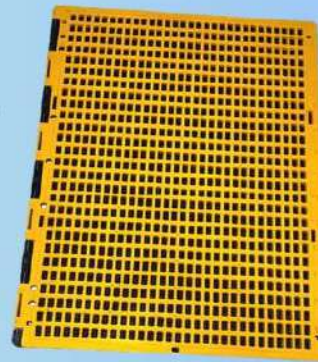
Stylus

Producing Braille involves employing a pointed stylus to emboss dots onto paper. Traditional slates or writing frames result in dots being formed on the opposite side of the paper, necessitating the writing of Braille in reverse. In contrast, an upward writing frame creates the dots on the front side of the paper, allowing you to generate Braille while reading it in the correct left-to-right orientation, simplifying the process of taking rapid notes.

INSTRUCTION:
1. Place the cardboard inside the Braille slate.
2. Take the stylus and write as a tittle PRACTICE 1 (Do not forget to write from right to left).
3. Write your whole name and the date you are writing.
4. Transcribe the following text:

The Busy Bee
Benny the bee loved to fly around and collect nectar from flowers. He was always in a hurry, buzzing from one flower to another. One day, he got lost. He was scared, but he remembered to stay calm. He followed the smell of flowers back home.

Vocabulary: bee, fly, nectar, flowers, hurry, buzzing, lost, scared, calm, smell, home.

9
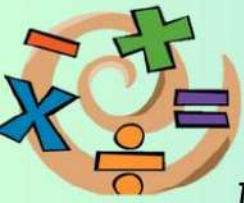
PRACTICING MATHEMATICAL OPERATIONS

INSTRUCTION:
In a new sheet, transcribe this worksheet and solve the operations.

$$11 + 1$$

$$13 + 4$$

$$3 + 8$$

$$17 + 0$$

$$5 + 6$$

$$14 + 2$$

$$7 + 7$$

$$2 + 7$$

$$0 + 4$$

$$16 + 1$$

$$15 + 0$$

$$10 + 4$$

$$8 + 0$$

$$4 + 3$$

$$12 + 3$$

$$6 + 1$$

LEXICAL APPROACH

It emphasizes assisting students in acquiring Vocabulary and helping them to build their word knowledge.

The main feature of the lexical approach lies in its emphasis on single words and chunks of words. Moreover, learners are exposed to authentic language usage, including idiomatic expressions and phrasal verbs, which enables them to develop a more natural and fluent command of the language.

The Lexical Approach can be defined as an educational approach to language instruction that shares similarities with the communicative approach. However, it also emphasizes the role of lexical phrases and preconstructed language chunks in facilitating fluent speech.

STRATEGIES	WHAT DOES IT CONSIST?
Associate the word with tactile sensation	Use Braille materials (Braille books or worksheets) to introduce letters, words, and sentences; then, learners develop reading skills, decoding abilities, and comprehension.
Writing and Spelling	Students can transcribe their thoughts and ideas into Braille by using a Braille slate and stylus or a Braille writer. Engaging in writing activities using Braille helps develop language production skills and reinforces spelling and grammar concepts.
Literacy Skill Building	Teachers can create Braille word cards, flashcards, or sentence strips to support vocabulary acquisition, construction, and language comprehension. Using Braille labels or Braille-enhanced objects can reinforce the association between objects and their names.
Giving clues	Prompt students to identify specific constructions by providing hints or clues. Alternatively, if you prefer to simplify the task, you can provide students with a written copy of the lyrics along with the instructions. For example, a teacher can ask questions related to lyrics.
Braille games and activities	Teachers can design interactive Braille games and activities to engage learners in a fun and engaging manner. Those include Braille puzzles, word games, storytelling with Braille, or Braille-based board games. Such activities promote language practice, cognitive skills, and social interaction.

SECTION 2

FOR TEACHERS AND PARENTS

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Facultad de Educación, Ciencia y Tecnología
Pedagogía de los Idiomas Nacionales y Extranjeros 12
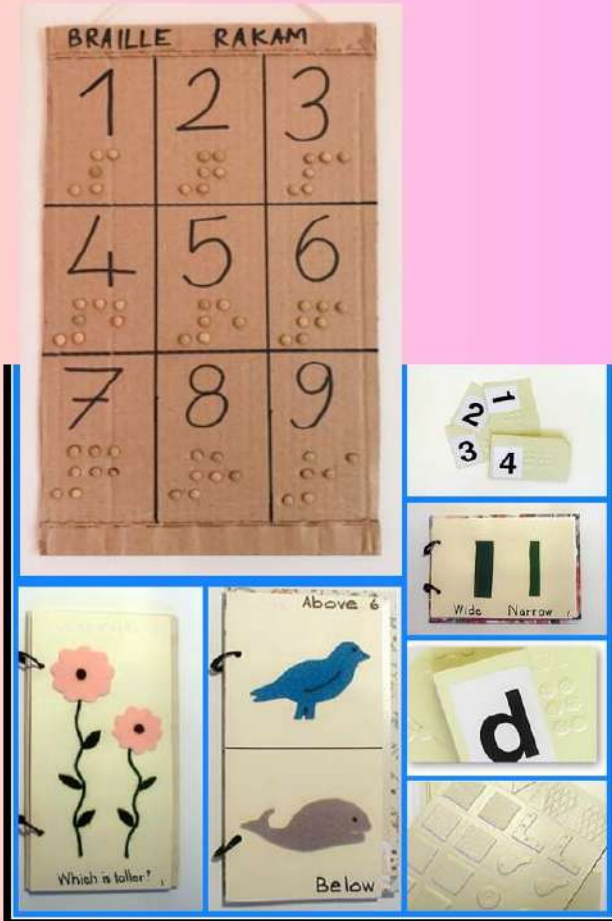
CREATING DIDACTIC MATERIAL

BEFORE TO START, WHAT IS MY ROLE IN ADAPTING MATERIALS?

Adaptations

Example of Adapted Material in Braille

Parts of a Plant

used in your own classroom, the parts of a plant.

9:26 / 12:07   1x
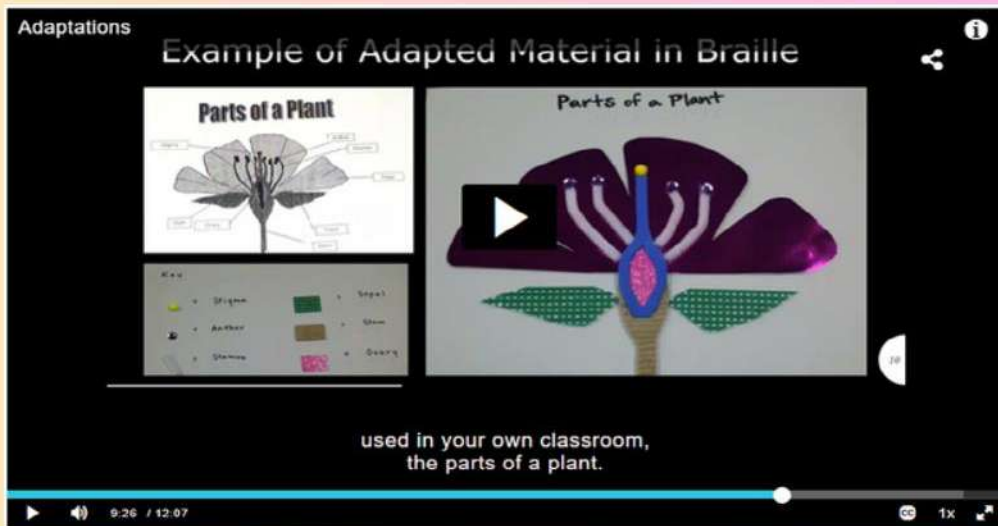
Please, visit the link below, watch the video and answer the question above.
https://www.pathstoliteracy.org/what-my-role-adapting-materials/

Let´s dive a little bit more into the matter!
https://www.perkins.org/resource/adapting-environments-individuals-vision-loss/

Adapting Environments for Individuals with Vision Loss

Ver más ta...   Compartir

Make Braille Alphabet Cards

Prep Time	25 mins	Total Time
5 mins		29 mins

Equipment

- 1 Pair of scissors
- 1 Set of braille alphabet cards printable
- 1 Bottle of school glue
- 1 package of candy dots or bump dots

In most cases, you are going to create cards with the vocabulary written in braille and tactile cards with tactile graphics that represent the English chunks or single words to be taught because students feel with their hands.

