

# UNIVERSIDAD ESTATAL PENÍNSULA DE SANTA ELENA SCHOOL OF EDUCATION AND LANGUAGES PEDAGOGY OF NATIONAL AND FOREIGN LANGUAGES

# "BENEFITS OF A MULTISENSORY APPROACH IN ENGLISH LANGUAGE ACQUISITION WITH CHILDREN WITH DOWN SYNDROME"

# **RESEARCH PROJECT**

As a prerequisite to obtain a:

# BACHELOR'S DEGREE IN PEDAGOGY OF NATIONAL AND FOREIGN LANGUAGES

Authors: Figueroa García Angelica Paulina

Salinas Severino Melissa Madeline

Advisor: García Villao Rosa Tatiana, Msc.

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2

**Advisors Approval** 

La Libertad, November 29, 2024

ADVISOR'S APPROVAL

In my role as Advisor of the research paper entitled "BENEFITS OF A MULTISENSORY

APPROACH IN ENGLISH LANGUAGE ACQUISITION WITH CHILDREN WITH

DOWN SYNDROME" prepared by FIGUEROA GARCÍA ANGELICA PAULINA AND

MELISSA MADELINE SALINAS SEVERINO, undergraduate students of the Pedagogy of

National and Foreign Languages Major, at School of Educational Sciences and Languages at

Universidad Estatal Península de Santa Elena, I declare that after oriented, studied and reviewed

the project, I approve it in its entirety, because it meets the requirements and is sufficient for its

submission to the evaluation of the academic tribunal.

Sincerely,

GARCÍA VILLAO ROSA TATIANA, MSc. ADVISOR

# **Statement of the Authorship**

We, Figueroa García Angelica Paulina, with ID number 0106529738 & Melissa Madeline Salinas Severino ID number 0928235852, undergraduate students from Universidad Estatal Península de Santa Elena, School of Education Science and Languages, as prerequisite to obtaining a bachelor's degree in Pedagogy of National and Foreign Languages in our role as authors of the research project "BENEFITS OF A MULTISENSORY APPROACH IN ENGLISH LANGUAGE ACQUISITION WITH CHILDREN WITH DOWN SYNDROME", certify that this study work is our authorship, except for the quotes, statements, and reflections used in this research paper.

Figueroa García Angelica Paulina

Salinas Severino Melissa Madeline

AUTHOR AUTHOR

# **Declaration**

The responsibility for the information and content in this degree and research work lies with the Universidad Estatal Península de Santa Elena, which also holds intellectual property rights

Figueroa García Angelica Paulina

Salinas Severino Melissa Madeline

AUTHOR AUTHOR

# **Board of Examines**

León Abad Eliana Geomar, Msc

Vergara Mendoza Ketty Zoraida, Msc

PEDAGOGY OF NATIONAL

AND FOREIGN LANGUAGES

MAJOR'S DIRECTOR

**SPECIALIST PROFESSOR** 

García Villao Rosa Tatiana, Msc

Almeida Briones Xavier, Msc

**ADVISOR** 

**UIC PROFESSOR** 

# Acknowledgment I

First and foremost, I want to express my deepest gratitude to God and the Virgin Mary for their constant guidance, wisdom, and strength throughout this journey. Without their divine support, this achievement would not have been possible.

Furthermore, I dedicate this work to my daughter, Adeline Hailey Garcia Figueroa, the most precious person in my life. She has been my greatest motivation and the reason behind all my efforts. Her presence has accompanied me in every step of this process, and everything I do is for her—to give her a brighter future and teach her that perseverance and hard work lead to success.

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- Melissa Madeline Salinas Severino

#### **Dedication I**

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#### Abstract

The continued use of multisensory methodology in teaching English to children with Down syndrome seeks to have a significant impact by decreasing the challenges teachers face when working with these children. This study will examine the involvement of the senses in improving students' motivation, comprehension, and linguistic processes to identify the learning needs of these children. Through interviews directed especially to teachers, it was identified that the multisensory methods help students to better understand a new language and better retain the information in their memory, while from the physiological point of view, obtained through a psychologist trained in working with children with Down syndrome, it was possible to identify a significant increase in social welfare, an increase in motivation as children felt in an inclusive environment in the classroom, being more committed or to their learning, there was an improvement in their learning, and there was an improvement in their social skills to build relationship among peers. By adopting this method correctly, students receive a unique learning experience, aligning pedagogical strategies to the strengths in weakness of each student.

This research project analyzes the incorporation of multisensory techniques in teaching a new language to children with Down syndrome, showing the perspectives of experienced English teachers in working with these children, providing other educators with specific instruction, and promoting parental involvement in the teaching-learning process for students in and out of the classroom. New studies are proposed to examine the long-term implications and possible use of technology to enhance the multisensory experience. These findings provide useful concepts for adaptive language education, foresting inclusive practices that support language assimilation in diverse learning groups.

**KEYWORDS**: Down syndrome, Multisensory methods, English

#### Resumen

El uso constante de la metodología multisensorial orientada a la enseñanza del inglés para niños con síndrome de Down busca tener un impacto significativo al disminuir los desafíos que enfrentan los profesores cuando trabajan con estos niños. Este estudio examina la participación de los sentidos para la mejora de la memorización, comprensión, y el progreso lingüístico que van teniendo los estudiantes a medida que se identifican las necesidades de aprendizaje que tienen estos niños. O son de entrevistas dirigidas especialmente a docentes, se logró identificar que los métodos multi sensoriales ayudan a los estudiantes a comprender mejor un nuevo lenguaje y a retener mejor la información en su memoria, mientras que desde el punto de vista psicológico, obtenido a través de un psicólogo capacitado en trabajar con niños con síndrome de Down, se logró identificar un aumento significativo en el ámbito social, siendo más comprometidos con su aprendizaje y existiendo una mejora en sus habilidades sociales al entablar relaciones entre compañeros. Al adaptar este método correctamente los estudiantes reciben experiencias de aprendizaje únicas, Alineando las estrategias pedagógicas a las fortalezas y debilidades de cada alumno.

Este proyecto de investigación analiza la incorporación de las técnicas multi sensoriales en la enseñanza de un nuevo idioma para niños con síndrome de Down, mostrando las perspectivas de docentes de inglés experimentados al trabajar con estos niños, se proporciona a los demás educadores instrucción específica y se promueve la participación de los padres dentro del proceso de enseñanza-aprendizaje de los estudiantes dentro y fuera del aula. Estos descubrimientos brindan conceptos útiles para la educación lingüística adaptativa, fomentando prácticas inclusivas que respalden la asimilación del idioma en grupos de aprendizaje variados.

