



*Teaching english to visually impaired students in Ecuador through l.g.b learning
braille book*

*Enseñanza del idioma inglés para estudiantes con discapacidad visual en Ecuador
a través del libro l.g.b learning braille book*

*Ensino de inglês para alunos com deficiência visual no Equador por meio do livro
l.g.b learning braille*

Luis Oswaldo Guadalupe-Bravo^I

loguadalupe@epoch.edu.ec

<https://orcid.org/0000-0002-7631-2102>

David Antonio Ureña-Lara^{II}

david.urenia@epoch.edu.ec

<https://orcid.org/0000-0002-1482-0312>

Marcelo Eduardo Allauca-Peñañiel^{IV}

mallauca@epoch.edu.ec

<https://orcid.org/0000-0002-5431-0704>

Correspondencia: loguadalupe@epoch.edu.ec

Ciencias de la Educación.

Artículo Investigación

***Recibido:** 25 de junio ***Aceptado:** 23 de agosto de 2021 * **Publicado:** 1 de septiembre de 2021

- I. Magister en Lingüística Aplicada al Aprendizaje del Inglés, Licenciado en Ciencias de la Educación Profesor de Idiomas Ingles, Grupo de Investigación Med and Linguistics, Facultad de Salud Pública, Escuela Superior Politécnica de Chimborazo, Riobamba, Ecuador.
- II. Magister en Enseñanza del Inglés como Lengua Extranjera, Grupo de Investigación Med and Linguistics, Facultad de Salud Pública, Escuela Superior Politécnica de Chimborazo, Riobamba, Ecuador.
- III. Magister en Interconectividad de Redes, Ingeniero en Sistemas Informáticos, Técnicos Docente, Centro de Idiomas, Escuela Superior Politécnica de Chimborazo, Riobamba, Ecuador

Abstract

The following study investigated how visually impaired students are taught English through L.G.B Learning braille book that englobes English as a foreign language content, techniques, and activities teachers use to teach English at Dr. Luis Benavides School. Three English teachers of visually impaired students were interview. Furthermore, an observation guide was used to follow up on the progress of several classes. Content analysis procedures were implemented to encode and reproduce the data acquisition in the interviews. Observation guides deliver the necessary information to understand the teachers' downsides when presenting the contents, techniques, and orally interacting in the second language with the visually impaired students while developing the activities presented in the braille book. Interview data analysis demonstrated topics of concern that include syllabus, social problems, lack of resources, and the constant use of the audio-lingual method as the only technique available for the teachers. Participants used the same materials in the different levels, adding the braille book developed by a previous study, which was difficult to introduce due to teachers' and students' lack of previous capacitation. Students were exposed to several tasks that the braille book presented, but the same antique methods were necessary for teachers to accomplish them. The study presents suggestions for in-service English learning program updates, especially for those who work with students with visual impairments, for the syllabus to be rebuilt, evaluated, and made more effective for students with special needs. Moreover, it includes comments on the teacher's materials and techniques used.

Keywords: Teaching English; visually impaired students; content; braille book.

Resumen

El presente estudio investigó cómo se enseña inglés a los estudiantes con discapacidad visual a través del libro L.G.B Learning braille book que incluye el contenido, las técnicas y las actividades del inglés como lengua extranjera que los maestros utilizan para enseñar en la escuela Dr. Luis Benavides. Se entrevistó a tres profesores de inglés de estudiantes con discapacidad visual. Además, se utilizó una guía de observación para hacer un seguimiento del progreso de varias clases. Se implementaron procedimientos de análisis de contenido para codificar y reproducir la adquisición de datos en las entrevistas. Las guías de observación brindaron la información

necesaria para comprender las desventajas de los docentes al presentar los contenidos e interactuar oralmente en el segundo idioma con los estudiantes con discapacidad visual, mientras se desarrollan las actividades del libro en braille. El análisis de datos de las entrevistas demostró temas de interés que incluyen problemas con el programa de estudios, sociales, de falta de recursos y el uso constante del método audio-lingual como la única técnica disponible. Los participantes utilizaron los mismos materiales en los diferentes niveles, agregando el libro en braille desarrollado por un estudio previo, el cual fue difícil de introducir debido a la falta de capacitación previa de profesores y alumnos. Los estudiantes fueron expuestos a varias tareas que presentaba el libro en braille, pero los mismos métodos antiguos eran necesarios para que las cumplieran. El estudio presenta sugerencias para actualizaciones del programa de aprendizaje de inglés, especialmente para quienes trabajan con estudiantes con discapacidades visuales, para que el plan de estudios se reconstruya, evalúe y sea más efectivo. Además, incluye comentarios sobre los materiales y técnicas utilizados por el profesor.