Instructions

1. Print out the alphabet cards on cardstock and print the Braille alphabet on regular paper. You might want to print multiple copies.

Braille Alphabet

a b c d e f g h i j

k l m n o p q r s t

u v w x y z

? ! ' , _ . capital #

0 1 2 3 4 5 6 7 8 9
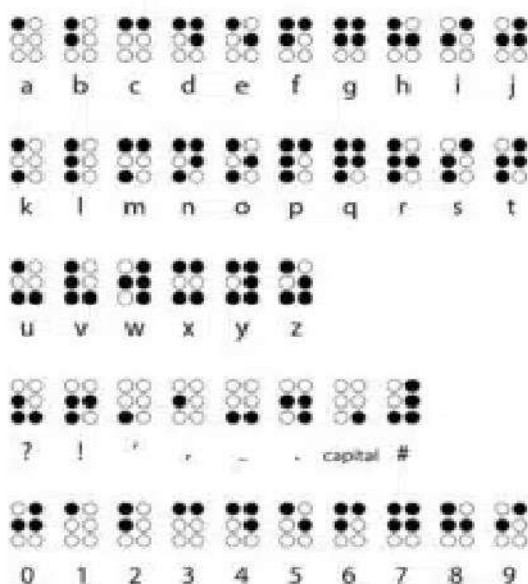
2. Using the Braille Alphabet decide which letters you want to create in braille. You might want to spell words.
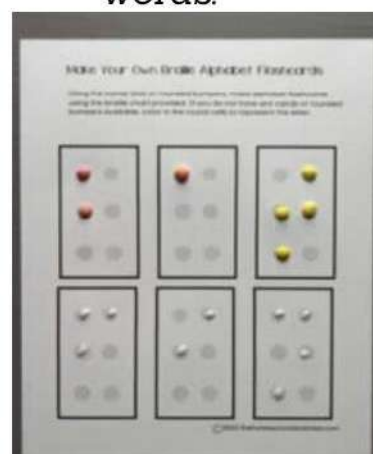
3. Dab glue and place a candy where it needs to go. Or, if using bump dots, arrange them on the dot. Write the letter next above or below each letter card.

15
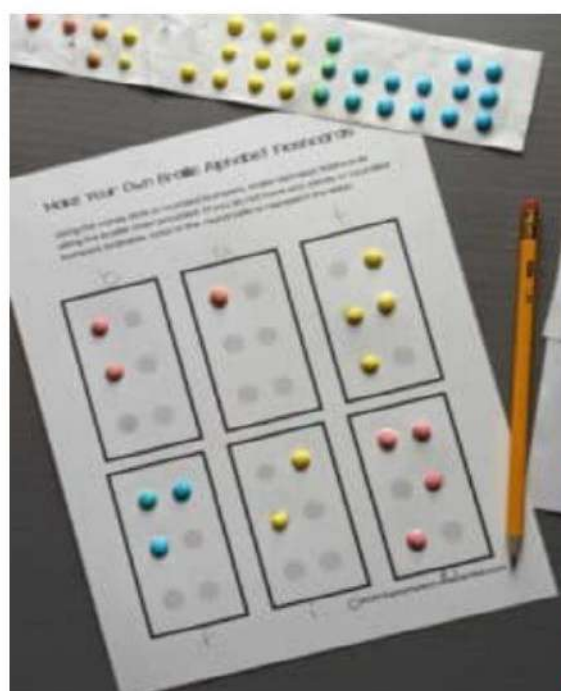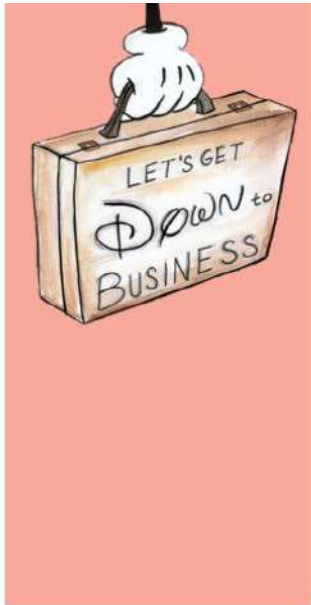
Braille Card Activity for Kids

This hands-on activity will help students understand how braille works. They'll become familiar with the braille alphabet and how visually impaired people have accessibility to reading and writing.

Prep Time	Active Time
5 mins	20 mins

Equipment
- Package of bump dots
- 1 Pair of scissors
- 1 Set of activity printables Request them below.

Instructions

1. Print the card templates on cardstock.
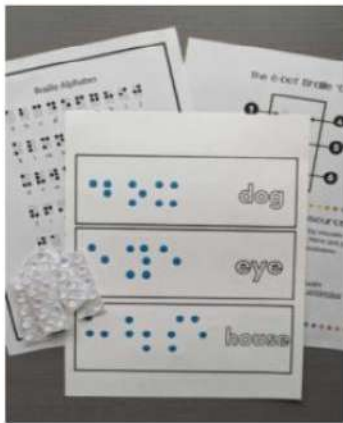
2. Cut out the printed cards along the outside line.
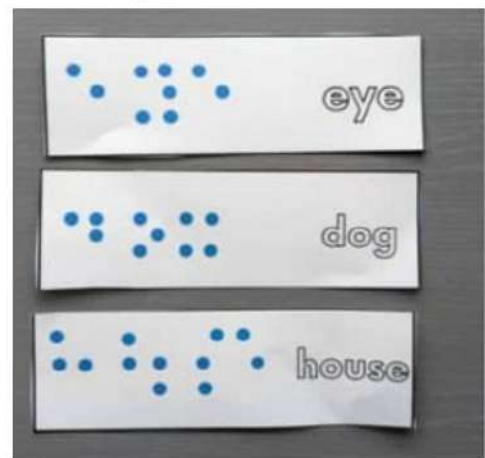
3. Peel the backing off of the bump dots and affix them to the cards, place one bump dot per blue dot.
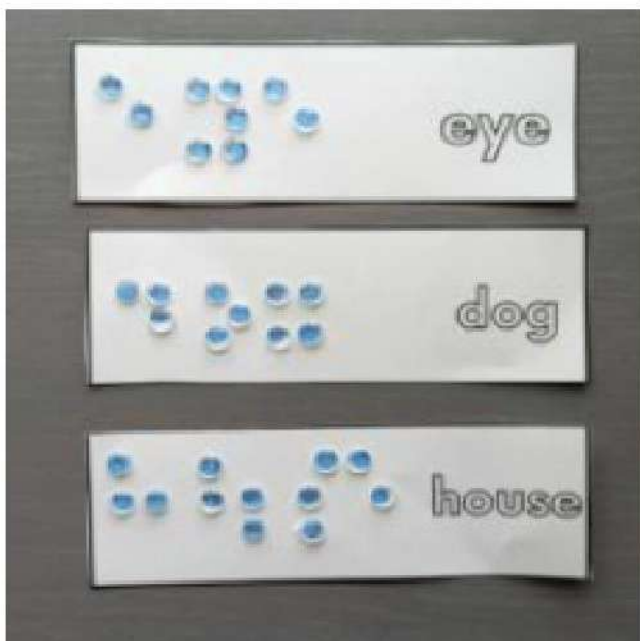
4. If using candy dots, place glue on each blue dot and place a candy on each.

