

UNIVERSIDAD HISPANOAMERICANA  
EDUCATION FACULTY

**THESIS SUBMITTED TO OBTAIN THE  
LICENTIATE DEGREE IN BILINGUAL  
PRESCHOOL EDUCATION**

IMPACT OF USING MUSIC THERAPY TO IMPROVE THE READING SKILLS IN  
THE IDENTIFICATION OF SOUNDS AND LETTERS OF STUDENTS FROM 5-7  
YEARS OLD IN PREPARATORY B OF THE PAN AMERICAN SCHOOL DURING  
THE FIRST SEMESTER 2023

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## Sworn of declaration

### DECLARACIÓN JURADA

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"IMPACT OF USING MUSIC THERAPY TO IMPROVE THE READING SKILLS IN THE IDENTIFICATION OF SOUNDS AND LETTERS OF STUDENTS FROM 5-7 YEARS OLD IN PREPARATORY B OF THE PAN AMERICAN SCHOOL DURING THE FIRST SEMESTER 2023", es una obra original que ha respetado todo lo preceptuado por las Leyes Penales, así como la Ley de Derecho de Autor y Derecho Conexos número 6683 del 14 de octubre de 1982 y sus reformas, publicada en la Gaceta número 226 del 25 de noviembre de 1982; incluyendo el numeral 70 de dicha ley que advierte; artículo 70. Es permitido citar a un autor, transcribiendo los pasajes pertinentes siempre que éstos no sean tantos y seguidos, que puedan considerarse como una producción simulada y sustancial, que redunde en perjuicio del autor de la obra original. Asimismo, quedo advertido que la Universidad se reserva el derecho de protocolizar este documento ante Notario Público.

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Paola G.

Firma del estudiante

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## Carta del tutor

### LETTER FROM THE TUTOR

#### CARTA DEL TUTOR

San José, 08 de diciembre de 2023

**Destinatario:** Jessica Ramírez

**Carrera:** LICENCIATURA DEGREE IN BILINGUAL PRESCHOOL EDUCATION

**Universidad Hispanoamericana**

Estimada señora:

La persona estudiante **Paola Garcia Garcia** cédula de identidad número 117580041, me ha presentado, para efectos de revisión y aprobación, el trabajo de investigación denominado "IMPACT OF USING MUSIC THERAPY TO IMPROVE THE READING SKILLS IN THE IDENTIFICATION OF SOUNDS AND LETTERS OF STUDENTS FROM 5-7 YEARS OLD IN PREPARATORY B OF THE PAN AMERICAN SCHOOL DURING THE FIRST SEMESTER 2023", el cual ha elaborado para optar por el grado académico de Licenciatura.

En mi calidad de persona tutora, he verificado que se han hecho las correcciones indicadas durante el proceso de tutoría y he evaluado los aspectos relativos a la elaboración del problema, objetivos, justificación; antecedentes, marco teórico, marco metodológico, tabulación, análisis de datos; conclusiones y recomendaciones.

De los resultados obtenidos por el postulante, se obtiene la siguiente calificación:

a)	ORIGINAL DEL TEMA	10%	10
b)	CUMPLIMIENTO DE ENTREGA DE AVANCES	20%	20
c)	COHERENCIA ENTRE LOS OBJETIVOS, LOS INSTRUMENTOS APLICADOS Y LOS RESULTADOS DE LA INVESTIGACION	30%	30
d)	RELEVANCIA DE LAS CONCLUSIONES Y RECOMENDACIONES	20%	20
e)	CALIDAD, DETALLE DEL MARCO TEORICO	20%	20
	TOTAL		100

En virtud de la calificación obtenida, se avala el traslado al proceso de lectura.

Atentamente,

**MSc. Ariel Gustavo Vargas Vindas**

**Cedula: 204420300**



**Carta del lector****CARTA DE LECTOR**

San José, 23 de enero de 2024

**Universidad Hispanoamericana**  
**Sede Llorente**  
**Enseñanza del Inglés**

**Estimado señor**

La estudiante Paola García García, cédula de identidad 1-1758-0041, me ha presentado para efectos de revisión y aprobación, el trabajo de investigación denominado “IMPACT OF USING MUSIC THERAPY TO IMPROVE THE READING SKILLS IN THE IDENTIFICATION OF SOUNDS AND LETTERS OF STUDENTS FROM 5-7 YEARS OLD IN PREPARATORY B OF THE PAN AMERICAN SCHOOL DURING THE FIRST SEMESTER 2023”, el cual ha elaborado para obtener su grado de Licenciatura.

He revisado y he hecho las observaciones relativas al contenido analizado, particularmente lo relativo a la coherencia entre el marco teórico y análisis de datos, la consistencia de los datos recopilados y la coherencia entre éstos y las conclusiones; asimismo, la aplicabilidad y originalidad de las recomendaciones, en términos de aporte de la investigación. He verificado que se han hecho las modificaciones correspondientes a las observaciones indicadas.

Por consiguiente, este trabajo cuenta con mi aval para ser presentado en la defensa pública.

Atte.



**Silvia Rodríguez Arce**  
**Cédula No. 1-1217-0331**

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## **Dedicatory**

I want to dedicate this investigation to the people who were present for me during this long process, and the people who I am so thankful today for providing this opportunity to me: my parents. They supported me throughout my career and keep pushing me towards my goals, and I will forever be grateful. Also, I want to dedicate and thank my siblings and my boyfriend Joel, for also being part of this journey, and for always supporting me professionally. To all these people, this work and achievements are for you.

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## **Abstract**

The objective of this investigation is to analyze the impact of the use of music therapy in the learning of reading skills, specifically in the identification of sounds and letters, which was carried out in students of Preparatory B in Pan-American School. The research aims to analyze the main factors that have affected the learning of the reading skill in the students of the group mentioned above, the benefits that music therapy has on the students and their education, and to inform on different methods to use in the class in order to provide effective learning strategies. The nature of the research is qualitative, so instruments were built and applied to collect information in the classroom. The techniques used in the Preparatory B class at Pan-American School were observation, in order to examine specific characteristics and behaviors in the students; survey, which was implemented to the homeroom teachers to generally analyze their knowledge in music therapy and its application in the class, and in this way compare and examine data; interview, in order to know in greater depth the trajectory of the homeroom teachers, the difficulties they have observed in the class in regard to the reading skill, and the connection they consider there may be between the use of music and teaching of the mentioned skill. This information is presented as a contribution for preschool educators when it comes to including the use of music not only in the routine, but also in the learning of basic and lifelong skills.