Palabras clave: Enseñanza de inglés; estudiantes con discapacidad visual; contenido; libro en braille.

Resumo

O presente estudo investigou como o Inglês é ensinado a alunos com deficiência visual por meio do livro LGB Learning em braille que inclui o conteúdo, técnicas e atividades de Inglês como Língua Estrangeira que os professores usam para ensinar na escola Dr. Luis Benavides. Três professores de inglês de alunos com deficiência visual foram entrevistados. Além disso, um guia de observação foi usado para acompanhar o progresso de várias aulas. Procedimentos de análise de conteúdo foram implementados para codificar e reproduzir a aquisição de dados nas entrevistas. Os guias de observação forneceram as informações necessárias para compreender as desvantagens dos professores na apresentação dos conteúdos e na interação oral na segunda língua com alunos com deficiência visual, no desenvolvimento das atividades do livro em Braille. A análise dos dados das entrevistas evidenciou temas de interesse que incluem problemas com os conteúdos programáticos, problemas sociais, falta de recursos e a utilização constante do método áudio-linguístico como única técnica disponível. Os participantes utilizaram os mesmos materiais em diferentes níveis, acrescentando o livro braille desenvolvido em um estudo anterior, que foi difícil

de introduzir devido à falta de formação prévia de professores e alunos. Os alunos foram expostos a várias tarefas que o livro braille apresentava, mas os mesmos métodos antigos eram necessários para realizá-las. O estudo apresenta sugestões de atualizações no programa de ensino de inglês, principalmente para quem trabalha com alunos com deficiência visual, para que o currículo seja refeito, avaliado e mais eficaz. Além disso, inclui comentários sobre os materiais e técnicas utilizadas pelo professor.

Palavras-chave: Ensinando inglês; alunos com deficiência visual; conteúdo; livro em braille.

Introduction

The learning process that visually impaired children pass through differs from people who do not struggle to formulate mental images to understand the world. Instead, visually impaired children try to live and learn, constructing their meanings for the things they only know by learning through the hearing sense, the only available input information source for them. For creating social proximity with their peers and image the relationship between how tools and words work together according to their correct function and purpose they were conceived. How visually impaired students perceive the class is beyond the common class boundaries. Therefore, activities and techniques used to educate the visually impaired students follow the assumption that they should be designed to focus on the weaknesses instead of the students' strength. (Álvarez, 2019)

Researchers state that there have been significant improvements in the education field for visually impaired students. Methods and techniques had changed over time, and plausible application in a real class is possible. (Bonilla, 2019). Thanks to the technology development, transcript lessons to braille from a standardized English learning book, it is achievable to allow visually impaired students to explore an intellectual realm that they did not have the opportunity to meet before Casierra (2021) and Mahler, C. (2020).

Recent research asserts that only things that a person can perceive through the sight sense can be conceptualized according to the identification they deliver to them that comes from the education process attained. Romero-Sánchez (2017) declared in his study for teaching visually impaired students that they born with visually impairing problems in their early life could not generate a perspective concept. However, the fact that visually impaired students cannot create concepts for

themselves is not a trammel for being goods in second language acquisition. Learning languages today is more accessible than in the previous years because methods and technology are flexible enough to adapt to visually impaired students' needs (Castañeda, 2018). However, despite teaching methods for visually impaired students' advances and advantages, they tend to commit the same mistakes as in the years previous the application of the new techniques. One of the most representative issues they have is verbalism or the recurrence in using a word with an unknown referent. Since visually impaired students can not construct a clear image or idea to correlated with words it is a challenge for them to understand a wide variety of words. Moreover, deliver a clear explanation of each word represent a challenge for the teacher too. Thus, to ease this problem it is necessary and information source that impaired students can handle. Furthermore, the contrast between the interaction and concepts that the relatives of the visually impaired students deliver to them and the teacher's perspective about the exact contents represents a difficulty to solve. The differences in some instances only produce confusion for the students. For daily live interaction, some words are difficult to understand and define for the ordinary person. People who do not have sight disabilities use an expression like "I SEE," "WATCH OUT," or "SHE LOOK LIKE." Thus, a visually impaired student may find it challenging to comprehend such expressions with visual meanings (Melo, 2017). How they understand and create a visual image of them is something that they only know, and it got to be difficult for them to understand. However, the newest research concludes that there is not a consequential effect in the use of these expressions went the visually impaired students start to use them for a while, so the learning process in means of the use of the language is very similar to those students who do not have a sight disability.