Happy Birthday

money

cat

purse

MY INDIA

YOU CAN ALSO RECREATE THIS USEFUL MATERIAL

BRAILLE PUZZLES
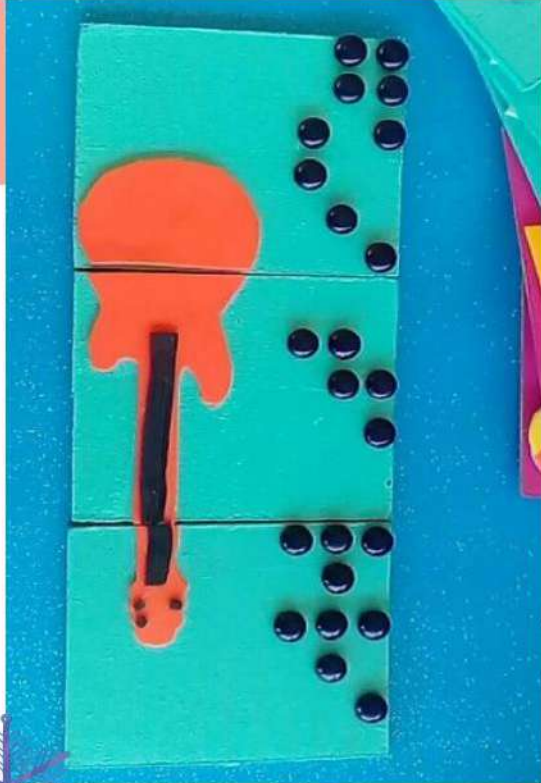
MATCHING

SOLAR SYSTEM
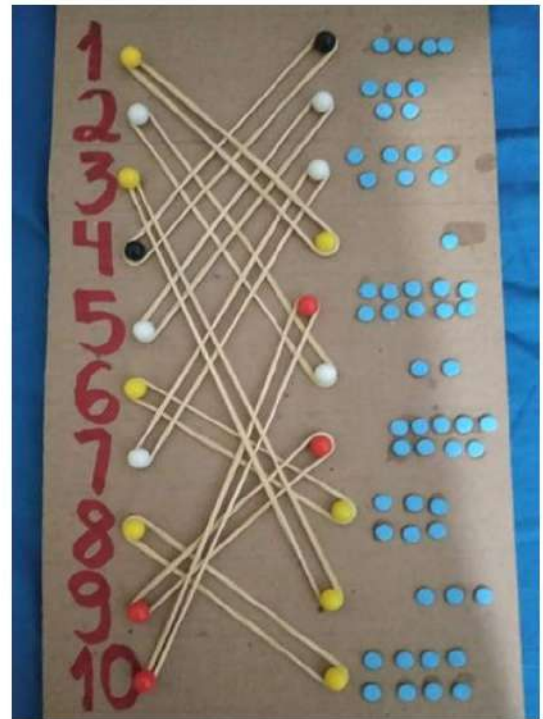
SENSITIVE BOOKS

TRY THESE GAMES

BINGO WITH VOCABULARY

B	I	N	G	O
3	24	40	51	63
8	26	36	49	65
5	21	REIZEN	46	61
2	18	34	60	69
9	20	44	50	66

B	I	N	G	O
ao	play	my	it	and
at	see	have	look	for
go	the	free	to	can
like	up	me	no	are
said	we	has	she	am

THE MYSTERY BOX

What can you feel?

LABYRINTH

19

LET'S GET
Down to
BUSINESS

TRY THESE GAMES

It Feels...

soft rough fuzzy

hard spongey bumpy
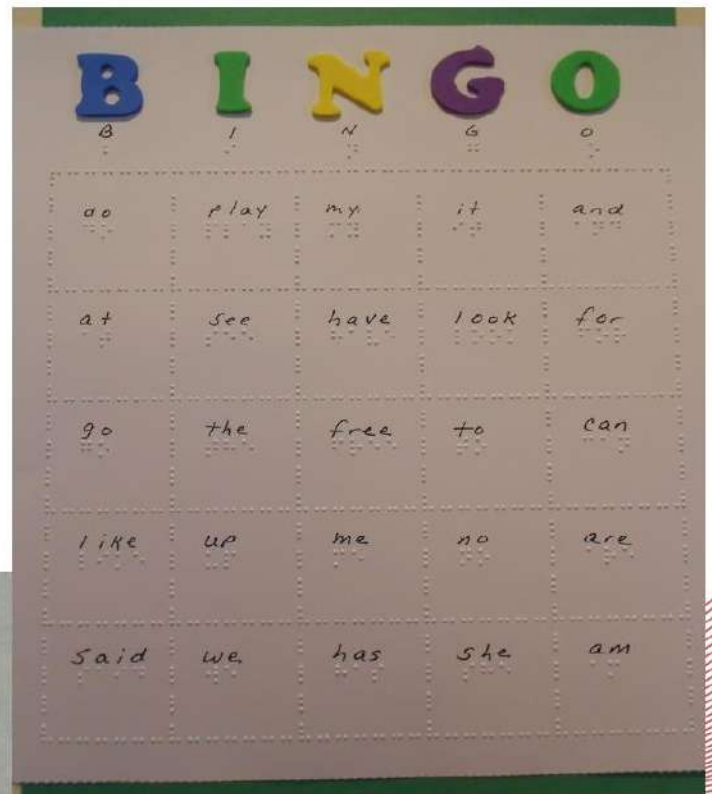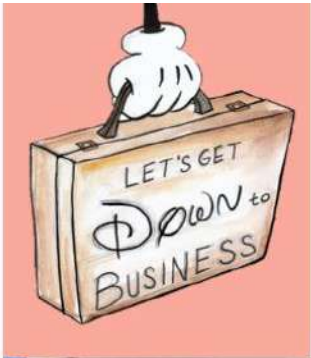
FEELING TEXTURES

THREE IN A ROW

FINDING THE PAIR

SECTION 3

FOR TEACHERS AND STUDENTS

Universidad Técnica del Norte
Facultad de Educación, Ciencia y Tecnología
Pedagogía de los Idiomas Nacionales y Extranjeros **21**

LEARNING VOCABULARY THROUGH THE ALPHABET

CONTENS

LESSON	VOCABULARY	STRATEGY	LEXICAL ACTIVITY	DIDACTIC MATERIAL	TIME
1	Classroom	Associate the word with tactile sensation	Touch real objects	Braille cell	45 min
2	Human body	Associate the word with tactile sensation	Simon says touch your...	Pairs of Braille cards	45 min
3	Animals	Reading instructions and Giving clues	Storytelling	Tactile board, toys and story printed in Braille	45 min
4	Adjectives	Role-play	Job interview role-play Say someone who is...	The mysterious box with braille cards	45 min
5	Music	Associate the word with tactile sensation & Braille games	Form words by touching and music	Braille puzzles	45 min

The Braille Alphabet

LESSON 1: A B C D E

Strategy — Associate the word with tactile sensation.

Lexical activity — Touch real objects

Didactic material — Braille cell

Objective — Students will be able to internalize the vocabulary through association of the word with tactile sensation to produce lexis.

Time: 45 min

Classroom Vocabulary

Apple
Book
Chair
Door
Eraser

Lexis

This is an apple
This is a book
There are two chairs
There is a door
Lend me the eraser

SOMETHING EXTRA TO TEACH:
You can explain briefly when to use a/an ; there is / There are.

PROCEDURE

PRE

1. Play the song "Braille rap" and read the lyrics of the song (English – Spanish)
2. Pronounce three times every single word.
3. Present Braille cards with the first five letters of the alphabet.
4. Indicate the punctuation marks for each letter.

DURING

5. Put the balls in the Braille cell to practice letters.
6. Say a word that starts with each letter. For example:

A as in Apple
B as in Book
C as in Chair
D as in Door
E as in Eraser

7. Ask students "Where do you find these objects?
8. Explain it is classroom vocabulary.
9. Give real objects to represent each word while repeat it twice.
10. Introduce lexis (detailed on the left) that contains the vocabulary and repeat them twice. For example "This is an apple"

POST

11. Ask students to develop the worksheet attached in the resources.

The Braille Alphabet

LESSON 1:

A B C D E

Be ready with:

- BRAILLE CELL
- BRAILLE CARDS
- SOUNDTRACK
- BRAILLE RAP SONG

♫ Well, hello everybody,
And everybody says hello.
Today, we'll learn the alphabet
And rap along. Let's go!
Dot 1 is an "a". Are you ready to play?
An "a" is dot 1. Reach for the sun.
Rap, tap, tap. Rap, tap, tap.
Dot 1, 2 is a "b". Braille is fun to me.
A "b" is dot 1, 2. On the floor tap your
shoe.
Rap, tap, tap. Rap, tap, tap.
Dot 1, 4 is a "c". Oh me, oh me.
A "c" is dot 1, 4. Let's stomp the floor.
Rap, tap, tap. Rap, tap, tap.
A dot 1, 4, 5 is a "d". Now, listen
carefully.
A dot 1, 4, 5 is a "d". Buzz like a bee.
Rap, tap, tap. Rap, tap, tap.
And that's the way we do it, the
Braille Rap Song.
The way we do it, we all rap along.
Dot 1, 5 is an "e". I guarantee.
Dot 1, 5 is an "e". Touch your knee.
Rap, tap, tap. Rap, tap, tap.