PALABRAS CLAVES: Síndrome de Down, Métodos multisensoriales, Ingles

# **INDEX**

Advisors Approval	2
Statement of the Authorship	3
Declaration	4
Acknowledgment I	6
Acknowledgment II	8
Abstract	10
INDEX	12
Introduction	14
Chapter I	15
The problem	15
Research Topic	15
Title of your project	15
Problem Statement	
Justification	17
Problem Question (General)	19
Specific Questions	19
General Objective	20
Specific Objectives	20
Chapter II	21
Theoretical framework	21
Background	21
International Background	21
Regional Background	23
Pedagogical Basis	25
Theoretical basis	26
Legal bases	28
Chapter III	
Methodological Framework	30

Method	30
Type of research	30
Data Collection Techniques	31
Instruments	32
Type of questions	32
Data Collection Processing and Resources	33
Population and sample	34
Chapter IV	35
Analysis of Findings	35
Brief Explanation of the Finding.	35
The interpretation of the date from the interview	36
Chapter V	46
Conclusions	46
Recommendations	47
References	48
Annexes	51
Annex A: Certified Anti-plagiarism System	51
Annex B: Questionnaire	53
Annex C: Interview Transcripts	54

#### Introduction

Acquiring a new language is a complicated procedure that requires cognitive, social, and sensory effort. This can be a major challenge when it comes to children with Down syndrome, as they have problems with storing and retaining new knowledge in their minds, as well as linguistic differences that complicate the acquisition of a new language, compared to students without educational needs who do not have such difficulties and can successfully adapt traditional methods when teaching a new language. In providing a greater focus on inclusive education, attractive and flexible methods are needed to adapt to the needs of each student with Down syndrome. Fidler, D. J. (2005).

The multisensory approach helps teachers to develop a positive increase in academic outcomes, especially in children who need personalized education. In children with Down syndrome, it was identified that one of their strengths is learning through visual or tactual, while one of their weaknesses is understanding problems containing abstract concepts and expressive language, highlighting that the multisensory approach could help increase their strengths and decrease the challenges.

Multisensory approach can be tailored to the learning styles of these children, they help promote better acquisition, retention, comprehension, and engagement in learning the English language. Research related to this method shows that it can be beneficial for language retention and complication and provides an increase in the development of essential skills needed to communicate effectively. However, studies especially focused on the use of multisensory methods in English language learning for children with Down syndrome remind scarce.

# Chapter I

## The problem

#### **Research Topic**

Approach and English Language Acquisition

#### Title of your project

Benefits of a Multisensory Approach in English Language Acquisition with Children with Down Syndrome

#### **Problem Statement**

Is important to consider that language acquisition is important to address child growth or development; however, focusing on children with Down syndrome, it is a challenge for them to learn a second language such as English, due to their cognitive difficulties since they do not acquire the same skills as children without any cognitive problems. These problems or challenges arise from the interaction of physical, verbal, and cognitive deficits commonly related to Down syndrome. On the other hand, cognitive disabilities are based on speech and language difficulties, such as articulation, less extensive vocabulary, and when the student tends to be developmentally delayed in grammar. In addition, this leads to a major problem when children with Down syndrome want to learn English as a second language (Sudarwati & Rahmah, 2021)

Most multisensory teaching approaches, such as visual, auditory, kinesthetic, and tactile modalities, have been explored as helpful for children with Down syndrome. These methods are intended to integrate all these senses in a way that can help to enhance learning by providing a variety of ways for children with Down syndrome to acquire information. Given that children with Down syndrome may have advantages such as visual-spatial, as well as difficulties with auditory processing and memory, when multisensory techniques are implemented, it may be beneficial for English language acquisition (Badalzadeh, 2023). Despite the theoretical benefits,

empirical research on the efficacy of multisensory methods specifically for children with DS learning English remains limited.

Ecuador faces difficult situations when teaching a second language such as English to children with Down syndrome. Despite policies of educational inclusion, teachers must focus on strategies that are appropriate to the needs of these children. Previous research has mentioned the significant value of multisensory strategies in improving communication and vocabulary acquisition (Villafuerte Holguín & Alonzo Rezabala, 2020). However, there is not enough research specifically investigating the effects of a multisensory approach on English learning for students with Down syndrome.

Despite the multisensory techniques to achieve language learning outcomes for children with Down syndrome, it is worth mentioning that there is not much information on this topic for teachers to obtain better results through the teaching process with children with Down syndrome. Most of the studies on multisensory learning in language acquisition focus on children with cognitive disabilities such as children with Down syndrome (Kearns, 2023). Given the distinct cognitive profiles and sensory processing abilities of children with Down syndrome, it is important to investigate how teachers can encompass multisensory methods to the specific needs of children with Down syndrome in educational classrooms. For example, while they may benefit from visual learning strategies, they often face challenges with auditory processing and memory.

The purpose of this study is to analyze the benefits of using a multisensory approach to help children with Down syndrome in the process of learning a new language such as English, according to the experience of teachers and psychologists. By collecting the experiences of the people mentioned, this research aims to give clear and concise information about how multisensory teaching methods influence language development in this population.

This thesis will focus on how a multisensory approach can be beneficial for children with Down syndrome. For children with Down syndrome, language learning involves cognitive, social, and emotional factors. In addition, by implementing the multisensory approach, a more inclusive and supportive learning environment can be created, which will help children with Down syndrome to use their strengths more effectively. The goal of this research is to improve the educational experience of these children by better understanding the benefits of multisensory teaching methods.

#### Justification

The exploration of multisensory learning approaches for children with DS is important in the live of these children because they face unique and significant day-to-day challenges in language acquisition, especially when they want to acquire knowledge of a second language such as English. In addition, research indicates that children with DS often experience considerable linguistic and cognitive problems, which affect their development of verbal and communicative skills (Sudarwati & Rahmah, 2021). However, a focus on traditional teaching methods, which are based on verbal and auditory information may not adequately address these challenges, creating a critical need for alternative pedagogical strategies.

The potential benefits of applying a multisensory approach are considerable. If effective, this approach could help improve different aspects of language learning such as vocabulary expansion, sentence formation, pronunciation accuracy, and overall comprehension. In addition, it can be argued that integrating different sensory modalities could improve certain aspects of children with Down syndrome, for example, improving the engagement, motivation, and self-

confidence of these children with DS. This is especially important given their tendency to face attention and motivation problems in conventional determining environments (Mirzaie & Themelis, 2023).

The current literature reveals that there is not much information on understanding the impact of multisensory learning for children with Down syndrome, as many of the studies focus on neurotypical children, for example, children who are not cognitively deficient. Focusing on this area of knowledge is crucial to developing successful educational strategies that can be adapted to the unique cognitive and sensor profiles of children with Down Syndrome.