## Resumen

El presente trabajo tiene como objetivo analizar el impacto del uso de la musicoterapia en el aprendizaje de las destrezas de lectura, específicamente en la identificación de los sonidos y las letras, el cuál fue llevado a cabo en estudiantes de Preparatoria B en Pan-American School. La investigación busca analizar los principales factores que han afectado el aprendizaje de dicha destreza en los estudiantes del grupo mencionado, los beneficios que posee la música terapia en los alumnos y en su educación, e informar sobre diferentes métodos para utilizar en la clase con el fin de brindar estrategias de aprendizaje efectivas. La naturaleza de la investigación es cualitativa, por lo que se construyeron y aplicaron instrumentos para recolectar la información en el aula. Las técnicas utilizadas en la clase de Preparatoria B en Pan-American School fueron observación, con el fin de examinar características y comportamientos específicos en los estudiantes; encuesta, la cual se implementó a las docentes guías para analizar de manera general su conocimiento en la música terapia y su aplicación en la clase, y de esa manera comparar y examinar datos; entrevista, con el fin de conocer a mayor profundidad la trayectoria de las docentes guías, las dificultades que han observado en la clase con respecto al aprendizaje de la lectura, y el vínculo que consideran que pueda haber entre el uso de la música y la enseñanza de dicha destreza. Dicha información se presenta como un aporte para las docentes de preescolar a la hora de incluir el uso de la música no solamente en la rutina, si no también en el aprendizaje de destrezas básicas y para toda la vida.

**CHAPTER I**  
**RESEARCH PROBLEM**

## 1.1 Introduction

The preschool years and what occurs during those ages are going to be very important and are going to have a great impact on the students' learning process, development of skills, and decisions. Nowadays, there are several studies that evidences how big changes or situations can alter the way a student learns; Miller (2022) affirms that the early years have a considerable role in shaping the trajectory of the person long life, and how the supportive environments become relevant since they relate to neurobiological, cognitive, and social-emotional development. It is understood that not only the events in the student life are going to influence, but also the environment surrounding them is going to affect their performance. One of the most recent and global events that had affected students around the world was the pandemic of COVID-19, which according to Pokhrel & Chhetri (2021), it created the biggest interruption on the educational system in all human history, affecting 1.6 billion students around the world, in more than 200 countries. The greatest impact about the pandemic was the restrictions that teachers had to follow to avoid the contagion of the virus, like the social distancing. A child's most important influence on their brain development is the relationships with the adults in their life, which is going to depend on caring, responsive relationships (TUIO, 2022). By having to stop the close interaction, children might experience a lack of motivation or feel lost due to the social distancing. Children need several opportunities to play and to explore in their environments, and with the pandemic these spaces had to become safer and more stable, where the interaction, use of materials, exposure to sensory experiences, among others, had to be limited to have a controlled and sanitary environment (TUIO, 2022).

What was the positive effect that the pandemic brought for educators? Teachers around the world had to make sure that they were up-to-date to the changes and new, innovative methodologies to help students keep up, no matter the disruption they had. It is well known that the world keeps changing constantly, and so should the educators too. Since the recommendation is to keep learning and updating with innovative methodologies and strategies, teachers are considered “lifelong learners”, which Eastern Washington University (2018) considers the importance affirming that “it helps educators incorporate new tools and strategies into the learning process to boost their students’ learning development”. There are three important characteristics of lifelong learners (Eastern Washington University, 2018):

- a) Conquer challenges: mistakes and challenges are taken as part of the process, not as a mistake that cannot be fixed; instead, it is new and important information that is going to lead to the right path.
- b) Innovate to improve learning outcomes: courses and workshops taken are going to help with the creation of innovative ideas to use in teaching, which improve the students’ outcomes.
- c) Role model for students: it is important for teachers to practice what they teach, to become an example for the students. It is an encouraging learning process for them.

The investigation about new methods and strategies for students are related to the skill of study, which is the improvement of reading through the use of Music Therapy. It is very important to understand the gap that students had due to the pandemic and be in charge of overcoming the reading difficulties with them. This skill is considered as “the key that unlocks the door to lifelong learning” (Warner School of Education, 2019), being an

important element for their development of other skills. The most important part about reinforcing reading, is that it helps students on expanding their vocabulary, their independence, and self-confidence, by pushing them to make sense of the world around and building their social-emotional skills (Warner School of Education, 2019). During this investigation, the goal of learning different methods and strategies to use with Music Therapy to develop reading skills are going to be studied and analyzed, in order to achieve a successful learning process for the students of Preparatory B in Pan American School.

### **1.1.1 Background of the problem**

The process of investigation about a topic always must consider several sources that were previously created with important information gathered, that are going to be the base for the path the investigator wants to follow and the specifications to consider. The topic about learning skills during and after the pandemic has wide sources of information nowadays since teachers around the world are gathering it all together and sharing to help each other out. The first source visited was called “The Impact of Virtual Activities in Listening and Speaking Skills in Preschool Education at República Federal de Alemania School, Desamparados, San José during Second Semester 2021”, by the investigator Naara Keila Reyes Núñez. She discussed the necessities teachers went through during the distanced classes, and the consequences it had on the students. Most of the problems that increased the situation were caused by the lack of training and knowledge that teachers had to teach their lessons and create effective strategies, and also due to the demotivation and short periods of concentration that the students were facing (Reyes, 2022). The survey gathered mostly information about the experience of the teachers during the virtuality. It was well represented that not even half of the teachers were prepared, and they did not have

a lot of resources to use for their classes. The questionnaire gathered direct information from the teachers regarding the environment of the students at home and how able they were to connect despite their situation. According to Reyes (2022), the results of the investigation in general terms were alarming and needed to be analyzed in order to give the students a better learning experience. Most of the teachers had low preparation for the virtual teaching, and most of the families were facing financial difficulties that made them struggle and affected the students at home. Reyes (2022) concluded that teacher training is one of the most important aspects to help the students engage in the classroom. Preschool students mostly learn by doing, and the author concluded that the students definitively needed more interactive activities, where they can learn by moving and doing, not by listening through a computer or watching a video. By having all these aspects, the students were able to become more motivated in the virtual sessions.