SONG:
https://www.pathstoliteracy.org/br
aille-rap-song/

STUDENT ACTIVITIES

PRE

1. Listen to the song.
2. Repeat every single word with the correct pronunciation after the teacher.
3. With theirs hands, touch the Braille cards and locate the dots for each letter.
4. Check the punctuation marks(a – 1 ; b –1,2 ; ...)

DURING

5. Practice with the Braille cell to form letters.
6. Repeat correctly:

> A as in Apple
> B as in Book
> C as in Chair
> D as in Door
> E as in Eraser

7. Answer: inside the classroom.
8. Have the first encounter with the classroom vocabulary.
9. Associate the word with real objects and repeat the vocabulary.
10. Internalize the lexis and repeat the examples that the teacher provides: "This is an apple"...

POST

11. Work on the worksheet.

WORKSHEET - LESSON 1

NOTE

You can create this worksheet with the equipment for writing and reading in Braille (use cardboards, stylus, and slate) or the other option is to use a Braille printer.

GOOD NEWS! The Universidad Técnica del Norte has this printer and you can request for its use. Just visit the Blind people Area located at the library.

INSTRUCTION - INSTRUCCIÓN

Circle the correct Braille letter that represents the print letter on the left.

Encierre la letra Braille correcta que representa letra impresa que está a la izquierda.

A	⠁	⠈
B	⠃	�
C	⠉	⠘
D	⠙	⠚
E	⠑	⠊

When you got the correct answer, say a lexis with the vocabulary you learnt in the lesson.

Cuando tenga la respuesta correcta, diga una oración con las palabras que aprendió en la lección.

VOCABULARIO DE CLASE – CLASSROOM VOCABULARY

Manzana = Apple
Esto es una manzana = This is an apple
Libro = Book
Esto es un libro = This is a book
Silla = Chair
Hay dos sillas = There are two chairs

Puerta = Door
Hay una puerta = There is a door
Borrador = Eraser
Préstame el borrador, por favor = Lend me the eraser, please

The Braille Alphabet

LESSON 2: F G H I J K

Strategy — Associate the word with tactile sensation.

Lexical activity — Simon says touch your...

Didactic material — Pair of Braille cards

Objective

Students will be able to internalize the vocabulary through association of the word with tactile sensation to produce lexis.

Time: 45 min

Human body Vocabulary
Face
Gut
Hand
Index finger
Jaw
Knee

Lexis
Face-to-face meeting.
The food stayed in my gullet.
I read with my hands.
This is my index finger.
Touch your jaw.
Touch your knee.

SOMETHING EXTRA TO TEACH:
You can explain briefly about the idioms like face-to-face, –ed ending, and being polite saying please.

PROCEDURE

PRE

1. Play the next part of the song "Braille rap" and read the lyrics of the song (English – Spanish)
2. Pronounce three times every single word.
3. Present Braille cards with the next six letters of the alphabet.
4. Indicate the punctuation marks for each letter.

DURING

5. Put the balls in the Braille cell to practice letters.
6. Say a word that starts with each letter. For example:

    F as in Face
    G as in Gut
    H as in Hand
    I as in Index finger
    J as in Jaw

7. Ask students "Where do you find these parts?
8. Explain it is human body vocabulary.
9. Ask to touch every part and repeat the word twice while say Simon says ...
10. Introduce lexis (detailed on the left) that contains the vocabulary and repeat them twice. For example "I read with my hands"

POST

11. Ask students find the pair of tactile cards.
12. When they got the pair, ask to repeat the lexis respectively.

The Braille Alphabet

LESSON 2: F G H I J K

Be ready with:

- BRAILLE CELL
- TACTILE PAIR CARDS
- SOUNDTRACK
- BRAILLE RAP SONG

♪ Dot 1, 2, 4 is an "f". You did it yourself.

"F" is dot 1, 2, 4. Knock on the door.

Rap, tap, tap. Rap, tap, tap.

Dot 1, 2, 4, 5 is "g". Braille is easy to me.

Dot 1, 2, 4, 5 is "g". Hit your chin, touch your knee.

Rap, tap, tap. Rap, tap, tap.

"H" is dot 1, 2, 5. Four and one is five.

"H" is dot 1, 2, 5. Count from one to five.

Rap, tap, tap. Rap, tap, tap.

And that's the way we do it, the Braille Rap Song.

The way we do it, we all rap along.

Dot 2, 4 is an "i". Oh my, oh my.

Dot 2, 4 is an "i". Find your eye.

Rap, tap, tap. Rap, tap, tap.

Dot 2, 4, 5 is a "j". Hey, hey, what do you say?

Dot 2, 4, 5 is a "j". Touch your ankle today.

Rap, tap, tap. Rap, tap, tap.

Dot 1, 3 is a "k". This is the same every day.

Dot 1, 3 is a "k". Touch your wrist, it's okay.

Rap, tap, tap. Rap, tap, tap.

STUDENT ACTIVITIES

PRE

1. Listen to the next part of the Braille rap song.

2. Repeat every single word with the correct pronunciation after the teacher while increase vocabulary.

3. With theirs hands, touch the Braille cards and locate the dots for each letter.

4. Check the punctuation marks (f-1,2,4;...)

DURING

5. Practice with the Braille cell to form letters.

6. Repeat correctly:

> F as in Face
> G as in Gut
> H as in Hand
> I as in Index finger
> J as in Jaw

7. Answer: in the human body.

8. Have the encounter with the human body vocabulary.

9. Do what Simon says and associate the word while touching body parts and repeat the vocabulary.

10. Internalize the lexis and repeat the examples that the teacher provides:

"The food stayed in my gullet"...

POST

11. Touch the cards and feel the different textures, shapes to find the pair. After that, repeat the lexis provided before.

FINDING THE PAIR - CARDS LESSON 2

NOTE

You need to create the pair of cards including a tactile picture that helps to associate the key vocabulary, include the word written in Braille too. You can print the cards below, fill or outline the images as well as the dots for each word (go back to the section of creating material will be useful); or use your creativity. The fact is that the cards look like:
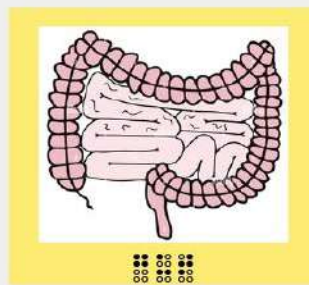
As you did in the first lesson, print these part to help students to keep the vocabulary.

VOCABULARIO DEL CUERPO HUMANO – HUMAN BODY VOCABULARY

Cara = Face

Reunión en persona = Face-to-face meeting

Garganta = Gut

La comida se atoro en mi garganta= The food stayed in my gullet.

Manos = Hands

Leo con mis manos = I read with my hands

Dedo índice = Index finger

Este es mi dedo índice = This is my index finger.

Toca tu mandíbula = Touch your jaw.

Toca tu rodilla = Touch your knee.

The Braille Alphabet

LESSON 3: L M N O P

Strategy — Reading instruction & Giving clues

Lexical activity — Storytelling

Didactic material — Tactile board &Toys

Objective
Students will be able to internalize the vocabulary by listening a story and a tactile board to provide more examples related to the topic.

Time: 45 min

Animals Vocabulary
Lion
Monkey
Nutria
Octopus
Penguin

Lexis
A lion lives in the jungle.
Monkeys eat bananas.
A nutria eats fish.
An octopus lives in the ocean.
My favorite animal is the penguin.

IMPORTANT!
Read the story very slowly and use good entonation.

PROCEDURE

PRE
1. Play the next part of the song "Braille rap" and read the lyrics of the song (English – Spanish)
2. Pronounce three times every single word.
3. Present Braille cards with the next five letters of the alphabet.
4. Indicate the punctuation marks for each letter.