The goal of this research is to fill in the gaps by providing information that can be validated about how multisensory teaching methods may be beneficial in addressing information about language acquisition in children with Down syndrome. In addition, the result could influence educational practices, the structured content that teacher provide to their students, and the classroom environment, contributing to more inclusive and adaptive learning experiences that support both the educational and emotional development of these children.

The potential benefits of solving this problem are profound. If a multisensory approach proves effective, it could lead to significant improvements in language learning outcomes, enhancing children's vocabulary sentence structure, pronunciation, and comprehension abilities. Moreover, a multisensory approach has the potential to boost engagement, motivation, and self-confidence key factors in the learning process for children with DS. Kinesthetic and tactile learning, for instance, may help sustain attention and make learning more accessible and enjoyable for children who often face barriers in conventional classrooms (Saroyan, 2022).

Currently there is literature that does not totally represent the true impact that a multisensory approach has when related to teaching a new language to children with DS, considering the different cognitive lines and abilities focused on the sensory procedure, no focused research is provided on this topic (Siti & Mohd Norazmi, 2023). Most research only focuses on children with autism spectrum disorder, neurotypical children, our children with attention deficit hyperactivity disorder, which prevents us from understanding the importance of using this method to help students with DS. By addressing this gap, the research aims to provide valuable insights for educators, therapists, and parents, offering them more effective tools for teaching language to children with DS.

The results of this research could improve the English language education of children with Down syndrome, considering all the teaching strategies are addressed in the classroom and the environment. However, this could have long-term consequences, i,e., it would be beneficial for children with Down syndrome in both the emotional and social environment by giving better educational outcomes through the creation of inclusive, engaging, and adaptive learning environment adapted to their specific unique needs and strengths.

This research focuses on examining the effectiveness of multisensory learning approaches in teaching English as a second language to children with Down syndrome (DS).

### **Problem Question (General)**

How can a multisensory approach enhance the English Language acquisition abilities of children with Down syndrome?

### **Specific Questions**

1. What are the multisensory techniques for teaching English to children with Down Syndrome?

- 2. How can multisensory method be adapted to address the unique needs of children with Down syndrome in learning English?
- 3. What are the perceptions of educators and parents regarding the effectiveness of a multisensory approach for English language acquisition in children with Down syndrome?

# **General Objective**

To investigate the benefits of a multisensory approach to the English language acquisition abilities of children with Down syndrome.

# **Specific Objectives**

- 1.. To identify the most beneficial multisensory techniques for teaching English to children with Down syndrome.
- 2.. To explore how multisensory methods can be adapted to meet the specific needs of children with Down syndrome in acquiring the English language.
- 3... To describe the perceptions of educators and parents regarding the effectiveness of a multisensory approach in English language acquisition for children with Down syndrome.

# **Chapter II**

#### Theoretical framework

#### **Background**

The theoretical framework of this research is obtained by collecting literature related to English language acquisition and the teaching of new languages. This study is especially focused on the cognitive, linguistic, and body-like challenges that students with Down syndrome develop in the acquisition of new knowledge. Techniques were found that can be adapted to the needs of these children, promoting inclusion and effectiveness in the classroom.

## **International Background**

#### The Multisensorial Method

In a study conducted by Dr. Mohamad K in Saudi Arabia in 2024, propose that the multisensory approach is defined as a strategy capable of using sensory modalities such as visual, auditory, kinesthetic, and tactical skills within the teaching-learning process. The objective of using this approach is a positive increase in educational results since while these senses are in constant movement, new information is understood and retained, this is especially used in students with special educational needs. Although the focus is on Down syndrome, many of the multisensory techniques, such as incorporating auditory, visual, and kinesthetic methods, can benefit order students with cognitive disability, such as Down syndrome (Khasawneh, 2024).

## How long has it been used in language teaching

The multisensory method in English language teaching aims to improve learning experiences by including different elements such as visual, auditory, kinesthetic, and tactile. Likewise, by integrating activities such as reading texts, listening to pronunciations, and

performing practical tasks, students can interact with the language in different ways, thus providing advantages to people who have difficulties in acquiring the English language.

# Effectiveness in teaching English to children with cognitive disabilities

The study explored that using multisensory techniques guided a significant relationship in the language abilities of children with cognitive disabilities like Down syndrome. The results indicated a strong relationship between the consistent use of these methods and the advancement of language skills, indicating that the regular application of multisensory approaches can significantly benefit the educational progress of these students (Karvonen et al., 2021).

# Down syndrome affects cognitive development

According to Margaret Snowling, which was conducted in the United Kingdom in 2021, Dang syndrome is associated with intellectual disabilities that affect children's ability to process information and learn effectively. Furthermore, these disabilities manifest themselves with varying degrees of severity, with some children showing closer to average cognitive development, while others may experience more significant disabilities. Research shows that while children with Down syndrome may have improvements in areas such as visual memory, it should be noted that they also have greater difficulty with verbal skills and understanding abstract concepts.

In addition, the author discusses the challenges children with Down syndrome face in developing phonological attention skills important for language and reading. This includes difficulties breaking words into individual sounds, learning new words, and understanding grammar (Snowling et al., 2021).

# **Effects of Down Syndrome on Cognitive Development**

The study was conducted in Spain in 2024, with Miguel Galeote as the author. It was highlighted that Down syndrome has a substantial impact on the cognitive development of children, particularly on verbal memory and language acquisition. Also, some of the effects observed include difficulties in working memory and language acquisition, perceptual problems, and the influence of images. Furthermore, these examples underline the need for educational strategies that are specialized for these specific characteristics, highlighting the impact of Down syndrome on cognitive and language development (Galeote et al., 2024).

# **Regional Background**

In a recent study published in Canada in 2021, author T.A. Carey discussed the advantages of using a multisensory approach to help children with Down syndrome learn the English language about Colombia. This study addresses the benefits of incorporating sensory elements into phonics programs by showing an improvement in children's language and reading skills. Carey explains that the use of these types of instruments can be beneficial in developing phonological resolution skills, referring to the skills that allow interpretation and comprehension of the information provided.

It is important to provide teachers with training on multisensory techniques that can be used in the classroom for teaching children with Down syndrome, providing effective instruction so that they can be understood by children with learning difficulties. In these training courses there are educational approaches that blend multiple senses, ranging from sight, hearing and touch, essential during the learning process. This method may include interactive games, realia, flashcards, and interactive technologies, engaging the students with attention deficit and helping

them understand abstract or complex concepts, and integrating activities that use senses associated with the teaching of reading (Langille & Green, 2021).