Previous research has stated that using meaningful materials that are adequate for visually impaired students and directed exclusively for them has good reception. (Moran, 2015). However, it takes a significant amount of time for visually impaired students to get accustomed to them. Moreover, it represents a significant challenge for teachers to use the materials because the students may get lost in the material and what content the teacher is presenting to them when the class has already taken its course. Nevertheless, once adequation complications are solved, the students start to develop better-standardized concept images, at least for the group using the same material, helping them interact a little bit more with their classmates. Furthermore, the visually impaired students start to ask questions about the perspective of the things that the teacher can see.

Despite the findings that the observation guide provided, several issues are difficult to solve even implementing the L.G.B braille book: how the students represent and describe themselves and which is the real purpose for them to learn and use a second language for real-life situations (Bravo, 2017). The results of learning the second language structure and means to be used had been covered, but the real-life situation in which the students imagine they are going to use the second language still is something difficult to perceive for them and even more difficult for the teachers to imagine. Therefore, this study investigates new ways of upgrading and updating the methodology, techniques, and material that teachers of visually impaired students got to use to deliver meaningful information. Following this line of investigation, the study supports itself by answering the following research questions:

1. Which are the downsides when applying new methodologies for visually impaired students?
2. Does the use of a material designed exclusively for visually impaired students improve learning the second language?
3. Which are the strengths of using a material that was conceived for visually impaired students exclusively?
4. Which is the most representative weakness that visually impaired students' English have?

2. Research design

This study has a qualitative research design. Within this framework, three English teachers of visually impaired elementary and high school students were interviewed, and each teacher's forty-five-minute class was observed. The interviews were only transcribed due to time constraints. The

content analysis process was followed to analyze the interviews. Observation guides were used to evaluate and triangulate interview data and deliver conclusions.

2. 1. Participants

The interviews were conducted at Dr. Luis Benavides school students, where 100% of the population have visually impairing disabilities. Seventeen students were interviewed with ages from 7 years old to 17. In addition, one principal teacher and two hired teachers were interviewed at the school. Their ages were 30, 34, and 29 years old (teachers are coded as T.A. (Teacher A), T.B. (Teacher B), and T.C. (Teacher C) in the study to avoid any conflicts with identity). The first interview was conducted with T.A. T.A. had a degree in English as foreign language teaching, he had a visual disability of 100%, he did not have any instruction in teaching people with disabilities. He reported for the study that he had been teaching visually impaired students for four years, and before he did not have any experience as a teacher before those four years. T.A. was asked if he had courses or capacitation in teaching visually impairing students, but he reported that he did not have any.

The second and the third interviews were directed to the teachers with no visual disabilities hired to help the principal teachers' needs and time constraints. Both teachers work for Escuela Superior Politecnica de Chimborazo with no visually impaired students in their work. Both teachers had prior training for teaching and using the L.G.B. is learning braille books at elementary and secondary levels. They had a master's degree in teaching English as a Second language in different universities in Latin America, and they reported that they had formal instruction teaching people with learning and physical disabilities. Moreover, they reported their capacitation for elementary and high school teaching for students with learning and physical disabilities. Teachers review the syllabus and program that the school propose and identified critical issues. Thus, they reported that the program does not have meaningful purposes. Besides, they affirm that there was no difference between the contents presented for the different courses. Essentially, they were the same, stating that the principal cause of the deficiencies that students present in the courses is due to the implementation of the school program.