DURING
5. Put the balls in the Braille cell to practice letters.
6. Say a word that starts with each letter. For example:

> L as in Lion
> M as in Monkey
> N as in Nutria
> O as in Octopus
> P as in Penguin

7. Ask students: How much do you know about these animals?
8. Share ideas related to the vocabulary.
9. Tell a short story "Some things about my friends" using a tactile board and toys.
10. Introduce the lexis when telling the story.

POST
11. Make questions about the story and ask students to complete the missing words when read again.

The Braille Alphabet

LESSON 3: L M N O P

Be ready with:

BRAILLE CELL
TACTILE BOARD AND TOYS
SOUNDTRACK
BRAILLE RAP SONG

♪ Well, hello everybody,
And everybody says hello.
Today, we'll learn the alphabet
And rap along. Let's go!

Dot 1, 2, 3 is an "l". Now isn't this swell?
An "l" is dot 1, 2, 3. You're as silly as a monkey.
Rap, tap, tap. Rap, tap, tap.
And that's the way we do it, the Braille Rap Song.
The way we do it, we all rap along.
Dot 1, 3, 4 is an "m". AM or PM.
Dot 1, 3, 4 is an "m". Give your hair a trim.
Rap, tap, tap. Rap, tap, tap.
Dot 1, 3, 4, 5 is an "n". Let's do it again.
Dot 1, 3, 4, 5 is an "n". Count your fingers on your chin.
Rap, tap, tap. Rap, tap, tap.
Dot 1, 3, 5 is an "o". Ready to go.
Dot 1, 3, 5 is an "o". Wiggle your toe.
Rap, tap, tap. Rap, tap, tap.
Dot 1, 2, 3, 4 is a "p". I see, I see.
Dot 1, 2, 3, 4 is a "p". Count to three.
Rap, tap, tap. Rap, tap, tap.

STUDENT ACTIVITIES

PRE

1. Listen to the next part of the Braille rap song.
2. Repeat every single word with the correct pronunciation after the teacher while increase vocabulary.
3. With theirs hands, touch the Braille cards and locate the dots for each letter.
4. Check the punctuation marks (l-1,2,3;...)

DURING

5. Practice with the Braille cell to form letters.
6. Repeat correctly:

L as in Lion
M as in Monkey
N as in Nutria
O as in Octopus
P as in Penguin

7. Give some ideas to answer the question.
8. Have a pre-encounter with vocabulary related to animals.
9. Listen to the story while touching the tactile board and toys.
10. Pay attention to the lexis mentioned in the story.

POST

11. Answer the questions and say the missing words.

STORY TELLING
LESSON 3

NOTE

You must read the story a maximum of three times in the target and mother languages. When you read it in English, please encourage students to follow the reading while you spell every word, highlighting that English is written in one way but pronounced in another. If possible, take time for repetition.

Get this reading using the Braille printer:

Create a tactile board including the animals mentioned, and also use toys.

SOME THINGS ABOUT MY FRIENDS

Hello, my little stars; I am María, a monkey. I have many friends from different places. For example, my friend Gabriel, a lion, lives in the jungle. My friend Fernanda, an octopus, lives in the ocean. On the other hand, my friend Juan is my neighbor and lives in the jungle. We like to eat bananas, they are delicious. We do not like fish, but we have a friend who does; she is Jessica, a nutria. Well, that is it, bye and see you later.

VOCABULARIO SOBRE ANIMALES– VOCABULARIO ABOUT ANIMALS

León = Lion

El león vive en la jungla= The lion lives in the jungle

Mono = Monkeys

Los monos comen bananas = Monkeys eat bananas.

Nutria = Nutria

Una nutria come pescado = A nutria eats fish.

Pulpo = Octopus

Un pulpo vive en el océano = An octopus lives in the ocean.

Pingüino = Penguin

Mi animal favorito es el Pingüino = My favorite animal is the penguin.

The Braille Alphabet

LESSON 4: Q R S T U

Strategy — Role - play

Lexical activity — Job interview Role - play
Say someone who is....

Didactic material — The mysterious box with braille cards

Objective — Students will be able to describe a profile through a job interview role-play.

Time: 45 min

Adjectives Vocabulary
Quiet
Responsible
Sensible
Thankful
Unique

Lexis
I am a quiet person.
I am responsible.
Give sensible advice.
You must be thankful.
We are unique.

SOMETHING EXTRA TO TEACH:
Reflect about being a good person and motivate students to practice their values.

PROCEDURE

PRE

1. Play the next part of the song "Braille rap" and read the lyrics of the song (English – Spanish)
2. Pronounce three times every single word.
3. Present Braille cards with the next five letters of the alphabet.
4. Indicate the punctuation marks for each letter.

DURING

5. Put the balls in the Braille cell to practice letters.
6. Say a word that starts with each letter. For example:

Q as in Quiet
R as in Responsible
S as Sensible
T as in Thankful
U as in Unique

7. Ask students, "What are these words?"
8. Explain the importance of practicing values.
9. Show the mysterious box containing vocabulary cards and ask to choose three. Then, ask to read the cards.
10. Present the situation "A job interview" and ask to perform the part when the employer is describing itself; students must use the three cards to produce lexis.

POST

11. Ask students to Say someone who is quiet/...

The Braille Alphabet

LESSON 4: Q R S T U

Be ready with:

BRAILLE CELL
MYSTERIOUS BOX &
CARDS
SOUNDTRACK
BRAILLE RAP SONG

Well, hello everybody,
And everybody says hello.
Today, we'll learn the alphabet
And rap along. Let's go!
Dot 1, 2, 3, 4, 5 is a "q". Yes, it's true.
Dot 1, 2, 3, 4, 5 is a "q". Wash your hair with shampoo.
Rap, tap, tap. Rap, tap, tap.
Dot 1, 2, 3, 5 is an "r". You're a superstar.
Dot 1, 2, 3, 5 is an "r". Wave your hands near and far.
Rap, tap, tap. Rap, tap, tap.
Dot 2, 3, 4 is an "s". I must confess.
Dot 2, 3, 4 is an "s". You're making progress.
Rap, tap, tap. Rap, tap, tap.
Dot 2, 3, 4, 5 is a "t". Oh me, oh me.
Dot 2, 3, 4, 5 is a "t". Two plus one is three.
Rap, tap, tap. Rap, tap, tap.
And that's the way we do it, the Braille Rap Song.
The way we do it, we all rap along.
Dot 1, 3, 6 is a "u". Whoop de do.
Dot 1, 3, 6 is a "u". One plus one is two.
Rap, tap, tap. Rap, tap, tap.

STUDENT ACTIVITIES

PRE

1. Listen to the next part of the Braille rap song.
2. Repeat every single word with the correct pronunciation after the teacher while increase vocabulary.
3. With theirs hands, touch the Braille cards and locate the dots for each letter.
4. Check the punctuation marks (q-1,2,34,5;...)

DURING

5. Practice with the Braille cell to form letters.
6. Repeat correctly:

Q as in Quiet

R as in Responsible

S as Sensible

T as in Thankful

U as in Unique

7. Answer: They are essential values.
8. Have the first encounter with the keywords.
9. Take out three cards from the mysterious box and read the word with the teacher's help.
10. Listen to the situation and describe a profile using the words selected to perform a job interview.

POST

11. Say the name of the person who is quiet/responsible/... After that, they make that question each other.

THE MYSTERIOUS BOX
BRAILLE CARDS
LESSON 4

NOTE

You need to place the cards with the words written in braille inside the box. Your role is that of the interviewer and the students who are seeking employment. When the activity is finished, they can exchange roles.

As you did in the first lesson, print these part to help students to keep the vocabulary.

VOCABULARIO SOBRE VALORES – VOCABULARY ABOUT VALUES

Tranquilo = Quiet

Soy una persona tranquila = I am a quiet person

Responsable = Responsible

Soy responsable = I am responsible

Sensato = Sensible

Dar consejos sensatos = Give sensible advice

Agradecido = Thankful

Debes ser agradecido = You must be thankful

Único = Unique

Somos únicos = We are unique

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The Braille Alphabet

LESSON 5: V W X Y Z

Strategy — Associate the word with tactile & Braille games

Lexical activity — Form words by touching and music

Didactic material — Braille puzzles

Objective

Students will be able to internalize the vocabulary while forming words by tactile sensation to produce lexis.