The second source visited was called “The Development of Synthetic Phonics Approach and its Effectiveness in the Process of English as a Foreign Language, Based on Phonics and Reading in 1-A Group, at New Generation School from San Rafael, Heredia, During September 2016 to April 2017”, by Karen Gabriela Díaz Arauz. The population of focus is the group of 1-A, which consisted mostly of first time English learners, and using a methodology called Synthetic Phonics Approach, which was used to focus on the reading skill to improve the understanding of phonemes and deals with the development of sounds since the students were Spanish speakers and had difficulty on reading in English (Díaz, 2017). The main cause of struggling with the sounds is the disorganization on the curriculum, since it is important to focus not only on consonants but also vowels, to connect the phonemes and facilitate the learning; also, the pronunciation is a relevant part

to practice as well, which sometimes it is forgotten to prioritize other areas (Díaz, 2017). A very effective teaching material is the use of magnetic letters, such as the strategy used by the investigator, since it is going to encourage students to create words by using an entertaining material and listening to the sounds of each letter (Díaz, 2017). The approach used was a very productive approach to help students, where they had the possibility to progress in phonemic awareness, spelling, and reading.

A final source of information was consulted, which is called “Manual for Teaching English as a Foreign Language, Based on an Open Framework Model to Preschool Children of Level III & IV, at Centro Infantil Laboratorio Ermelinda Mora, San Ramón, 2018”, by Kelyn Yurandy Fernández Rojas. The main idea was to design a manual to help teachers teach the English language through an Open Framework Method, by first describing the methodology, observing its implementation, analyzing the information gathered and proposing the proper activities and strategies in the manual to give the best opportunities of learning to the students of the institution (Fernández, 2018). The population chosen as the focus of study by the author was the learners from 3 to 5 years old from the Centro Infantil Laboratorio Ermelinda Mora. The research was focused on this population specifically because there has been investigated and understood certain weaknesses with the preschool education due to the academic structure imposed by MEP, and how the preschool area lacks attention and engagement from the institutions (Fernández, 2018). According to Fernández (2018), it is very important to learn about these types of methods since they are going to help the student feel responsible for their own learning process with the proper guidance and intervention. The environment in the classroom is usually promoting peace and calm conflict resolution, through the use of

assertive communication and techniques to avoid anxiety or stress on the students (Fernández, 2018). Finally, the author states that a manual for teaching EFL from the Open Framework perspective is a good idea if the necessary information is gathered.

### **1.1.2 Problematization**

The pandemic of COVID-19 brought to students around the world several academic, emotional, or cognitive difficulties, where their development has been affected, with potentially lifelong, irreversible effects (İşler & Elmas, 2022). Students not only struggled in a physical area, but also had repercussions in their learning of a foreign language, which was one of the most affected areas of education due to the sudden change of routine, virtual learning, several assessments to do at home which led to stress, among other aspects (İşler & Elmas, 2022). The early years are the most important ones in a child's education, since they start developing the skills, they are going to need for the years to come, and for them it is like building the base for their future learning. ALTA Language Services (2022) mentions that “As with literacy, the speech, language, and social communication skills we learn in early childhood are foundational to all of what comes later”. Children in preschool age are understanding the structure of knowledge they will acquire, which is why it was difficult with the changes the pandemic brought, and teachers understood that when the students returned to school it was going to become a challenge to overcome the gap they went through and create effective strategies for the new reality. The gap of time where the students faced distanced learning brought several consequences or effects in their language development and literacy acquisition, since these skills are mostly learned through the interaction with peers and communication with teachers, and it is essential that they learn these processes by interacting with the person modeling the

knowledge for them to understand better and have more practice opportunities (ALTA Language Services, 2022).

Regarding the population chosen, the group of students that are going to be the focus during this process of investigation is the class of Preparatory B, students from 6 to 7 years old at Pan American School, located in Belén. The COVID-19 pandemic reached when the students were almost starting their Pre-K year, since the school calendar is based on a U.S model; the group had a great impact at the beginning of the pandemic since they were initiating a strong and significant level where they were going to learn communicative, social, and motor skills to prepare for the development of literacy, language, and math skills. Students transitioned from a face-to-face class model, where they are taught through a PYP methodology (Primary Years Programme) which consists of supporting children on making their own choices, using materials and their environment creatively, make inquiries, work cooperatively, and gain the ability to continue and make sense of their interests (IBO, 2012), to a virtual learning due to the social distancing and Ministry of Health regulations. The daily routine and activities went into a big change, where they had to learn through a computer, and therefore their motivation, engagement, and concentration were compromised, and they had to get used to a new, different modality. After the pandemic was more controlled and schools went back to face-to-face learning, the Preparatory group has presented strong relationships and developing of their social skills, but their academic area has been affected. The students struggle the most with basic concepts for their age, and there are some cases where they also present difficulty in properly communicating ideas and feelings. They are mostly struggling with literacy (regarding the identification and recognition of letters), numbers (most of them count

properly until 15-20 maximum) and being critical thinkers by using their acquired vocabulary, which is a primary feature for the methodology implemented in the school (meaning that they struggle on connecting ideas and getting to different conclusions about the topics of interest). By presenting this gap in their English learning, the main idea is to focus on strategies to increase their engagement in the learning process and help them learn more efficiently and effectively. The strategies are going to focus on reading skills, using the Music Therapy as a tool to engage on the learning of sound-letter identification, and in this way, help on the reading process throughout the semester.

### **1.1.3 Problem Statement**

Reading difficulties in the group of Preparatory B at Pan American School, in the identification of letters and sounds during the English lessons, improving through Music Therapy.