According to Yanilis Romero in an article published in 2020 by the English Language Teaching Journal, there are many advantages to using the multisensory approach as a tool to teach children with learning difficulties, especially children with Down syndrome, this study was conducted in Venezuela. Other studies conducted in this country suggest that children with Down syndrome respond better to multisensory activities compared to traditional methods, however, in the socioeconomic environment, the availability of resources is expected. The multisensory approach improves both the acquisition of a new language in this case English, as well as an impact on cognitive abilities by stimulating most of the human brain (Romero, 2020).

From the perspective of a special education, inclusive methods containing multisensory techniques have been aligned to the teaching of foreign languages. It is important to note that integrating body movements, Sounds, and visual aids can benefit both the students and teachers in achieving classroom objectives. The goal of this study is for teachers to implement multisensory techniques when teaching a foreign language to students, Creating an inclusive education. By using this approach, is intended to address the multiple needs that most students have in their learning, including children with Down syndrome (Carrillo Cruz et al., 2023).

Several studies provided information on the efficacy of language interventions to improve communication outcomes in this group of individuals. A systematic review of the literature, Moraleda-Sepúlveda et al., (2022) examined various language interventions for individuals with DS, promoting the relevance of tactics that engage multiple senses to boost learning and retention.

In research conducted at the Universidad Técnica del Norte, Otavalo (2022) Analyzed the use of multisensory methods in English instruction for students with Down syndrome. The motivation and confidence that the students have inside and outside the classroom are paramount to develop the required skills. Based on the data collected by this research it is established that there is an improvement in these areas through the inclusion of multisensory activities within the objectives and curriculum of each institution. Teachers can exercise a more meaningful experience for students when a multisensory environment is provided, Creating a more inclusive education for children with Down syndrome.

The article "Teaching English in in Ecuador: A Review from an Inclusive Education Approach" highlights that a multisensory approach environment is a way to support diverse learners, therefore it is important to incorporate inclusive teaching methods in the Ecuadorian educational system. The analysis highlights that inclusive education involves not only physical inclusion, but also the modification of teaching methods to meet the diverse needs of students with different learning styles. Multisensory techniques, which engage students through visual, auditory, and kinesthetic channels are considered especially effective in addressing the challenge faced by students with disabilities such as Down syndrome (Yhomaly et al., 2020).

## **Pedagogical Basis**

#### **Constructivist Learning Theory**

Constructivism affirms that learners actively build their understanding and knowledge of the world through experiences and reflection. A multisensory approach is in accordance with this theory as it promotes active learning by engaging multiple senses (visual, auditory, tactile, and kinesthetic), thereby helping children with Down syndrome to interact with the content in a manner that aligns with their cognitive and sensory requirements. Learners can connect their

prior knowledge and current or future experience through the engagement of multiple senses, thus improving retention and comprehension of information (Szabó & Csépes, 2022).

### **Multiple Intelligences Theory (Howard Garner)**

Howard Gardner's theory of multiple intelligence proposes that human beings process a great variety of intelligences, in which linguistic, auditory, kinesthetic, and spatial abilities stand out. However, children with Down syndrome tend to be skilled in specific areas but often find challenges in others. A multisensory approach leverages this diversity by offering a range of learning experiences that can support a child's specific strengths, such as kinesthetic or musical intelligence while also addressing areas of difficulty, such as verbal-linguistic skills (Gardner & Moran, 2006).

# **Vygotsky's Zone of Proximal Development (ZPD)**

Lev Vygotsky Zone of Proximal Development (ZPD) highlights the significance of scaffolding in the learning process, helping learners to perform tasks with assistance that they would not be able to perform independently. When employing a multisensory approach, educators utilize diverse sensory stimuli to provide support for language acquisition in children with Down syndrome. For instance, tactile exercise such as letter tracing and visual aids like images and symbols act as tools to aid the child in connecting their existing knowledge with new learning objectives (Irshad et al., 2021).

### Theoretical basis

#### **Multiple Intelligence Theory**

Howard Gardner's theory of multiple intelligences changed the way cognitive abilities are understood. Gardner (1983) asserted that people have multiple intelligences: linguistic, musical

spatial, bodily-kinesthetic, interpersonal, intrapersonal, naturalistic, and logical-mathematical. According to this theory, an educational approach that incorporates a variety of sensory experiences can benefit children, including those with Down syndrome. This can stimulate different types of intelligence. A multisensory approach, which offer multiple opportunities for participation, fits with Gardner's theory when it comes to the acquisition of English by children with Down syndrome. For example, auditory storytelling can enhance linguistic intelligence, while intelligence can be enhanced by auditory narration.

A multisensory approach, which offers multiple opportunities for participation, fits

Gardner's theory when it comes to the English acquisition of children with Down syndrome. For example, auditory narration can enhance linguistic intelligence, while activities or gestures related to language learning can enhance bodily-kinesthetic intelligence. This approach recognizes the diverse ways in which children process information and emphasizes the importance of addressing their unique cognitive strengths, which is particularly important for students with developmental disabilities (Gardner, 2011).

## **Constructivism Theory**

Lev Vygotsky's social constructivism theory emphasizes the crucial role that social interaction and cultural context play in cognitive development. Vygotsky (1978) asserted that learning occurs through social interactions especially through language, because children share their knowledge with more knowledgeable peers or adults. The concept of Zone of Proximal Development (ZDP) is crucial because it emphasizes that children can achieve more with help and cooperation than alone.

Social constructivism stresses the importance of interaction with others for children with Down syndrome, especially for language acquisition. This interaction is fostered by a multisensory approach that includes collaborative activities such as group play, role-playing, and shared storytelling. The idea that language development is not only cognitive but also relational is supported by Vygotsky's insistence on the social nature of learning. Children with Down syndrome can benefit from enhanced language exposure and practice through scaffolding provided by teachers or peers (Vygotsky, 1978).

In John Dewey's philosophy of education, learning is an active process in which students learn through experiences, advocated experiential learning, which involves experimenting and relating to the environment to acquire knowledge. From this perspective, education should be dynamic and interactive, promoting critical thinking and problem-solving in real-life situations.

A multisensory approach coincides with Dewey's idea of learning by doing when it comes to helping children with Down syndrome learn English. Children can experience language in context through hands-on activities such as matching pictures to words, using physical objects to represent the language concepts, and engaging in role-play. This approach not only enhances language learning but also meets to cognitive and developmental needs of children with Down syndrome, who often benefit from hands-on, experimental learning strategies (Suhendi & Purwarno, 2018).

#### Legal bases

# **United Nations Convention on the Rights of Persons with Disabilities (CRPD)**

Ecuador is part of this International Convention, which emphasizes the right to inclusive education for all persons with disabilities by promoting an education system that enables them to develop their full potential and participate in society. Created to support people with disabilities

in language development, Articles 24 and 30 highlight the need for adaptive teaching methods, such as the multisensory approach.