Time: 45 min

Music Vocabulary
Violin
Whistle
Xylophone
Yellow
Zombie

Lexis
I play the violin.
I blow the whistle.
I play the Xylophone
My favorite song is Yellow.
I memorize the song Zombie.

PROCEDURE

PRE

1. Play the las part of the song "Braille rap" and read the lyrics of the song (English – Spanish)
2. Pronounce three times every single word.
3. Present Braille cards with the first five letters of the alphabet.
4. Indicate the punctuation marks for each letter.

DURING

5. Put the balls in the Braille cell to practice letters.
6. Say a word that starts with each letter. For example:
   V as in Violin
   W as in Whistle
   X as in Xylophone
   Y as in Yellow
   Z as in Zombie
7. Ask students "Do you like music? Do you play any musical instrument?"
8. Play the sound of every musical instrument and a piece of the two songs.
9. Presents Braille puzzles with the musical instruments and spell every word.
10. Ask to form the puzzle correctly and then repeat the vocabulary adding the lexis.

POST

11. Ask students to tell more examples (lexis) using the vocabulary.

The Braille Alphabet

LESSON 5: V W X Y Z

Be ready with:

- BRAILLE CELL
- TACTILE PAIR CARDS
- SOUNDTRACK
- BRAILLE RAP SONG

Dot 1, 2, 3, 6 is a "v". Listen carefully.

Dot 1, 2, 3, 6 is a "v". Look and smile at me.

♫ Rap, tap, tap. Rap, tap, tap.

Dot 2, 4, 5, 6 is a "w". Could you? Would you?

Dot 2, 4, 5, 6 is a "w". Tell a friend I love you.

Rap, tap, tap. Rap, tap, tap.

Dot 1, 3, 4, 6 is an "x". Lickety tick, lickety teck.

Dot 1, 3, 4, 6 is an "x". Stretch your neck.

Rap, tap, tap. Rap, tap, tap.

And that's the way we do it, the Braille Rap Song.

The way we do it, we all rap along.

Dot 1, 3, 4, 5, 6 is "y". Can you answer why?

Dot 1, 3, 4, 5, 6 is "y". Put your hands down to your thigh.

Rap, tap, tap. Rap, tap, tap.

Dot 1, 3, 5, 6 is a "z". You must agree.

Dot 1, 3, 5, 6 is a "z". Now you're worry free.

Rap, tap, tap. Rap, tap, tap.

And that's the way we do it, the Braille Rap Song.

The way we do it, we all rap along.

Rap, tap, tap. Rap, tap, tap.

STUDENT ACTIVITIES

PRE

1. Listen to the next part of the Braille rap song.
2. Repeat every single word with the correct pronunciation after the teacher while increase vocabulary.
3. With theirs hands, touch the Braille cards and locate the dots for each letter.
4. Check the punctuation marks (v–1,2,3,6;...)

DURING

5. Practice with the Braille cell to form letters.
6. Repeat correctly:

    V as in Violin

    W as in Whistle

    X as in Xylophone

    Y as in Yellow

    Z as in Zombie

7. Answer to the questions.
8. Listen to the sounds and songs.
9. Play with the Braille Puzzle while touching the texture of the cards and review the spelling of the words.
10. When they got the word, build with the teacher lexis and memorize them.

POST

11. Produce more lexis similar to the ones provided by the teacher.

BRAILLE PUZZLES, SOUNDS AND SONGS
LESSON 5

NOTE

You need to create the Braille puzzles of the three musical instruments like the example below and play the sound of them. For the others two words, play a piece of each song and let students sing the chorus.

1. https://www.youtube.com/watch?v=6vnMmB1qp2Y
2. https://www.youtube.com/watch?v=6Ejga4kJUts
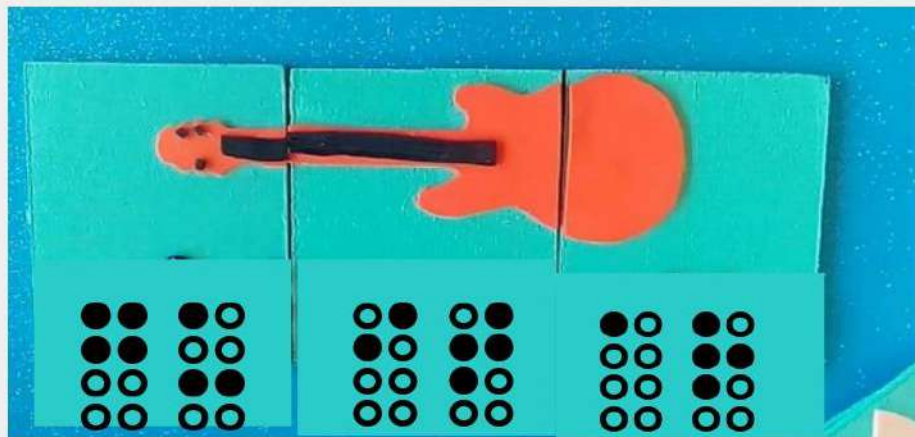
VOCABULARIO DE MÚSICA – MUSIC VOCABULARY

DO NOT FORGET TO PRINT THIS PART

Violín = Violin

Yo toco el violín = I play the violin

Silbato = Whistle

Soplo el silbato = I blow the whistle

Xilófono = Xylophone

Yo toco el Xilófono = I play the Xylophone

Amarillo = Yellow

Mi canción favorita es Yellow = My favorite song is Yellow

Zombie = Zombie

Memorizo la canción Zombie = I memorize the song Zombie
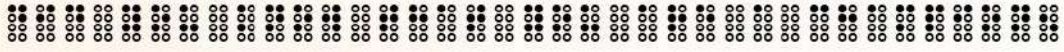
DID YOU KNOW THAT ...

YOU ARE A CHAMPION ?
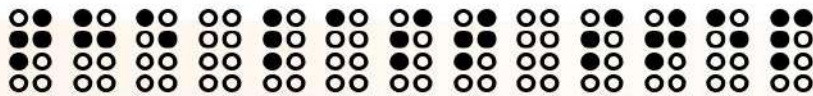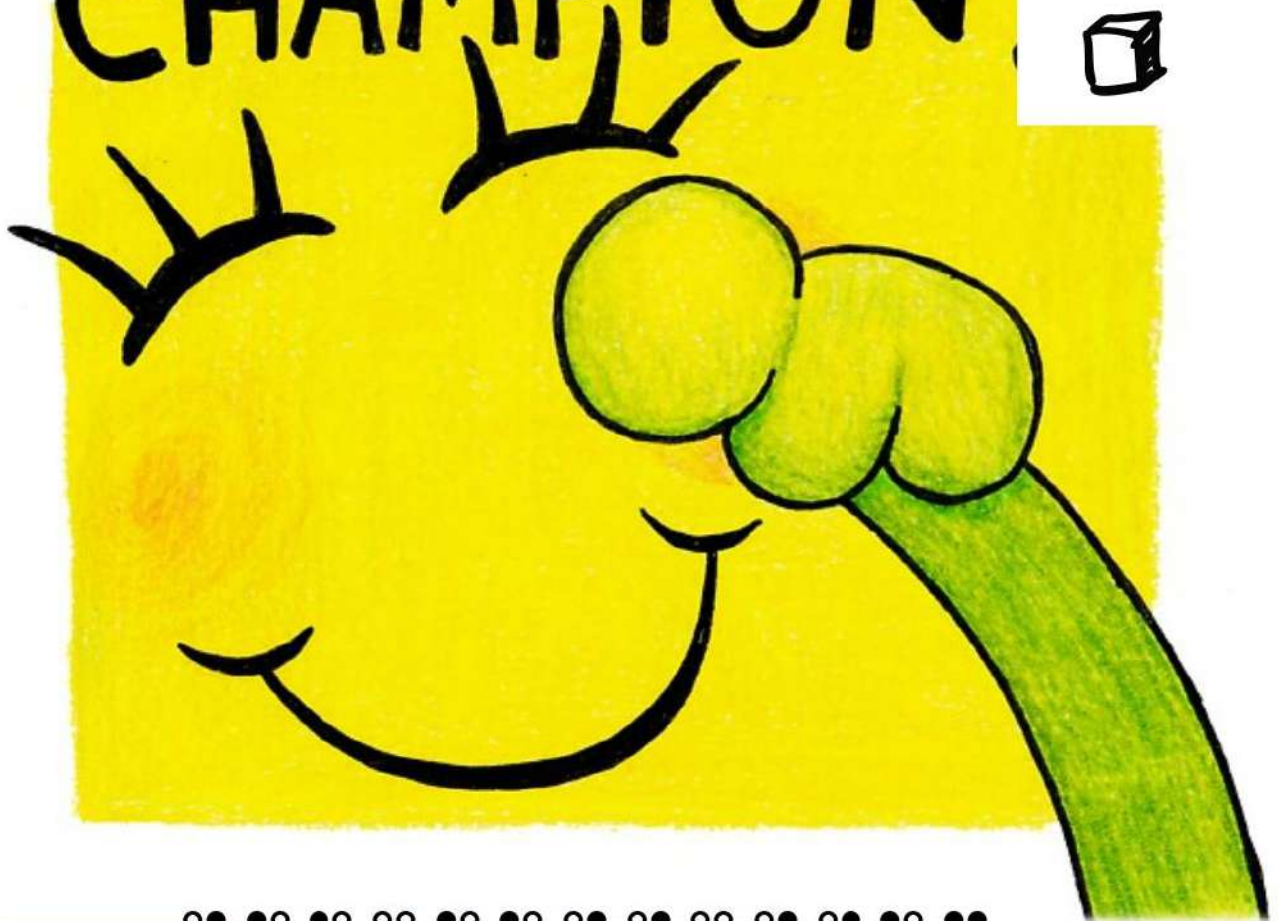
THE LAST STEP