### **1.1.4 Problem Justification**

Preschool and primary students, mostly from Kinder to First grade, were affected by the virtual learning and by missing the interaction with peers and teachers. Every academic delay that students might experience is important to cover on its own, but the one that is important to stand out for this investigation is the reading skill, since it helps students expand their learning for future situations. As it was previously mentioned, literacy learning is an important tool for future knowledge and for learning different processes throughout their lives. It is a very important population to take care of nowadays since they missed the start of their skills learning. The Preparatory group is an example of how the time gap made it difficult for them to experience the acquisition of important skills, such as the reading

skill. At least half of the students are struggling in the identification of the letters and sounds, or confusing certain sounds which complicated the reading process, so this population was chosen to help them make the learning more memorable.

The desired method to use is Music Therapy, which is defined by the American Music Therapy Association (2006) as “using music therapeutically to address physical, psychological, cognitive, behavioral and/or social functioning”. During early years, the use of this therapy provides several music experiences in an effective manner to help with the changes in a child’s behavior, and facilitates the development of their communication, social, emotional, sensorimotor, and cognitive skills (American Music Therapy Association, 2006). The idea of using Music Therapy as a method to help students improve their reading acquisition skills, is to stimulate them through all their senses and involving every learning level, to create motivating and calming learning environments, and be useful as a tool for their cognitive functioning and language skills. (American Music Therapy Association, 2006). The use of this methodology is going to motivate students not only to learn about reading, but also give them an opportunity to take advantage of their soft skills, such as their social development by participating together, emotional development by effectively communicating their thinking, and use them as an opportunity to improve them, and the critical thinking by expanding their minds through music, among others. (Tanguay, 2018).

The creation of a manual with strategies and ideas is important to concise what preschool teachers could apply in the classroom, focusing deeply on the students' needs and interests. Each student learns differently, turning every single of them into a unique human being, meaning that the variety of methods is necessary to create group progress; the close

up to each student can be observed and analyzed through a perspective of the Multiple Intelligences, which is defined as the different kinds of intelligences people might have, being eight different areas (Cherry, 2022). The ones that are going to be taken into consideration are the musical and intrapersonal perspective, to motivate teachers to understand each student as an autonomous individual, consider their interests, and help them better understand their strengths and how to develop them to their full potential. The creation of the manual will be done by taking into consideration the importance of following the school's methodology and implementing experiences that link the improvement of reading skill and the use and creation of music.

## **1.2 Problem formulation**

What is the impact of using Music Therapy to improve the reading skills in the identification of sounds and letters of students from 5-7 years old in Preparatory B of the Pan American School during the first semester 2023?

## **1.3 General and Specific Objectives**

### **1.3.1 General Objective**

- a) To determine the impact of including Music Therapy strategies to improve the reading skills in the identification of sounds and letters of students from 5-7 years old in Preparatory B of the Pan American School during the first semester of 2023.

### **1.3.2 Specific Objectives**

- a) To determine the difficulties that students face with the letter-sound relation during reading strategies.
- b) To establish the benefits that Music Therapy provides for students with difficulties in the letter-sound relation.
- c) To describe strategies that can be applied as a resource of Music Therapy for the improvement of the letter-sound correspondence.

## **1.4 Scope and Limitations**

### **1.4.1 Scope**

The population that is going to be more beneficial for the use of this investigation is the group of Preparatory B in the Pan American School. They are 16 students, from 5 to 7 years old, who are in the process of learning how to read and write. The purpose is to apply strategies related to the use of Music Therapy to improve the reading acquisition and engagement in the students. As it was mentioned before, the students in Pan American School learn through a PYP methodology, where they are independent learners and explorers of their surroundings through different provocations, which is why the use of music might work as an effective experience to motivate in the reading process. The use of different songs, instrumental activities, rhymes, writing of songs, among other strategies, might be a helpful method to overcome academic difficulties and help students to better relate the sounds and letters, and hence, improve the reading necessities.

### **1.4.2 Limitations**

Literacy skills is a narrow topic to discuss about, but this research is focused primarily on improving the receptive area, specifically the reading skills. It is well known that all these abilities complement each other, expanding the knowledge of students by using these skills together. The study did not evaluate the use of listening, writing, or speaking, even though these areas might be more used in the young learner's classroom. The analysis of these skills in the classroom would have varied the results obtained when using Music Therapy for each of them and could have provided a greater range of activities that specifically sought to support students in their reading process, by complementing the other abilities.

## **CHAPTER II**

# **THEORETICAL FRAMEWORK**

## 2.1 Historical framework

### 2.1.1 Background of the organization and community

The chosen institution was Pan American School, where the population of study is currently coursing the grade of Preparatory. PAS is one of the most recognized private schools in Costa Rica since it was the first institution to incorporate IB Continuum. The history starts with Mr. James Genis (mostly known as “Mister”) who implemented a very successful educational philosophy the Primary School of the Inter-American Institute of Agricultural Sciences (IICA) located in Turrialba, Costa Rica, and wanted to bring it to San José (Pan American School [PAS], 2023). The idea became real and Pan American School opened the doors on March 2<sup>nd</sup>, 1971, located in Los Yoses, San José, with only 35 students and 5 teachers working. The philosophy of providing a school environment that involve respect, leadership, and camaraderie inspired some parents who wanted to expand the institution, which is why the school had to move to Barrio México and later, in 1993, to a converted house in Los Laureles, Escazú (PAS, 2023). After some years working in Escazú, the school kept growing and had to move to San Antonio, Belén, where the campus is currently located and modernized. The focus of the school is to create engaged students, who are ready to face challenges from the outside world, which is clearly stated by PAS (2023) in the mission and vision information:

“**Mission:** Preparing internationally engaged individuals, committed to the pursuit of excellence, who make meaningful contributions to their country and the global community.

**Vision:** A leading bilingual World School in Central America”.

Since achieving a new location and growing professionally, in 2006 the institution received an international accreditation by the New England Association of Schools and Colleges (NEASC); on 2015 they were authorized as an International Baccalaureate (IB) World School, which offered the Diploma Programme (DP) and later on 2019 they started with the implementation of the Primary Years Programme (PYP) and Middle Years Programme (MYP) as well (PAS, 2023).