### Constitución de la República del Ecuador

In accordance with Articles 26 and 27, established education as a fundamental right and a duty of the state and oriented its objectives towards inclusion and equity. This approach not only guarantees the comprehensive development of students but also responds to the constitutional mandate to offer an education that promotes social justice and equity, adapting to the needs of students with disabilities and guaranteeing their full right to education (Legislativo, 2008).

# Ley Orgánica de Educación Intercultural (LOEI)

Article 47 focuses on special educational needs (SEN) emphasizing the importance of creating an inclusive education using pedagogical methodologies that increase the educational level of all the students with special educational needs, being flexible enough to adapt to every need. This article ensures the provision of strategies associated with appropriate pedagogy that supports students with disabilities, the multisensory method aims to introduce learning challenge and improve cognitive abilities (Delgado, 2017).

# Plan de Desarrollo para el Nuevo Ecuador (2024-2025)

This plan emphasizes the importance of reducing inequality during the teaching-learning process by promoting social inclusion and recognizing that there are strategies, methods, techniques, or methodologies that can be included in the lesson plan to develop an environment in which all students feel they have the same learning opportunities. It also focuses on the development of dialectic, creative, and flexible methodologies such as the multisensory approach which promote the active participation of students, guaranteeing their development.

#### **Chapter III**

#### **Methodological Framework**

#### Method

#### Qualitative Methodology

This study focuses on a qualitative research methodology to collect information about the benefits of a multisensory approach with children with Down syndrome. This approach enables exploring feelings, perceptions, beliefs, and the relationship between the variables and the various factors to be discussed in this study.

According to Ponce et al. (2022), qualitative research is key for analyzing sociocultural, political, and contextual aspects of education. One-on-one interviews provide an in-depth understanding of individual experiences, with a focus on managing participant dynamics and researcher biases to ensure reliable data. This method helps understand a topic based on the perspectives of the sample group.

During this method, the aim is to identify the benefits of a multisensory approach in English language acquisition for children with Down syndrome through experience of teachers and psychologists. In this manner, it will get exact data from the cons and pros often children with Down syndrome faced.

#### Type of Research

#### Phenomenological studies

Based on Worthington (2013) cited by Ordoñez & Espinal (2024), the phenomenological approach focuses on how people find meaning in their experiences, which is essential to our existence. It emphasizes understanding a phenomenon from the perspectives of those who have experienced it. This type of research aims to find and analyze the fundamental characteristics of participants' mental processes related to a shared experience. As a result, the research provides

an image that captures the essence of the phenomenon, allowing readers to acquire a deep understanding of what it is like to go through that experience.

The phenomenological approach has significant potential for investigating the advantages of using a multisensory approach to English language acquisition in children with Down syndrome. This research methodology facilitates a comprehensive exploration of the subjective experiences of the participants, thereby contributing to a good understanding of their perspectives.

This investigation intends to explore the perspectives of both educators and children with Down syndrome on the teaching and learning process when using a multisensory approach. This approach contains visual, auditory, tactile, and kinesthetic elements. By exploring the children's experiences and interpretations of these methods, the phenomenological approach can reveal the core impact on their language and communication development.

# **Data collection techniques**

#### One-on-one interview

This recent research has indicated the beneficial use of multiple sensory modalities in dealing with children with Down syndrome. Nevertheless, they have a good visual memory. However, the way they learn is through repetition and observation. In addition, addressing these multisensory approaches would also help facilitate their practice and semantic processes, which coordinate with the natural abilities of those children with Down syndrome (Kaviyani et al., 2023).

Due to the geographic limitations of some teachers and their schedules, the interview will be conducted using the Zoom platform. However, in this way, it is adapted to teachers who are not physically close to the research site. However, for educators located nearby, face-to-face interviews will be arranged to cultivate a more direct and personalized connection.

The incorporation of both virtual and face-to-face interviews provides a comprehensive and equitable method for data collection. Likewise, virtual and face-to-face interviews will contribute the supporting our questions about the benefits of a multisensory approach with Down syndrome.

#### **Instruments**

#### **Questionnaire**

The questionnaire is a common and effective tool for data collection in educational research allowing researchers to obtain qualitative information from participants. According to Babbie et al. (2021), questionaries are especially useful for understanding perceptions and attitudes within a specific population, making them suitable for this study on the benefits of a multisensory approach to teaching English to children with Down syndrome.

Questionnaires are particularly beneficial for collecting large volumes of information for, a sample in of period which makes them a lucrative tool for research. For analysis, a questionnaire is optimal, since it can gather the views and perceptions of teachers and psychologists. The incorporation of open-ended questions facilitates the collection of diverse types of data, ensuring the acquisition of numerical trends and detailed qualitative responses (Fowler, 2014).

### Type of questions

# **Open-ended questions**

Open-ended questions make it possible for participants to provide comprehensive and indepth answers in their own words. This method is particularly beneficial in educational research because of the complexity of experiences and points of view that cannot be adequately reflected with closed questions. Open-ended questions facilitate the collection of valuable qualitative data which provide perspectives into the interviewees' thoughts, emotions, and interpretations of their experiences. As Mezmir (2020) points out, open-ended questions promote the exploration of participants nuanced experiences, particularly in fields related to pedagogical practices, where individual approaches and subjective perceptions play a significant role.

# **Data Collection Processing and Resources**

Table 1

Project main research questions

<b>Basic Questions</b>	Explanation
What?	To obtain the data
Where?	At Peninsula of Santa Elena University, La
	Libertad – Santa Elena
When?	2024
How?	One-on-one interview, questionnaire
What for?	To explore the experiences of English
	teachers and phycologists using the
	Multisensory Approach in English Language
	Acquisition to children with Down syndrome
	and the benefits it provides.

Note: The chart details the principal information of where the project will be developed

# **Population and sample**

A population includes all individuals relevant to specific topic who meet defined criteria, knowledge, and experiences representing the broadest group to which research findings will apply. This study analyzes the benefits of a multisensory approach to English language acquisition for children with Down syndrome. Given this, the population will be teachers working with this approach. Specifically, the focus will be on English teachers who acquire multisensory strategies in teaching children with Down syndrome.

The sample corresponds to a selected group that provides relevant information for this research. Therefore, this research included English educators and a psychologist from several schools in the province of Santa Elena in Ecuador, selected according to established guidelines. Four teachers and one psychologist were selected who implemented a multisensory approach when teaching English to children with Down syndrome. Their knowledge will provide exact data on how these sensory-engaged methods support language acquisition and development in children with special learning needs.

# **Chapter IV**

## **Analysis of Findings**

#### **Brief Explanation of the Finding.**

The responses of the professionals who were interviewed emphasized the teachers' experiences of the benefits of a multisensory approach to English language acquisition with children with Down syndrome. Based on their experiences and prior knowledge, they facilitate an investigation into the benefits of a multisensory approach to English language acquisition with children with Down syndrome in education to foster English language proficiency. Overall, all their reflections provide relevant information on the dynamic interaction between the benefits of a multisensory approach with children with Down syndrome.