FINAL ACTIVITY

Strategie — Vocabulary instruction

Lexical activity — Dictation

Didactic material — Braille equipment

Objective

To evaluate how much vocabulary students learnt during the five lessons through dictation of single words and chunks.

Challenge

You say any letter of the alphabet and students say a word quickly. Example: B, B as in Book

HOW DO YOU SAY... IN ENGLISH?

You say it in Spanish and students write it in English:

- Préstame el borrador, por favor.
- Ésta es una manzana
- I read with my hands.
- Éste es mi dedo índice.
- Los monos comen bananas.
- Mi animal favorito es la nutria.
- Soy una persona tranquila.
- Somos únicos.
- Yo toco el piano.
- Mi canción favorita es Yellow.

A MESSAGE FROM A FRIEND

Hi, my friends. I am Stevie Wonder, a legendary American musician, and singer-songwriter. I want to tell you that please, never give up and follow your dreams. I have been blind since I was born; however, that was not a limitation to being happy doing what I love the most: the music!

YOU ARE CAN ACHIEVE EVERYTHING YOU WANT, TRUST YOU!

LISTEN ONE OF MY HITS HERE:
https://www.youtube.com/watch?v=ZuXjQDxicTA

THE END
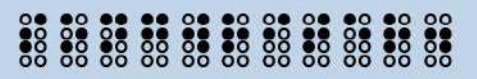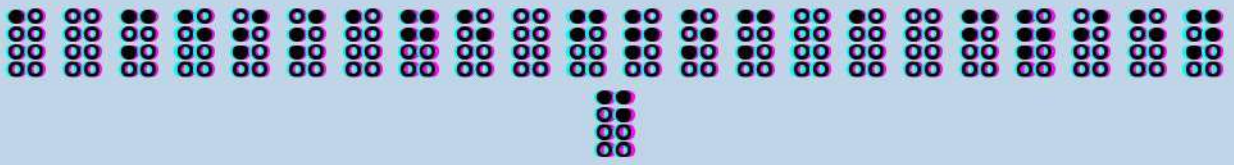
For more information and support about teaching to blind students, visit:

Paths to Literacy
- https://www.pathstoliteracy.org

Foundation for Blind Children
- https://www.youtube.com/@seeitourway/videos

DIY Braille Cell
- https://www.youtube.com/watch?v=I7bBkj3dGVY

BRAILLE card - Easy technique to make a greeting card
- https://www.youtube.com/watch?v=ASKyuj7P9Wk

How to Read Music in Braille
- https://www.youtube.com/watch?v=9zYMqsH5DzA

Tactile Communication Symbols for Non-Verbal Students
- https://www.youtube.com/watch?v=Rq3Hdfy69XE

Tactile Story Time: Mouse's First Spring
- https://www.youtube.com/watch?v=DhKcjc_GJt8

How to Create Sensory Bins for Kids with Visual Impairments
- https://www.youtube.com/watch?v=anicz7doO44

Story Book: Pete the Cat and the 5 little bunnies
- https://www.youtube.com/watch?v=5p3ua5bKx8I

How to make a texture boar
- https://www.youtube.com/watch?v=km6ih0NgOEQ

Tips and Tools for Teaching Beginning Braille Skills
- https://www.pathstoliteracy.org/tips-and-tools-teaching-beginning-braille-skills/#learning%20braille%20letters

Reading Strategies for Students with Visual Impairments: A Classroom Teacher's Guide
- https://www.prcvi.org/media/1078/reading_strategies_for_visual_impairments.pdf

Teaching Students with Visual Impairments
- https://www.teachingvisuallyimpaired.com/tactile-graphics-instruction.html

Braille Activities for Children
- https://www.pdrib.com/pages/brailactivities#braillebingo

CHAPTER V: CONCLUSIONS AND RECOMMENDATIONS

5.1. CONCLUSIONS

The following conclusions are established after conducting this research about using the Braille system to teach vocabulary from a Lexical Approach to visually impaired students.

The Braille system helps to develop or enhance reading and writing skills in visually impaired and blind students who write using the Braille slate and stylus and read using their fingerprints; learning it requires knowing the punctuation marks or dots of each letter from the alphabet as well as signs, and numbers. In fact, with intensive practice, individuals can read and write from single words to whole texts.

As the theoretical framework explains, the lexical approach is the most proper way to teach vocabulary because it focuses on building lexis and chunks of language. It should be highlighted that vocabulary acquisition goes beyond learning what a single word means; it is about internalizing the whole concept of words, considering context, spelling, and pronunciation.

Applying the research instruments provided first-hand information that helped identify weaknesses in methodology, strategies, and material that the teacher needed to teach the target language at Centro de Apoyo Pedagógico Especial de Imbabura. As a solution, adapting the Braille system to the different strategies, lexical activities, and materials enhances teaching topics of A1 English vocabulary to visually impaired and blind learners. Then, teachers must apply those components when teaching to create a proper learning environment.

The proposal presented brings together all the components mentioned before, which allows English teachers to face the exciting challenge of teaching visually impaired students in a very didactic way. It also makes it possible for students to have fun while learning English. Then, they get motivated to continue improving their English skills and obtain new experiences based on an inclusive education.

5.2. RECOMMENDATIONS

First, becoming an expert in Braille requires time and practice. If English teachers want to teach English through this system, they must establish a goal to become experts. Therefore, it is recommended to self-demand intensive practice in Braille writing and reading so that English teachers can reach their students, transmit their knowledge, and achieve an effective teaching-learning process.

Second, knowing the theoretical basis, specifically being informed about the approach behind this inquiry, is indispensable to understanding how vocabulary is built. It is recommended to inquire more about the Lexical Approach, looking for new and current articles that include innovative strategies and activities in which teachers can adapt them utilizing the Braille.

Third, based on the data collected by instruments application, it is recommended to expand the study population and consider interviewing Braille teachers because they have experience teaching that matter and can apport with other strategies to be implemented when teaching the target language. Even English teachers can work with Braille teachers and combine knowledge to streamline the teaching process.

Finally, it is recommended to take the proposal presented as a starting work for other researchers to continue improving strategies and activities and create new Braille material to teach vocabulary. In the same way, extend the contents to be prepared and periodically raise the English level. Lastly, including more motivational activities is recommended, too, because a student is motivated to learn the target language quickly.