The same observation guide and parameters were used in the different classrooms at Dr. Luis Benavides school. Levels are ranged from elementary level to middle-high school exclusively for visually impaired students. Moreover, the school allows the inscription for students who have different disabilities. Contrasting the standardized educational system code implemented in Ecuador, this educational institution does not distinguish the age of the students, so there is a significant variation in their ages that sometimes make difficult their interaction in class. Besides, the knowledge level varies from student to student since they have extra instruction at home and others do not. According to the information displayed and the educational particularities, data collection and analysis are detailed to provide vital information to stress the importance of this research study.

2. 2. Data collection procedures

Data collection procedures included: Semi-structured interviews for the three teachers and students, an observation guide for each course, and participants in the 45 minutes class. There was a pre-interview before the observation guide implementation and a post-interview after the classes. Interviews and observation guides were based on the study research questions discussed with the institution principal and the two hired teachers before their implementation. Moreover, the principal teacher was informed and gave consent to enter his classes and interrupt them if necessary for the study.

Once the research question was meticulously studied, their principles were used for the semi-structured interviews. The teachers deliver the class plans and syllabus to be analyzed in which it can be found the information to relate with the observation guide. However, they do not mention the techniques and the methodology they follow; when asked, they mention that the primary methodology was the audio-lingual method. Thus, the observation guide considered the audio-lingual method features mainly the process and objectives. Also, teachers' perceptions about the materials and the implementation of the L.G.B Learning braille book were gathered to know the opinion of its content. It was necessary to mention the study purpose to the students to feel prepared for some of the changes that the application of the book may carry in a class, especially for them not to feel any pressure of having another person considering the teaching and learning process.

The final step was to compel the information acquired and triangulate the information with the students' and teachers' perceptions about the research study for that, it was essential to talk informally with the students after class, that information was vital to understand the participants better, and so the results could be trusted.

2. 3. Data analysis procedures

The data analysis procedure was performed systematically since time constraints were a considerable disadvantage for the study. Data was coded when it was gathered. Thus, data criteria were arranged according to the "Content analysis", following them for qualitative research. Thus, the coded system and criteria selection allows the study to present rushing presumptions and generalization of results with misguided conclusions. Data analysis criteria incorporate repeated content to make it easy for the students to familiarize themselves with coding, clustering codes that appeared a couple of times, and turning each cluster into a critical study topic. After that, the transcribing data process follows a comprehensible criterion for the results to be arranged following the coding, clustering, and reorganizing model to create themes for answer the study questions. Most relevant information was processed using a word processor, for the topics have concordance with the information that it has relation with, considering the study question principles. The interviews were read several times to avoid the content that may appear unnecessary for the study. Nevertheless, the characteristics of the semi-structured interview items make it impossible for information that does not relate to the criteria to appear.

Data obtained from the observation guide application used in each class have little differences from the interviews data considering they were focused for the teaching and learning process observation instead of gathering perceptions about them. The items in the observation guide consider the contents that were included in the L.G.B learning braille book so the number of the topics review during the observed classes were evaluated. However, the information of the interviews was triangled when both the observation guide and the interviews were finished to analyze. Data criteria had to be carefully evaluated for the process of triangulation to avoid taking in consideration unnecessary data.

3. RESULTS

3. 1. Results from Classroom Observation

The observation guide had its primary objective to determine and analyze teachers' challenges in teaching. Thus, the teachers apply the contents related to the L.G.B. learning braille book in which they can use the methodologies, techniques, and tasks suggested during class to have a basis for triangulating the information that they will encounter post-interviews. The observation guides applied in class also deliver a clear picture of the students' performance while using the activities and tasks suggested in the book. The usage of this observation guide displays most of the issues that a classroom of visually impaired students in Ecuador has concerning the topics of EFL instruction. The topics considered in the observation guide and their most representative problems are described at the end of this section, considering a participant's perception.

Regarding the critical issues identified by the teachers in the class, lack of interaction among the students was one of the most problematic ones. Even though the students started to understand the new material they were exposed to, they did not want to share with the teacher or their classmates what they understood in the class. Students only responded to the repetition of what the teacher said in class, and it was challenging for them to create their concepts or ideas about the topic. However, in front of these problems, even though the strategies for solving them were given, the teachers did not have the opportunity to apply them properly, they change the teaching contents, but the students were as they have been until that day. The only strategy that could be observed and applied was to present the realia, with a couple of interactive toys that make sounds given by the study the students started to talk to each other, but the problem was that the interaction was halved in the use of their mother tongue and the English Language.