For English teachers and a psychologist with ample experience in education participated in an interview focused on teaching children with Down syndrome using a multisensory approach in English education. During the interview the participants shared their experiences on how this approach contributes information. helps to facilitate active participation and improve communication with other students in the classroom, such as socializing and acquiring confidence in them. They said that the multi-sensory approach, which involves multiple senses, helps make the learning process more accessible and natural for students and effectively reinforces concepts. They also mentioned the importance of applying the specific needs of the students in the classroom. Also, the interviewers mentioned that multisensory activities help to maintain motivation, which helps to express difficult concepts through experiences that can be real. helps to facilitate active participation and improve communication with other students in the classroom, such as socializing and acquiring confidence in them. They said that the multisensory approach, which involves multiple senses, helps make the learning process more accessible and natural for students and effectively reinforces concepts. They also mentioned the

importance of applying the specific needs of the students in the classroom. Also, the interviewers mentioned that multisensory activities help to maintain motivation, which helps to express difficult concepts through experiences that can be real.

In addition, they discussed how parents and teachers can work together to integrate language skill development into daily routines, and how behavioral interventions such as positive reinforcement, can support language acquisition in these students. Overall, participants agreed that balanced and adaptive methods are key the comprehensive skill development in children with Down syndrome.

# The interpretation of the date from the interview

- 1. Question one was: **Based on your experience, can you describe your overall experience teaching English to children with Down syndrome?** All the teachers had a similar idea about teaching English to children with Down syndrome. They mentioned that it does present cognitive difficulties and requires adaptability, patience, and a lot of creativity. Some, have little experience with these children but have had to study their needs and behaviors in order to create an appropriate learning environment. They emphasized that these students respond well to visual and interactive lessons, which helps keep them motivated. In addition, they stressed the importance of a structured and repetitive approach, in line with their emotions, which helps to facilitate the teaching and learning process.
- 2. Question two was: In your opinion, what specific benefits have you observed from using a multisensory approach with children with Down syndrome? Teachers and a psychologist were interviewed for this study to gather their viewpoints using the multimodal approach to the education of children with Down syndrome. A basic summary of the advantages of this method was developed based on their experiences, stressing that using a variety of senses

(visual, auditory, tactile, and kinesthetic) helps these children learn and retain knowledge.

Teachers mention that activities such as using flashcards, songs, and crafts capture children's attention, improve their understanding of linguistic concepts by responding to learning preferences, and make lessons more accessible and effective.

3. Question three was: In your opinion, how do your students with Down syndrome respond to multisensory activities compared to traditional teaching methods? In general, interviewers noted that students with Down syndrome respond more possibly and enthusiastically to multisensory activities compared to traditional teaching methods. They agree that using a multisensory approach not only enhances their focus and engagement, but also makes the learning experience more spontaneous, enjoyable, and productive for them. They mention that traditional methods can be boring and challenging for these learners.

At the same instant, activities that incorporate visual, auditory, and kinesthetic elements create a more captivating and inclusive learning environment. Furthermore, they observe that this method has positively influenced students' social interactions and emotional expression, allowing them to cultivate better relationships with their classmates and enhance their communication and emotional regulation skills.

4. Question four was: What do you think about the pros and cons that you face with children with Down syndrome when teaching the English language? Teachers find that children with Down syndrome often respond well to positive reinforcement and show motivation when learning English, making significant progress when adaptation are applied. Benefits include the development of social skills and an increased interest in communication. However, they also face challenges such as the need for slower and more repetitive learning, difficulties in attention and behavior, as well as the need for constant adjustments in methodology. This

requires from teachers more planning, flexibility, and patience to meet their specific learning needs.

- 5. Question five was: **Based on your observation, in what ways has the multisensory** approach contributed to the students' social interaction or emotional expression in the classroom? The interviewers note that the multisensory approach has significantly improved the social interactions and emotional expression of students with Down syndrome in the classroom. By including visual, auditory, and tactile activities, is a positive process for students with Down syndrome as they become more confident in their abilities, which increases their commitment to learning and improves the way they communicate with their peers. This method has also facilitated collaboration and inclusivity, as collaborative activities like singing and role-playing facilitate emotional expression and the enhancement of social abilities. In addition, this can create a more peaceful and supportive learning environment. In addition, sensory experience helps students regulate their emotions, promoting a calmer and more positive learning environment.
- 6. Question six was: In your point of view, how does inattention or impulsive behavior in children with Down syndrome affect language learning? The interviewers agree that inattention and impulsive behavior in children with Down syndrome significantly affect their language learning. These behaviors make it difficult to concentrate which can lead them to miss important information or interrupt activities thus reducing comprehension and retention of vocabulary and grammatical structures.

However, they suggest that implementing strategies such as assured activities, frequent breaks, clear routines, and a structured environment can help manage these challenges. They also

point out that recognizing when a student is stressed and providing controlled breaks allows attention to be regained effectively, creating a more stable and positive learning environment.

- 7. Question seven was: In your experience, how can parents and teachers help children with Down syndrome include language skills in their abilities? The interviewers mentioned based on their experience that both parents and teachers have a very important role to play in helping children with Down syndrome to effectively develop English language skills, and they emphasize the importance of doing activities where their environment can be enriched with language, both at home and at school, since they spend more time in those places. In addition, they indicate that activities can be reading enrichment, singing, playing with words, and practicing vocabulary. Parents should avoid using simplified language and use proper vocabulary because the children can quickly assimilate this information. In addition, collaboration between parents and teachers is essential to maintain consistent and progressive learning.
- 8. Question eight was: In your opinion, can you describe any behavioral intervention that have been successful in supporting language learning for children with Down syndrome? The interviewers highlighted that several behavioral interventions are effective in supporting language learning in children with Down syndrome. Based on the interviewers' experience, they mentioned that positive reinforcement, which stimulates children's attention, and the use of visual aids, such as pictograms and flashcards, which support language comprehension, were two of the most frequently suggested.

Furthermore, it was highlighted how important it is to appropriately model language and use children's word development and repetition to increase their vocabulary and fluency. Also, use resources like word order exercises that help kids identify and pronounce words and social

stories that teach communication standards. These strategies, applied consistently and adapted to the needs of each child, contribute significantly to their linguistic development.