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APPENDIX

Appendix 1: Request for the Application of Instruments at Centro de Apoyo Pedagógico Especial Imbabura

REPÚBLICA DEL ECUADOR

UNIVERSIDAD TÉCNICA DEL NORTE

Acreditada Resolución Nro. 173-SE-33-CACES-2020

FACULTAD DE EDUCACIÓN, CIENCIA Y TECNOLOGÍA

DECANATO

Oficio nro. UTN-FECYT-D-2023-0080-O

Ibarra, 22 de mayo de 2023

ASUNTO: TRABAJO DE INTEGRACIÓN CURRICULAR SRTA. YAZÁN AGUIRRE LILIAN THALIA

Señorita
Noemí Trejo
COORDINADORA
CENTRO DE EDUCACIÓN POPULAR ESPECIAL DE IMBABURA
Ibarra

De mi consideración:

A nombre de la Facultad de Educación, Ciencia y Tecnología, reciba un cordial saludo, a la vez que le auguro el mejor de los éxitos en las funciones que viene desempeñando.

Por medio del presente me dirijo a usted con el fin de solicitar de la manera más comedida, autorice que, se brinde las facilidades del caso, para que la señorita YAZÁN AGUIRRE LILIAN THALIA, portadora de la cédula de ciudadanía 0401953047, estudiante de la carrera de la carrera de Pedagogía de los Idiomas Nacionales y Extranjeros, obtenga información y aplique los instrumentos de investigación que se requieren para el desarrollo del trabajo de integración curricular con el tema: "THE BRAILLE SYSTEM AS A DIDACTIC STRATEGY FOR TEACHING VOCABULARY IN BLIND STUDENTS AT CENTRO DE EDUCACIÓN POPULAR ESPECIAL DE IMBABURA, ACADEMIC PERIOD 2022-2023"

Por la favorable atención le agradezco.

Atentamente,
CIENCIA Y TÉCNICA AL SERVICIO DEL PUEBLO

JOSE LUCIANO REVELO RUIZ
Firmado digitalmente por JOSE LUCIANO REVELO RUIZ
Fecha: 2023.05.22 15:10:27 -05'00'

MSc. José Revelo Ruiz
DECANO
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JRR/M. Báez.

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Ibarra-Ecuador
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Appendix 2: Request Instrument Validation

UNIVERSIDAD TÉCNICA DEL NORTE

FACULTAD DE EDUCACIÓN CIENCIA Y TECNOLOGÍA – FECYT

PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS

Ibarra, 09 de junio del 2023
Magíster

Rubén Congo
DOCENTE DE LA CARRERA PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y
EXTRANJEROS

De mis consideraciones:

Mediante el presente, solicito muy comedidamente se digne validar los Cuestionarios de
Investigación del Proyecto The Braille System as a Didactic Strategy for Teaching Vocabulary in
Blind students at Centro de Apoyo Pedagógico Especial Imbabura, Academic Period 2022-2023.
Previo a la obtención del título de: Licenciatura en Pedagogía de los Idiomas Nacionales y
Extranjeros; para lo cual, se dignará encontrar adjunto el/los Cuestionario y los instrumentos de
validación.

Por la atención que se sirva dar al presente, le anticipo mis debidos agradecimientos.

Atentamente,

Yazán Aguirre Lilian Thalía

C. C.: 0401953047

UNIVERSIDAD TÉCNICA DEL NORTE

FACULTAD DE CIENCIA Y TECNOLOGÍA FECYT

PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y

EXTRANJEROS – INGLÉS

PROYECTO: The Braille System as a Didactic Strategy for Teaching Vocabulary in Blind Students at Centro de Apoyo Pedagógico Especial Imbabura, Academic Period 2022-2023

SURVEY FOR THE STUDENTS AT CENTRO DE EDUCACIÓN POPULAR ESPECIAL DE IMBABURA

Objective: The aim of this survey is to collect information about your experience as an English learner at Centro de Apoyo Pedagógico Especial Imbabura.

Questionnaire

1. Age
   a. 8-15
   b. 15-20

2. How much do you like English?
   a. Very much
   b. A few
   c. A little

3. Why learning English is really important for you?

....

4. Are your English classes in Braille system?
   a. Yes
   b. No

5. How much do you dominate the Braille system?
   a. Very much
   b. A few
   c. A little

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6. In which percentage, does your English teacher use the braille system to teach you English?

a. 76-100 %

b. 51-75 %

c. 26-50 %

d. 0-25 %

7. From the next list, what activities does your English teacher commonly use in class?

○ Provide English learning materials in Braille format (textbooks, worksheets, reading materials level A1)

○ Create tactile word cards (with vocabulary a1)

○ Use objects with different textures to represent words (associate the word with the tactile sensation)

○ Utilize audio recordings of English texts, stories, or dialogues

Create creative writing tasks

○ Establish one-on-one English conversation with you.

○ Storytelling

8. How many words in English do you learn in class?

a. 1-3

b. 4-6

c. 7-10

9. What contents would you like to study in your English classes?

○ English alphabet

○ Word formation

○ Numbers in English

○ Colors

○ Geometric figures

○ Body parts

○ Planets

○ Greetings

○ Verb to be

○ Simple sentences

○ Affirmative, negative, and interrogative sentences in present simple

○ Pronouns

○ Family members

○ Professions

10. From the next list, what activities would you like to do using the braille system in order to increase your vocabulary?

- ( ) Braille puzzles
- ( ) Making sentences with flashcards
- ( ) Storytelling with braille
- ( ) Crosswords
- ( ) Writing things about me

11. Do you think creating an English glossary in braille will improve your English skills? Explain your answer.

....

....

Thank you for your cooperation!

A continuación, marque con una X en el criterio de evaluación según el análisis de cada pregunta que conforma el cuestionario, las cuales se encuentran representadas en el siguiente instrumento de evaluación como Ítem. De ser necesario realice la observación en el casillero correspondiente.

INSTRUMENTO DE EVALUACIÓN CUANTITATIVO				
CRITERIOS DE EVALUACIÓN				OBSERVACIONES
Ítem	Dejar	Modificar	Eliminar	
1	/			
2				
3	/			
4	/			
5	/			
6	/			
7	/			
8	/			
9	/			
10	/			
11	/			

....
Firma del Evaluador
C.C.: 1001417235

Apellidos y nombres completos	Congo Maldonado Rubén Agapito
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Correo electrónico	racongo@utn.edu.ec
Teléfono	0998693662

Fecha de envío para la evaluación del experto:	09-06-2023
Fecha de revisión del experto:	09-06-2023

UNIVERSIDAD TÉCNICA DEL NORTE
FACULTAD DE CIENCIA Y TECNOLOGÍA FECYT
PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS – INGLÉS

PROYECTO: The Braille System as a Didactic Strategy for Teaching Vocabulary in Blind Students at Centro de Apoyo Pedagógico Especial Imbabura, Academic Period 2022-2023

INTERVIEW FOR THE ENGLISH TEACHER AT CENTRO DE EDUCACIÓN POPULAR ESPECIAL DE IMBABURA

Objective: Collect data about the experience of teaching English at Centro de Apoyo Pedagógico Especial Imbabura.

Please, answer the following questions:

1. According to your experience, what English level based on Common European Framework Reference do visually impaired students have?

2. What strategies do you know to teach English vocabulary to visually impaired learners? Could you tell me the activities you include in those strategies?

3. Do you follow a syllabus? If not, how do you organize or choose the topic to teach?

4. Do you apply the braille system for English teaching? If yes, why do you think the English material decoded braille is useful in vocabulary acquisition?

5. Do you have enough Braille material to teach English vocabulary?

6. In general, what are the challenges you face in English teaching to visually impaired learners?

THANK YOU FOR YOUR TIME!

En la siguiente matriz marque con una X el criterio de evaluación según corresponda en cada ítem. De ser necesario realice la observación en el apartado correspondiente.

INSTRUMENTO DE EVALUACIÓN CUALITATIVO			
ITEMS	CRITERIOS DE EVALUACIÓN		
	MUCHO	POCO	NADA
Instrucción breve, clara y completa.	✓		
Formulación clara de cada pregunta.	✓		
Comprensión de cada pregunta.	✓		
Coherencia de las preguntas en relación con el objetivo.	✓		
Relevancia del contenido	✓		
Orden y secuencia de las preguntas	✓		
Número de preguntas óptimo	✓		

Observaciones:

....
....
....

Appendix 3: Evidence of Survey Application