A significant achievement was gained for students who started to interact with the words but not in a desirable percentage. Perhaps, this situation happens because of the time constraints of the study that did not allow it to continue with it for a longer time. Therefore, it was necessary to apply similar content with all the classes and levels that the teacher has. The L.G.B. leaning braille book contains the contents that shall be shown to the students in primary and intermediate levels, but

their use must have a progression. Topics that are treated in the beginning can be neglected and change to more advanced ones.

Moreover, the methods and techniques that are presented there must have a progression too. Thus, another issue for the students was for them to get accustomed to the book use. In the first lesson, it was observed, T.A. that was the principal teacher wanted the students to use their L.G.B. books, which had content in braille, and wanted the students to read per turns the contents presented in the book, but the teacher needed to guide page per page the reading of the book. Although the content was straightforward, the students tend to get lost in the pages that they must read and interpreted in the book, so the intervention of a second person was necessary. Sometimes the students who had visual field restrictions helped the visually impaired ones, which was favorable for the learning and teaching process and was serious about taking into consideration. Regarding the teaching of grammar structures, T.A. does not have any preparation to distinguish between the uses of a sentence in present simple with the verb to be and its use with principal verbs that was a surprising recoil in the process of teaching, and students seem a lot confused. As a result, almost the entire class was lost for them, which was a considerable disadvantage considering the time constraints mentioned many times in this study.

Meanwhile, T.B. and T.C., which were teachers with a significant domain of the English language and the education process, were able to apply the contents of the books in a better way. As a result, students are shown a better attitude towards the contents presented by them. Besides, students sometimes started to smile and laugh, improving their class participation. Furthermore, methodologies and techniques were used according to the content because, as stated before, there was no distinction between the class levels. Teachers started the explanation orally, just making references in the book at the correct page and line that the students could identify with haste. Then the teachers used some of the realia tools to construct mental images, and sometimes the students were able to identify the tool by their shape and others by the sound they make. However, when the tools were not practical for the students to create a mental image of what the teachers describe, students tend to confuse some of the words falling into verbalism issues. So, the teachers needed to decide on a different approach to relate the words with things that students already have a mental image of. If their efforts do not achieve anything, they spelled letter by letter the words take notes

about how they explain those words and mention the student must work on that word the next class, a technique that helped a lot the process of writing because they do not stop in certain words which were unknown for the students. Finally, T.B and T.C explained the structures with the help of language grammar through braille table, a device created by the teachers which consist of making grammar structures to develop the grammar skill into students. However, the device only works with simple grammar structures, so for more complex structures, the teachers used the oral repetition in which they prefer to separate the subjects, verbs, and complement, isolating the importance of each of those words, selecting as the most important ones the verbs.

3. 2. Interviews results

Data analysis and items that come from the application of the interviews were: Methodologies, Materials, strengths, and weaknesses, taking into consideration the principles of the SWOT (Strengths, weakness, opportunities, and threats) analysis for the last two items. These items are the summary of the subcategories, which are the most relevant information about them.

The following table considers items Primary category, subcategories, and regarding the content analysis process, one of the most relevant answers was given for each one of them.

Table 1: Primary categories, subcategories that were taken from interviews, and relevant examples

PRIMARY CATEGORIES	SUBCATEGORIES	RELEVANT SAMPLE
Methodologies	<ul style="list-style-type: none"> • Audio lingual method • Grammar translation method. • Generating new mental images with realia. 	<p><i>“I repeat several times the words, so they notice how they sound</i></p> <p><i>“We deliver the translation for the words that are complicated for them”</i></p> <p><i>“We create a context with tools or realia objects”</i></p>
Materials	<ul style="list-style-type: none"> • Lack of material 	<i>“We just one course book for all the levels.”</i>

	<ul style="list-style-type: none"> • L.G.B Book 	<p><i>"A little bit difficult to get accustomed to the content presented on it."</i></p>
Strengths	<ul style="list-style-type: none"> • Classroom management • Willingness to learn • Willingness to help 	<p><i>"Class size is good, only five students per class, help me a lot"</i></p> <p><i>"Students are always ready for the lesson and are very happy when the English teacher come in. they said we always wait for you teacher."</i></p> <p><i>"Students with less disabilities or visual field shortage help the others."</i></p>
Weakness	<ul style="list-style-type: none"> • Multiple disabilities • Learning disability • Time constraints 	<p><i>"Half of the students have multiple disabilities."</i></p> <p><i>"They are unable to retain information for longer periods of time."</i></p> <p><i>"We don't have enough time for apply all the materials and class topics."</i></p>