**Table 2**Teachers' experiences about the benefits of a multisensory approach to English language acquisition with children with Down syndrome

Questions	Based	In your	In your	What do
	on your	opinion, what	opinion, how	you think about
	experience, can	specific benefits	do your	the pros and cons
	you describe	have you	students with	that you face with
	your overall	observed from	Down	Children with
	experience	using a	Syndrome	Down syndrome
	teaching	multisensory	respond to	when teaching the
	English to	approach with	multisensory	English language?
	Children with	children with	activities	
	Down	Down syndrome?	compared to	
	syndrome?		traditional	
			teaching	
			methods?	
Answers	It does	Benefits	The	Pros:
	present	of this approach,	learning	Children with
	cognitive	emphasizing that	process is	Down syndrome
	difficulties and	involving	more intuitive,	shows motivation

requires	multiple senses	enjoyable, and	when are learning
adaptability,	(visual, auditory,	effective for	English.
patience, and a	tactile, and	them. Also,	Cons:
lot of	kinesthetic)	activities that	Difficulties in
creativity.	facilitates the	integrate	attention and
However, these	acquisition and	visual,	behavior.
students	retention of	auditory, and	
respond well to	information in	kinesthetic	
visual and	these students.	elements allow	
interactive		for a more	
lessons.		engaging and	
		accessible	
		learning	
		experience. In	
		addition, it had	
		a positive	
		impact on	
		students'	
		social	
		interactions	
		and emotional	
		expression.	

Authors	The	Highlights	Using	According
	author	how activities	visual,	to Langille &
	mentions that	such as body	auditory,	Green (2021),
	they have	movements and	kinesthetic,	these methods are
	cognitive	visual aids	and tactile	effective in
	difficulties that	stimulate various	elements in	addressing specific
	impact their	areas of the brain,	phonics	learning needs.
	learning, but	improving both	programs	Negative,
	also present	language	significantly	limitation in
	strengths such	acquisition and	improves	unfavorable
	as visual	general cognitive	reading and	socioeconomic
	memory, which	skills. Rosemary	language skills	contexts. Romero
	makes adaptive	(2020)	and increases	(2020)
	strategies such		student	
	as multisensory		motivation.	
	methods		Carey (2021)	
	crucial for			
	successful			
	learning.			
	Snowling et al.			
	(2021)			

**Table 3**Teachers' experiences about the benefits of a multisensory approach to English language acquisition with children with Down syndrome

Questions	Based on	In	In	In your
	your observation, in	your point of	your	opinion, can you
	what ways has the	view, how	experience,	describe any
	multisensory	does	how can	behavioral
	approach	inattention or	parents and	interventions that
	contributed to the	impulsive	teachers help	have been
	students' social	behavior in	Children with	successful in
	interactions or	Children with	Down	supporting
	emotional	Down	Syndrome	language learning
	expressions in the	syndrome	include	for children with
	classroom?	affect	language	Down
		language	skills in their	Syndrome?
		learning?	abilities?	
Answers	This	Lead	Ву	motivates
	approach has also	them to miss	creating a	children's
	fostered teamwork	important	language-	participation and
	and integration, as	information	enriched	interest, and the
	group activities,	or interrupt	environment,	use of visual aids,
	such as songs and	activities.	both at home	such as
	role-playing,	However,	and school,	pictograms and

promote emotional	suggest	through	flashcards, which
expression and the	implementing	activities such	facilitate
development of	strategies like	as reading	language
social skills. In	short	together,	comprehension
addition, sensory	activities.	singing songs,	
experiences help		playing with	
students regulate		words, and	
their emotions,		practicing	
promoting a calmer		vocabulary.	
and more positive			
learning			
environment.			

Author	:S	Multisensory	The	Parent	Engaging
		methods not only	use of	and teacher	multiple senses
		improve	specialized	participation	not only
		communication	strategies	in a sensory-	improves
		skills but also	such as	enriched	retention but also
		reinforce students'	multisensory	environment	reduces
		confidence and	activities can	reinforces	disruptive
		motivation.	help mitigate	language	behaviors by
		Moraleda-	these	skills and	maintaining
			challenges by	promotes a	student interest.
			keeping	more	

Sepúlveda et al.	students more	inclusive	Khasawneh
(2022)	engaged.	educational	(2024)
	Galeote	experience.	
	(2024)	Otavalo	
		(2022)	

#### Chapter V

## **Conclusions and recommendations**

#### Conclusions

This research identified that various multisensory techniques can be effective in English to children with Down syndrome. These contain visual tools such as videos or flashcards, auditory resources like songs or phonics, kinesthetic experience including role-playing or handson tasks, and tactile materials like texture letters or manipulative resources. As a group, the essence strategies facilitate active engagement motivation, and retention of new information among these children.

Multisensory techniques can be personalized to the needs of students with Down syndrome. Teachers understand the significance of facilitating instructions, incorporating repetitive activities, and utilizing strengths such as visual learning and social interaction. Personalized methods were essential in catering to various linguistic skills and learning of students. Both the educators and parents considered the multisensory approach as an effective tool for enhancing English language abilities. They noted elevated motivation, improved confidence and enhanced communication skills in the students have significant benefits.

However, they also emphasized the necessity for continuous training and sufficient resources to implement these methods successfully. This technique engages multiple sensor tools, enhancing language understanding, retention, and general educational outcomes. Create a comprehensive guide that includes multisensory strategies for teachers, which can be tailored to teaching English to children with Down syndrome.

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#### Recommendations

This investigation should highlight practical examples, lesson plans, and resources that will make it easier to apply sensory activities into language instruction. Inspire teachers to personalize multisensory activities according to each students' strengths and areas for development.

Develop professional growth programs for teachers based on multisensory methods. It is recommended to organize workshop or professional development programs focused on adapting these techniques to diverse learning abilities, ensuring these methods become a standard part of inclusive education practice.

Promote collaboration between teachers and parents by organizing regular workshop, meeting and feedback session. Parents should be provided with strategies to reinforce multisensory techniques for learning at home, ensuring consistency and continuity between the school and the home environment.

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51

**Annexes** 

Annex A: Certified Anti-plagiarism System.

La libertad, noviembre 25, 2024

Certificado Sistema Anti-Plagio

En calidad de tutor/a del Trabajo de Integración Curricular denominado "BENEFITS OF A MULTISENSORY APPROACH IN ENGLISH LANGUAGE ACQUISITION WITH CHILDREN WITH DOWN SYNDROME" elaborado por las estudiantes ANGÉLICA PAULINA FIGUEROA GARCÍA Y MELISSA MADELINE SALINAS SEVERINO de la Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros, de la Facultad de Ciencias de la Educación e Idiomas, de la Universidad Estatal Península de Santa Elena, me permito declarar que una vez analizado en el sistema anti plagio COMPILATIO, luego de haber cumplido los requerimientos exigidos de valoración, el presente trabajo de investigación, se encuentra con 9 % de la valoración permitida, por consiguiente se procede a emitir el informe, para proceder a la revisión por parte del especialista.