The IB Program aims to help the students become global leaders, by developing inquiring, knowledgeable, confident, and caring characteristic to give them skills to use in and for the world, to make a difference; it empowers the students to be in charge of their own learning, by choosing the ways to learn and achieve knowledge (IB, 2023). Pan American School focuses since a young age on the personal and academic achievements according to each level, by challenging the students to stand out in the different areas; the student's interests, qualities, and talents are boosted through real-life provocations and diverse educational opportunities, to prepare for the world and create commitment on becoming citizens that promote peace, democracy, cultural diversity, and service to humanity (PAS, 2023). The institution states that “we believe that learning is an active and lifelong process and that a well-rounded education includes logical reasoning, languages, artistic sensitivity, social awareness, physical and mental health, and critical thinking” (PAS, 2023).

According to PAS (2023), each Programme divides according to the adequacy of each level, which are described more deeply in the following text:

The Primary Years Programme (PYP, PlayKids to Grade 5): The PYP prepares students to become active, caring, lifelong learners who demonstrate respect for themselves and others and have the capacity to participate in the world around them. It focuses on the development of the whole child.

The Middle Years Programme (MYP, Grades 6 to 10): The MYP provides a challenging framework that encourages students to make practical connections between their studies and the real world. The MYP is inclusive by design; students of all interests and academic abilities can benefit from their participation.

The Diploma Programme (DP, Grades 11 and 12): The DP aims to develop students who have excellent breadth and depth of knowledge — students who flourish physically, intellectually, emotionally, and ethically.

## **2.2 Theoretical Context**

The areas of focus during this chapter will be on developing a deeper understanding about Music Therapy and how it is related to teaching reading. Nowadays, in the world of education, new methodologies must be investigated to boost the student's abilities for the world. Since the world is in constant change, and each year the students are becoming more independent in their learning process, it is necessary to come up with innovative ideas that will encourage them to keep discovering the world on their own.

### **2.2.1 Music Therapy as a tool for teaching**

Music can be contemplated as a tool used by humans to express their thoughts and feelings, which is going to create desire to move to the rhythm of it. Music Therapy is

considered a successful tool for clinical uses, such as psychological, emotional, physical, spiritual, and social aspects, to accomplish different cognitive and physical goals, such as reducing stress, improving the mood and for self-expression; it includes experiences related to listening, singing, playing instruments, or composing music, without the requirement of being good at those activities (Cleveland Clinic, 2020). It can be considered that Music Therapy is a way for people to improve certain areas of development in an artistic way, which is going to help the person's health and well-being. This type of therapy is usually used mostly for physical disorders but it has been studied that it can help in depth several areas of the students' learning processes, to improve their periods of concentration and regulate their emotions, with specific disorder such as: behavior, mood and anxiety, ADHD (Attention Deficit/Hyperactivity Disorder), and ASD (autism spectrum disorder) (Cleveland Clinic, 2020).

Music Therapy is a method that can be used for people of any age and any ability level, and it is a successful way to captivate the person's attention and maintain the span in the activity, since it stimulates many parts of the brain; also, it can be easily adapted to the abilities and necessities of the person, since it helps on setting up a safe and structured environment for verbal and nonverbal communication (Carrie, 2014). The use of this tool is going to allow a more freely learning space by giving experiences of effective acquisition of knowledge, and supporting important aspects such as memory, movement, emotions, and past knowledge (Carrie, 2014).

It is very important to understand and learn about the different ways of implementing certain method, to be able to make the best use of it and impulse a clear

change. There are several types of Music Therapy stated by Herndon (2021) that could be used depending on the context, situation and needs of the student, which are the following:

- a) **Analytical:** It uses music as a way to explore the various relationships between the person, others, and music. It helps with the self-exploration to create analytical traditions that leads to psychotherapy.
- b) **Benenzon:** It is used as a nonverbal psychotherapy that focuses only on the implementation of body, sound, and non-verbal techniques to analyze the relationship created between the client and therapist, to improve their well-being.
- c) **Cognitive-behavioral:** It is the combination of Cognitive-Behavioral Therapy with the use of music, which uses it as a nonverbal facilitation tool. Cognitive Behavioral Therapy (CBT) is a therapeutic approach that is used for mental illness, which helps on understanding how thoughts and behavior are connected, and how to adopt healthier ways of coping (Porrey, 2021).
- d) **Nordoff-Robbins:** The approach states that people have a sensitivity for music which is usually used to boost personal growth and development in the different areas.
- e) **Bonny Method of Guided Imagery and Music (GIM):** It is considered a transformational type of therapy that focuses on the use of selected parts of classical music to encourage and support the experiences people goes through, by using guided imagery.

Music Therapy is going to reinforce the learning process in a more artistic way, and as it was mentioned before, it is going to improve the cognitive areas of a person's

development. Music has several benefits that are going to support learners with the difficulties regarding communicating and the different language skills. It is going to encourage the person in areas like listening, communicating, and having spontaneous expressions. Students are going to feel the desire to show and said what they are learning and transmit it in different ways, since it is going to stimulate the language development by using songs and turn-taking; for example, the simple act of singing might give the opportunity to the students to sing what they learned, improve their mood, and promote relaxation (Palmer, 2022). Also, in a more physical manner, it is going to improve the coordination and strengthen muscles by using movement, which will have more effective effects due to the positive response that action activities have with the learning process; for example, if the teacher includes instruments in the activity, it is going to improve the hand-eye coordination (Palmer, 2022). Focusing more deeply on the language development, music has a very relevant role in learning language skills, because it is going to promote the imitation of different rhythms and musical structures, and the retention of words, sounds, and expressions in a more effective way (HelenDoron, 2016). The simple act of liking a song is going to make the person constantly repeat the lyrics and memorize it, which represents that those repetitive patterns are going to benefit the student with learning letters and sounds.