Source: research post-interview items

Author: ureña david

Data analysis from the interview answer showed that the teachers applied the Audio lingula method and the Grammar translation method in all the classes that they deliver to the students. Participants were asked to repeat several times the words when they could not pronounce them with accuracy. Moreover, the teachers sometimes had to spell the entire word several times. The situation was verified with the observation guide. Grammar structures were introduced with the Grammar creating tool, a device that the students were a little bit accustomed to using, and it was constructive for the teachers because they already know how to use it. Translating contents and isolated words were another method that the teachers used to apply with the students. T.A mentions no difference between teaching with the Grammar translation method for visually impaired students and the other students with no disabilities. Besides, he stated that the only major problem was the lack of mental images that some of the students born with the visual impairing disability have. T.B used realia to get rid of the mental image issue. Several times he used items presented in the L.G.B learning braille book for students to understand how to use specific tools and reference the shape and sound of the tool when they were used. T.C focused on the communication between the students; he thought that interaction was the key to learning, so he delivered an

enjoyable environment when he arrives in the class. Thus, students have the willingness to learn, and they wait for his lesson all the time. With the excellent environment, the interaction was easy, and some of the students started to ask questions about the vocabulary they would like to know. T.C stated that if he had had more time, he might be able to try a Communicative approach with them.

Following the content analysis nature, the next excerpts deliver a more specific image of the situation in class:

T.A: “I spell the words several times, sometimes I make them to repeat over and over again, but class time limits me.”

T.B: “I bring as many things as I could, at first other professor were looking at the different things that I bring but at the end they were very useful.”

T.C: I try to make the environment enjoyable for them, first we play and talk about them, sometimes I make a couple of jokes, every time that they do something good, I encourage them.

To answer the second study question, the participant was asked about the materials they had used and the use of the L.G.B leaning braille book. They mention in common that the previous material was just a random English coursebook with activities that do not consider the unique circumstances of teaching for visually impairing students. T.A mention that before the research study was initiated, he had not as many materials that the other teachers carry and give to the students to deliver the lesson. On the other hand, T.B and T.C have well-versed in implementing their materials, especially the L.G.B learning braille book and the unknown grammar structure tool. The impact that material generated in the students was critical to distinguish a drastic attitude change of the students.

The following excerpts deliver a broader vision of what occurred in class.

T.A: the course book that we use have contents that are not according to the real life situations for my students.

T.B: L.G.B book was accepted by the kids, it was easy to follow up with the activities, but sometimes we have to stop for a break due to the wide number of words learned. It was a little overwhelming.

T.C: it was a good idea to change the course book with L.G.B book, participation of students was more active.

The third study question related the strengths that the teachers encounter when teaching English for visually impaired students. Subcategories considered were the classroom management which in all the class was appropriate for an effective teaching- learning process, the willingness to learn that the students have before, during and after the study research that was really helpful to acquire significant data, and the willingness of those students with less grade of visual impairing disability for helping the other students that have visual disabilities from the day they were born and also several learning disabilities. T.A mention that five students per course was more than enough to manage the classroom make them all to participate or at least make them to repeat the words and structures he taught to them. In concordance with the classroom management and display T.B and T.C mention that the conditions for learning with no more than five students were the appropriate ones for teaching. Moreover, the relationship that the classmates have was important to have a good leaning environment, students always response to the application of something new in a good way and whenever a student have a problem location a word in the book or a page the others were willing to help him or her. T.C mention that it was not only the help that they delivered to their classmates, but they also really care about the health and anemic state of their classmates. All the characteristics were the adequate ones to deliver the class in the best way possible so all of them were considered as strengths.

The following excerpts support the ideas discussed for the third study question.

T.A: the number of students it is okay for the class

T.B: the kids try to answer and participate but it is a little difficult for them.

T.C: class performance exceeds my expectations, they get along really well and that was a favorable point.