Atentamente,

Rosa Tatiana García Villao, Msc.

#### **TUTOR**



# Benefits of a Multisensory Approach in English Language Acquisition with Children with Down Syndrome. 1.1



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### Annex B: Questionnaire

Exploring teachers' perceptions of the Benefits of a Multisensory Approach in English

Language Acquisition with Children with Down Syndrome

Objective: To investigate the benefits of a multisensory approach to the English language acquisition abilities of children with Down Syndrome

## Questionnaire

- 1. Based on your experience, can you describe your overall experience teaching English to Children with Down syndrome?
- 2. Can you describe your experience, what specific benefits have you observed from using a multisensory approach with Children with Down Syndrome?
- 3. In your opinion, how do your students with Down Syndrome respond to multisensory activities compared to traditional teaching methods?
- 4. What do you think about the pros and cons that you face with Children with Down syndrome when teaching the English language?
- 5. Based on your observation, what ways has the multisensory approach contributed to the students' social interactions or emotional expressions in the classroom?
- 6. In your point of view, how does inattention or impulsive behavior in Children with Down syndrome affect language learning?
- 7. In your experience, how can parents and teachers help Children with Down Syndrome include language skills in their abilities?

8. In your opinion, can you describe any behavioral interventions that have been successful in supporting language learning for children with Down Syndrome?

## Annex C: Interview Transcripts

Interview with Professors

Q1: Based on your experience can you describe your overall experience teaching English to Children with Down Syndrome?

A: In short, my experience is a little bit short working with this kind of student. I acquired enough experience to talk about here and help you. So, in my experience, in short, I work with many different things, and I study a lot to engage them in a good way as we know working with children with Down Syndrome is too hard. As teachers, we have to engage the students in a good way these kinds of students are too much different than others, and based on that I study his behavior and his um what they think and that's so based on my experience um it's short but I can say that I will say the enough possible for demonstrate what is important and what they want for your research.

Q2: Can you describe your experience, what specific benefit have you observed for using a multisensory approach with children with Down Syndrome?

A: Yes, a specific benefit is how the way that they acquire the information. So, I like to work with flash cards. In my opinion, I like to work with flashcards because this is one of the best ways to teach them. And why? Because they really like things that are different. In this way, flashcards are a good way to teach them. So, the benefit is that they really learn quickly, and they save the information more quickly, in short.

Q3: in your opinion how do your students with Down Syndrome respond to multisensory activities compared to traditional methods?

A: yes they respond in a good way as I say they like to work differently and this is the idea because as teachers we have to identify what is the kind of students that we have in the classroom so if we teach them in the same way that the other students will they will bore or they will be feel bad in many things because they don't have enough attention uh for the teacher and as teachers we have to give them the good attention with planification and with bonification apart and many things because if we teach them like blah blah blah blah blah they don't engage their learning but if we work as a teacher and looking and we are looking for many things different they will learn the key is to teach them in a different way that's all.

Q4: What do you think about the pros and cons that you face with children with Down syndrome when teaching English Language?

A: yeah what yes one of the main important Pros is that they are Intelligent okay they have a different intelligence uh than other students they learn quickly and they acquire the information faster than other students that is one of the pros because they are more intelligent than others and the cons is the behavior of them because they tend to have different behavior than other students because they tend to cry they try to move many things and it's one of the cons because they have many behaviors apart of the other students and we have to control these behaviors in a way to teach them in a good way because it's too hard okay it's too hard in sometimes a try to say them can you stay quiet or another thing because they don't have the attention for this H but if we try to H lead the class in based on his behaviors we will be easier because we have to think as them because they are equal as us.

Q5: Based on your observation what ways has the multisensory approach contributed to the student social interactions or emotional expressions in the classroom?

A: So based on this this multisensorial approach could interact based on both because it helps in the social and emotional part as I say if we work with different things they will feel better because we are trying to do many different things to teach them and they recognize this okay and the social part is one of the most important part of these social Parts is that they are in the same classroom than other students we have to first say to others students that they are equal that us okay and one of the many one of the things that I like to the students is the students are too much too more social and they feel curious about their partners that have drown syndrome okay and many students tend to teach them as the teacher and this good because this kind of students are not social at all but the students try to be social with them and they feel this they don't react and say thank you for be social but no they feel and they are grateful for this okay and the emotional part is whatever many thing with the student because with all the students we have to we have to do many things to up their feelings okay and if we make them happy we will have a good class that's All.

Q6: In your point of view how do intention or impulsive behavior in children with syndrome affect language learning?

A:okay about his or their impulses is too much important as I say as I say at the beginning they tend to move a lot and then they tend to distract every time okay and in many times when I I am teaching them okay they distract and they say because I for example I was teaching them the colors I have the CL the flash cards and I say the word but in many times they feel like they move a lot and they try to distract okay but we have to take this this distraction as advantage and why because we have to try to predict their moves okay if we feel that the student

is a stressed we have to stop take a breath and try to control their emotions this is important because they tend to feel like stress in many times okay in this part we have to try to control the emotions okay make it stop and then continue teaching okay it's like a game it's like a pause game okay stop and that's all stop take a breath and let's continue teach okay we have to recognize this they are not machines okay and we are not of teaching okay we have to recognize that they feel stress and stop and continue with the class that's all.

Q7: In your experience how can parents and teachers help children without syndrome include language skills in their Abilities?

A: okay in many times the as parents okay have the error to talk with them in a bad way okay these students have different Behavior okay that's all but the parents tend to talk in a different way for example oh my baby are you okay so I try to say to parents that talk good with them okay try to teach them the words as really as really are because if we teach them the words for example this is an apple no they are students that they want to teach and learn in a good way no this is an apple this is the word Apple no apple okay we have to okay try to okay share the information with the parents and the other teachers okay to don't ER make mistakes about the pronunciations on many things because they tend to like a sponge absorb the information and it stay in the head no we have to avoid this and try to talk in a good way that like them because they are really intelligent and they recognize and they know how to work how to talk okay that's all.

Q8: In your opinion can you describe any behavioral interaction with that have been successful in supporting language learning for children with Down Syndrome?

A: Okay, one of the behaviors that they want they like or method is to complete words okay we have a pile of words for example the word card is disordered and they have to order the word okay in this way they recognize who is the word recognize the pronunciation and recognize the word completely okay that is good because the language for them is too much important because some students can talk and some students cannot talk okay and we have to guide the student to this way if the teach if the student can talk we have to try to teach them short words short H games and short um access accessories or many things to this because we have to do the best possible for them and we have to engage them in the language learning part because we have to teach them the things as art okay because you we don't have to invent words or invent many sounds no we have to be direct to the students in a way to talk in a good way or recognize in a good way the that's all.