Music Therapy has several techniques that are used and well known, such as using instruments, finding music in nature, singing educational songs, among others; but there are four specific types of techniques that could be used to improve the required skills. Starting with Compositional technique, it is the one where the person composes structured music depending on their likes and needs with the assistance of a professional; it is going to help

the student on finding a way to express and make their own learning tool (Drury University, 2023). The second one is Improvisation technique, described as the creation of spontaneous songs, which is going to show the persons' emotions and mood at the moment (Drury University, 2023). The third one is called Receptive technique, which is playing music in front of the person to see how he or she responds to it, and if they express their thoughts through words to add in the composition (Drury University, 2023). The final technique is the re-creative, which is when the person recreates the music played by the professional, to boost their imagination regarding singing the lyrics, creating connections, and recreating the instrumentals in a creative way (Drury University, 2023).

### **2.2.2 Milestones in language development**

Language development is defined as the process of acquiring the ability to comprehend and communicate using speech, which starts since a young age by hearing different sounds and understanding the pitch on the voices (Structural Learning, 2022). It is well known that children learn at their own pace and on their own way, but there are specific milestones that students should accomplish throughout each year, to demonstrate that they hear and comprehend the language skills.

The ages of focus for this research are from 5 to 7 years old, which are very important phases in the literacy process of a child, since they are starting to experience with sounds and word formation. At the age of 5, students begin to understand that the words are different sounds together, identifying their initial sounds and the words that rhyme; also, they will be more aware of using the correct form of the verb in past, present and future (Raising Children Network, 2023). At the age of 6 and 7, children might know almost all the sounds of the letters and being able to combine them to make up words; when they

manage the phonemes, they will be able to start reading words and short sentences on their own and correcting their own process. They will also include compound words in their vocabulary, understanding the meaning of them (Raising Children Network, 2023).

The various milestones mentioned above can be accomplished in the languages that the environment of the student offer, since these ages are the best to easily learn a foreign language and become bilingual. Young learners have the ability to comprehend the words faster by relating it with something or by understanding it through body language and can easily imitate the pronunciation. This process facilitates for them since they are also in the learning process of their native language, and they tend to use the same language learning strategies (Dunn, 2018). The use of play-based activities will make the acquisition of knowledge easier since they will make sense of the activity and understand the meaning unconsciously (Dunn, 2018).

### **2.2.3 Problems in the identification of sounds and letters for students from 5-7 years**

The difficulties in reading come deep down from a problem with the letter identification and sounds speech production. Struggling with phonics can have several reasons, but most of the times it includes a non-diagnosed difficulty or the lack of practice in the daily activities in school. The difficulty with the identification of sounds and letters is called Dyslexia, which “involves difficulty reading due to problems identifying speech sounds and learning how they relate to letters and words (decoding). Also called a reading disability, dyslexia is a result of individual differences in areas of the brain that process language” (MayoClinic, 2022).

Learning how to read is a structured process that must overcome certain steps to be produced correctly. Students must learn since a young age the different letters and sounds to do it effectively. The process of connecting sounds to their letters to be able to read and write is called Alphabetic Principle; students that demonstrates the connection and understand the correct letters in words by “sounding out” each of them is correctly using the principle, which is going to be the easiest way to learn how to read and write (Baker, 2023). The Alphabetic principle is very important in the process of understanding the meaning of a text, and it is very common that students make the connection and produce the words automatically and fluently, but the real difficulty is the process of remembering the sounds of each letter since they vary depending on if it is a short or long sound (Baker, 2023). The Alphabetic Principle is divided in four different stages, which are going to help with an effective learning process (Braintrust, 2023):

- a) Letter-sound correspondence: students learn that each letter is represented by a sound.
- b) Blending sounds: students make the relation of blending individual sounds to make words.
- c) Segmenting words: students learn the opposite now, which is breaking down words into their individual sounds.
- d) Manipulating sounds: students learn to make changes in the order of sounds in a word to create a new word.

In grammar there are some words that have a different structure from the normal rules stated, called Irregular Words, which cannot be read accurately with the Principle

previously mentioned, since they are not going to follow the phonic rules because of the variation of sounds in some letters; these words need a different way of teaching how to read and write them, using a method that follows a rule-based, letter-sound structure (Baker, 2023). Baker (2023) states that “learning the alphabetic principle thoroughly and using it to read unfamiliar words, is a much better strategy than trying to memorize how to accurately read each word as a whole word, or guessing what the word might be” which is a very relevant point of view regarding learning how to read and write irregular words, because it will give the student the correct understanding and they will be able to make the connections without them thinking every word they read or write is wrong; giving them the proper freedom to “sound it out” as they think is best, is a great way to provide confidence in the process. It is well understood that this situation depends on the age of the student, and that teachers still must give bases or examples on how to write the words properly.

Preliteracy stage in early learners is an essential part of the students’ development because they are more susceptible to listening and with the needed skills to acquire the knowledge. The alphabetic principle is not only going to give the children the ability to recognize the sounds in words and associate letters with spoken sounds, but also the ability to apply those skills into the reading words, motivating them to practice more and understand better the process to be able to read on their own (Braintrust, 2023).

The Alphabetic Principle has a very important part to consider which is the phonological awareness, which is known as the ability of the learner to recognize that each word is made by different individual sounds or phonemes, and to also recognize the ability to manipulate those sounds; both the alphabetic principle and phonological awareness are different but rely on each other, since they both involve letters and sounds, but students

must possess a strong understanding of the phonological awareness to begin to learn through the alphabetic principle (Braintrust, 2023).

As it was previously mentioned, the phonological awareness is a very important part of the preliteracy process in early learners because it is the base for their reading process; it is essential that teachers learn to differentiate the struggles a student might develop and how to properly help them with the adequate strategies. One of the most reliable signs that a child lacks phonological awareness is the difficulty with rhyming since the child is 3 years old, so if the student is not able to rhyme by the age of 4 years old, the specialists should start looking for strategies to speed the process of language acquisition to help the skill develop properly (Gemm Learning, 2023). By the age of 5 years old, other difficulties might present in the process that might show a delay in their phonological awareness, and some signs that teachers must pay close attention to are the following (Gemm Learning, 2023):

- a) Identification of rhymes.
- b) Differentiating between similar sounds (like “m” and “n”).
- c) Identification of the first sound in a word.
- d) Being able to remember sequences of sounds in a word.
- e) Dividing or breaking down words into phonemes.
- f) Manipulating sounds in a word (like changing “rush” to “bush”).