The fourth item was related to the teachers' weaknesses in the students aside from their visual impairing disability. There were considered in the subtopics the multiple disabilities that students have, the learning disabilities that several students present, and finally, the time constraints that

the class from the class present. Regarding the multiple disabilities, there identified sensory and motor disabilities that some of the students presented. Also, behavioral disabilities were identified in three students who were very difficult to deal with. T.A mentioned that the three students with multiple disabilities have sometimes to take another class for them to interact with him. Besides, he reported that two of them have critical learning disabilities that made it impossible for him to include them in the class participation without losing a critical amount of time. Thus, he prefers to focus on them when the class was nearly over. T.B and T.C support what was mentioned by T.A a suggest a second professor focus on the learning of those students who required special attention and teaching procedures. Both teachers tried their best to include them in the lesson, but they get distracted too quickly, and they did not answer the stimuli that the teachers deliver to everybody.

The following excerpts support the ideas analyzed in this section:

T.A: ...there are students with very specific need which require special a prioritized attention just for them, it is difficult to deal with them while try to maintain the class rhythm .

T.B: ... some students required specialized attention, they cannot be isolated but they are delaying some lesson.

T.C: I am concern in those kids with major problems but I think they need more attention, attention that a teacher cannot give to them without delaying or neglecting the others in class.

4. Analysis and interpretation

Overly results from the evidence that English teachers who taught to the visually impaired students and were observed and interviewed tried to use different methodologies to continue with their class or improve the way the students had to learn. However, the methodologies they used were the traditional ones. It is true that the hired teachers for the study state that if they had not time constraints, they would be able to apply communicative methodologies with the students. Moreover, they state that similarly with non-visually impaired students, they have similar class behavior and formal learning styles (Salas, 2017). Another point of relevance was the materials that teachers started to use. It was proved that the use of suitable materials directed for the students' needs was a huge help, not only for the students to know and create visual images of the things

that they do not know but for attracting their attention and learn in a different way they were accustomed to (Cevallos, 2018). Thus, one of the implications that must be taken into consideration by the Ecuadorian ministry of education is the training process for those teachers who are going to impart their classes to students with unique and specific needs. This study demonstrated that only teachers with extensive preparation could obtain tangible and decisive achievements.

Moreover, alongside the training of the teachers' materials that must be given for the institution with students with special needs, it is necessary to cover up all the students' learning needs before starting the teaching and learning process. For that, the evaluation for students with visual and other impairments is necessary to know what type of capacitation is necessary for them to acquire (Cardenas, 2019). Regarding the implications mentioned, programs and curriculum of the institutions must be designed or re-designed to help the teacher to cover the gap of the special needs that a visually impaired student has. Such redesigns should be focused on the language skill that the visually impaired students have easiest to use. Hence, technology could consider speaking and reading while the teachers focus on the reading in braille and perhaps writing in braille. (Malca, 2019)

5. Conclusions

This study focuses on teachers' and students' methodologies, materials, strengths, and weaknesses in an EFL class. Analyses of the interviews and the observation guide introduce new issues like multiple disabilities and lack of materials. However, strengths like willingness to learn and willingness to help were essential things that are necessary to remark. Their importance could be the starting point to study the behaviors and attitudes of the students with visual impairments in an English learning class. After taking into consideration the results of the observation guide and the interviews, it is essential to mention that inclusion of the students' needs, especially those who have particular needs, is the most crucial issue that the people in charge of creating the curriculums for the teaching process and those who create materials have to bear in mind. It is a particular need for the students who have physical and learning disabilities that are not considered. Then it cannot be possible to talk about inclusion. Hence, for the reasons mentioned above, it is a primordial need that the inclusion has to consider not only in paperwork but in action for making the learning

process something that the students feel comfortable with and necessary for their lives. There is not most unique inclusion for a human being capable of communicating with others by any means necessary, in the case of this study de English as a second language.