### **2.2.4 The important gap due to the pandemic**

COVID-19, the virus that came to this world not only to affect human health, but also to give a complete change on people's lifestyle, but most importantly disorganizing the educational system, made humans analyze that "although crises tend to reshape society, it is still uncertain how the global COVID-19 pandemic will transform our lives" (Kang, 2021, p. 27). According to the article written by Pokhrel & Chhetri (2021), the pandemic created the biggest interruption on the educational system in all human history, affecting 1.6 billion students around the world, in more than 200 countries. Schools around the world were on the necessity to change to online classes, due to the closure of learning facilities, challenging not only the student's learning and social development, and the parents stress of having their children at home, but also the educators into this new teaching system, adopting a term called "Education in Emergency" meaning the use of various online platforms, changing the normal teaching into something they were not prepared for. (Pokhrel & Chhetri, 2021). 5 In Latin American countries, the pandemic might be ever harder for the students than in the rest of the world, due to poorness and low accessibility to technology or internet, causing not only the students to burnout but also their parents for having the stress of helping their child and survive an unpredictable pandemic; many regions used at first a multi-modal solution, meaning the use of traditional means such as TV, radio or printed materials, to try to be inclusive with all the students enrolled; however, any method could be as good as a face-to-face learning for the most vulnerable since the participation and motivation of the students was not the same (Di Gropello, 2020), and as Pokhrel & Chhetri (2021) said "many students at home/living space have undergone psychological and emotional distress and have been unable to engage productively".

Distance and online teaching made educators around the world use any resource they had available to accomplish an appropriate learning process for the students, worrying about their futures, and understanding that even if it is complicated, “the online learning, distance and continuing education have become a panacea for this unprecedented global pandemic, despite the challenges posed to both educators and the learners”. (Pokhrel & Chhetri, 2021). The different E-learning tools started to have a very important role at the beginning of the pandemic since it was the only way to help educators and schools to facilitate the student learning during the quarantine period; schools primarily used free platforms to help their teaching to ensure a continuous learning throughout the whole COVID-19 pandemic (Subedi, Nayaju, Subedi, Shah & Shah, 2020). The transition from face-to-face learning to distance learning was divided into asynchronous and synchronous classes; the asynchronous classes let the students learn in their own pace and have access to the material whenever they needed, but the lack of instruction and interaction might be difficult for students, mostly preschoolers and their parents who must be the instructors for them; on the other hand, the synchronous classes were more preferable since they include more motivation, interaction and participation among the teacher and the students (Bojović, Bojović, Vujošević, & Šuh, 2020). The classes started to be hybrid or blended, meaning “any combination of the face-to-face, asynchronous, and synchronous paradigms” (Bojović, Bojović, Vujošević, & Šuh, 2020). Some of the different tools used by teachers included Zoom, Google Classroom, Microsoft Teams, and websites that helped with the creation of material such as Canva, Kahoot, among others.

As it was expected, the COVID-19 pandemic had a great impact not only on the students’ performance and learning process, but also on their well-being. Regarding the

learning process, they had to go through a challenging disruption period and new methodologies to get used to, being complicated for them to be productive and complete usual tasks like participating, paying attention, and feeling motivated and confident to complete the classwork properly (Meinck, Fraillon & Strietholt, 2022). It became difficult for them not only to complete their tasks, but also to be able to receive the teacher's feedback and motivation to improve their work and know their progress along the way (Meinck, Fraillon & Strietholt, 2022); even though it was not the same for all the students around the world, this situation affected a great percentage of learners and brought several consequences for their future learning. Regarding the student's mental health, it affected their emotional and social areas. Children started to experience mental health problems during the isolation and social distancing back in 2020, making them worried about situations that were out of their control such as their loved ones getting sick, anxious about the changes on their way of learning and feeling incapable of accomplishing it, losing contact with their peers causing them to feel alone during this whole process, among other aspects (Meinck, Fraillon & Strietholt, 2022). On the other hand, part of the student population already experienced mental health situations, which got even more compromised when the pandemic started, since "school routines are important coping mechanisms for young people with mental health issues" (Lee, 2020), meaning that school days are meant to help these students get through what they are experiencing and focus on other areas. Some schools provide an emotional support regarding the student's mental health situations, such as peer support groups, therapeutic services, and support via phone, and with the closures and social distancing, they lost this backing which could be the only one they received and the help that avoid them to relapse (Lee, 2020).

The consequences of the pandemic affected different areas of the students, among them the language learning and how it was developed in students after coming back with new necessities to accomplish. The difficulties were attributed to different aspects, among them the fewer opportunities of the students to being able to develop the communications and language skills at home, and the lack of visual articulation of speech and language due to the mandatory use of masks in schools when classes returned (McCormack, 2023). Many children around the world is feeling left behind in their communication and language development, and it is important for the governments and institutions to understand what to do to reduce the gap; teachers must work in the awareness of the different challenges found in the classroom that have impacted the children's development, and how their knowledge, experience and skills are going to effectively support this process for the students (McCormack, 2023).