References

1. Álvarez Pira, M. A., Barrera Hurtado, K. A., Madrigal Mape, A. A., & Barragán Arias, J. A. (2019). La estrategia de andamiaje para el aprendizaje de vocabulario de inglés en los estudiantes con discapacidad visual. <https://repositoriocrai.ucompensar.edu.co/handle/compensar/1941>
2. Bonilla Orjuela, S. C. (2019). Ambiente de aprendizaje mediado por TIC: una estrategia didáctica para mejorar la competencia oral en inglés en un estudio de caso con Discapacidad Visual.
3. Bravo, L. O. G., Montenegro, M. A. B., Pazmiño, A. F. A., Yerovi, E. J. G., Yanez, G. I. O., Peñafiel, M. E. A., & Guadalupe, C. S. A. (2017). Manual Didáctico En Braille Para El Aprendizaje De Inglés Básico De Los Estudiantes No Videntes De La Asociación Aprodvich De La Ciudad De Riobamba. *European Scientific Journal, ESJ*. <https://doi.org/10.19044/esj.2017.v13n22p59>
4. Cárdenas, J., & Inga, E. (2019). Discapacidad Visual un Reto para Enseñar Inglés usando Tecnologías Emergentes. *Proceedings - 2019 International Conference on Information Systems and Computer Science, INCISCOS 2019*, 267–273. <https://doi.org/10.1109/INCISCOS49368.2019.00049>
5. Casierra-Parraga, C. M., Loor-Fernández, M. N., Mejía-Avellan, M. A., & Macías-Loor, M. Á. (2021). Inclusión: Estrategias didácticas en el proceso de enseñanza aprendizaje del idioma inglés en los estudiantes con discapacidad visual en las universidades manabitas. *Dominio de Las Ciencias*, 7(2), 1069–1078. <https://doi.org/10.23857/DC.V7I2.1846>
6. Castañeda, C., & Gallegos, M. (2018). Aplicaciones informáticas para el aprendizaje de inglés en universitarios con discapacidad visual. In *La inclusión de las TIC en la educación de personas con discapacidad: relatos de experiencias*. <https://doi.org/10.7476/9789978104958.0005>

7. Cevallos Viscaíno, P. S., Romero García, V. H., Sandoval Vizuete, P. N., & Sandoval Vizuete, E. V. (2018). Utilización de software en la enseñanza del idioma inglés básico a personas con discapacidad visual. *Didasc@lia: Didáctica y Educación*, ISSN-e 2224-2643, Vol. 9, No. 3, 2018, Págs. 13-20, 9(3), 13–20. <https://dialnet.unirioja.es/servlet/articulo?codigo=6715219&info=resumen&idioma=EN>
8. Mahler, C. (2020). Un Alfabeto Fonético Internacional en Braille para el Nivel Superior en Argentina. *Archivos de Ciencias de La Educación*. <https://doi.org/10.24215/23468866e080>
9. Malca Monzon, M. A. (2019). Diseño, elaboración y aplicación de un módulo en Sistema Braille para el aprendizaje de Inglés. Universidad Nacional de Trujillo. <http://dspace.unitru.edu.pe/handle/UNITRU/14116>
10. Melo Hanna, G. E., Acosta Mora, M. G., & Chávez Villavicencio, J. F. (2017). Metodología basada en el enfoque correctivo compensatorio para la enseñanza del inglés a estudiantes con discapacidad visual. *RECIMUNDO: Revista Científica de La Investigación y El Conocimiento*, ISSN-e 2588-073X, Vol. 1, No. 4, 2017, Págs. 230-253, 1(4), 230–253. <https://dialnet.unirioja.es/servlet/articulo?codigo=6732747&info=resumen&idioma=SPA>
11. Morán Macias, L. F. (2015). Programa de enseñanza aprendizaje del idioma ingles, nivel básico, aplicando la fonética para personas con discapacidad visual. <http://dspace.ups.edu.ec/handle/123456789/11414>
12. Romero-Sánchez, D. (2017). Enseñanza de la lengua extranjera inglés en alumnado con discapacidad visual. <http://tauja.ujaen.es/jspui/handle/10953.1/5765>
13. Salas Murillo, D., Moreno Gómez, J. A.(2017). Propuesta de intervención educativa inclusiva para apoyar el aprendizaje de inglés como lengua extranjera de una estudiante de la PUJ en condición de discapacidad visual. Estudio de caso. <http://repository.javeriana.edu.co/handle/10554/33934>

© 2021 por los autores. Este artículo es de acceso abierto y distribuido según los términos y condiciones de la licencia Creative Commons

Atribución-NoComercial-CompartirIgual 4.0 Internacional (CC BY-NC-SA 4.0)

(<https://creativecommons.org/licenses/by-nc-sa/4.0/>)