There are four important language skills that are interconnected among each other, that make the communication process possible, which are called the Macro Skills; these are defined as the way language is expressed: reading, speaking, writing, and listening, that are used by all languages and learners to make the process easier and create a progressive learning and connection of knowledge between them (Martise, 2023). Since a young age, children learn first by listening and speaking, and then reading and writing, which makes it progressive for developing the skills properly. As the skills are all interconnected, it is expected by teachers to include these areas in the student's daily strategies in a way that is going to engage a balanced process, implementing them at the same time, because they will need practice to become better and motivation to overcome the gaps (Martise, 2023). It is important to emphasize the definition and characteristics that each skill contains to

understand better the ways to implement it properly. Starting with *listening*, it is considered the most effective skill because it makes the learner feel interested and at the same time acknowledge listening by brief responses; one thing is listening and the other hearing, because in one the learner is just listening to the information but on the other the student is understanding the information, enough to give the proper attention and correct response of what is being heard (Martise, 2023). The second skill is *speaking*, which is learned by hearing and practicing with people around and in every situation the student can participate, which can be intimidating sometimes; expression while speaking is important to add interest and depth to what is being said (Martise, 2023). The third skill is *reading*, which is one of the skills that involve progress by learning the ABC's first, and how to sound the letter out to discover what different sounds are found in a word; one of the most commonly used approaches to learn this skill is the Phonetic Approach, because it will sound out the units to figure out the words and students will be able to read different words regardless of the difficulty (Martise, 2023). The *writing* skill is considered one of the most complex and the one that takes more time to master; it develops with a lot of practice and willingness to correct the mistake in past attempts (Martise, 2023). The last skill to discuss about is the Macro Skill in which the research is focused about, that has been of great impact in the development of the topic, which is the *reading* skill; it has a lot of benefits for the learner, because it will improve the memory, increase the vocabulary, motivate the student to keep trying, and exposing them to a new idea of linguistics (Martise, 2023).

### **2.2.5 Reading Skills and Music Therapy**

The reading skill can present certain difficulties for young learners due to different reasons, which could be external (the student surroundings and opportunities to learn) or

internal (academic, specifically with the reading skill). Planet Spark (2021) emphasized on the difficulties that can occur in a classroom with the reading process, which are:

- a) Decoding problems with sounding out words: it could happen because of the difficulty with the Alphabetic Principle, meaning the struggle on the association of a sound with the written letter. The practice of phonics and reading aloud could help on this process.
- b) Comprehension: the reading process also involves a comprehension process that is important; the letter recognition and understanding of words and phrases are part of the difficulties regarding comprehension.
- c) Mixed difficulties: students may experience more than one difficulty that make it difficult for them to read well, such as the mixture of decoding, comprehension, phonemic challenge, or physical impairments such as dyslexia.
- d) Retention difficulties: the retention of an idea depends on how good cognitive abilities, memory, and ability to group and retrieve related ideas the student has.
- e) Speed: the good reading comprehension and retention help the reading speed of the student. Speed and fluency are not a priority in preschool ages, but still is good to observe these types of characteristics.

As a way to understand in depth the importance regarding the relation between music and language learning, and the connection it has with the human brain, there is an idea established by the authors Adoniou & Collins (2018), which states the following:

“Music processing and language development share an overlapping network in the brain. From an evolutionary perspective, the human brain developed music

processing well before language and then used that processing to create and learn language. At birth, babies understand language as if it was music. They respond to the rhythm and melody of language before they understand what the words mean”.

Developing into a musician involves different aspects that are going to help in the improvement of skills, because it is going to enhance the neurophysiological functions, but most importantly it is going to help in the auditory system; it is going to improve the nervous system function by focusing on meaningful acoustic cues, which is going to automatically improve the auditory processing regarding language and cognitive skills; in other words, music training is a successful strategy to induce plastic changes and perceptual improvements in the neural systems that are crucial for reading (Kraus et al, 2014). The use of music as an engagement for people is not only going to help in the auditory memory, attention, and executive functions, but it is also going to boost the understanding of speech, language processing and literacy (Kraus et al, 2014), which is the focus of this study.

According to the article *Does Music Training Enhance Literacy Skills? A Meta-Analysis* written by Fehd, Gordon & McCandliss (2015), the use of music in young learners for a short period of time, with a reading disability, improved their phonological awareness and spelling skills faster than the ones who did not receive the strategies. Also, it was stated that it has a significant variation regarding the phonological awareness for students diagnosed with dyslexia and difficulties with aspects of speech, which are both related to the reading skill; as they were connected, it was understood that musical practices were useful as a tool to help on the reading improvement, to enhance the student’s sensitivity to the prosodic aspects of speech (Fehd, Gordon & McCandliss, 2015).

Music and rhythms are constantly in the child's surrounding, and it is always used in certain way to transmit understanding and create a connection with the learning. Students not necessarily will become musicians, but the use of music as an educational purpose has always been beneficial for students of all levels, mostly because it is a tool that is commonly used by people of different ages and countries to communicate in different ways between each other, by sharing ideas, thoughts, feelings, and stories through it. Music can be very beneficial for the academic areas, and one of these is the improvement that it has for reading and writing skills (Wilson, 2017). The pronunciation is a big part of the reading skill, since students have to learn to pronounce out loud words correctly; one of the ways that have been recommended to support students on this area is through the use of music because it will help the child on the part of dividing words into units, by hearing them more clearly in songs or musical activities (Wilson, 2017). Wilson (2017) also states an important aspect about the topic, who says that "not only can music improve reading skills in children by slowing words down, but it can also provide them with the opportunity to practice speaking quickly"; connecting the language skills with the use of music is beneficial since it will stimulate them and make it more motivating to learn.

"Musically trained children are better readers" is the subtitle of the article of Adoniou & Collins (2018), where they stated about speech and learning how to speak are the most important foundation for the reading process. The reading process starts by teaching the different letters with their sounds and examples, which needs to be done with strategic activities to make it more memorable for the students, and the most common and best way to do it is through music; they first need to learn how to distinguish speech from all other sounds, and how to use it properly (Adoniou & Collins, 2018).

Teachers around the world must search for strategies to expand their knowledge and be prepared to help students in different ways, depending on their needs, which is a job that need creativity and disposition. It is very important to discuss about the implementation of techniques or strategies that help in the language development, but in this case, that also help with the acquisition of reading skills in young students. The first strategy that could be applied is the use and memorization of sight words or names of routines or objects that the students constantly have in their surroundings, which will help the students associate and identify words faster to improve their vocabulary and fluency (Planet Spark, 2021). The second strategy would be the activation of ideas and thinking strategies, by first discussing about the reading to help the student activate their prior knowledge about the topic, and in this way encourage the students to create a reading habit in their daily tasks; it could be done with the help of visual aid as a way for the students to understand the subject or as a way for the students to share ideas about what they know and how it could be related to the reading (Planet Spark, 2021). The third strategy is about building vocabulary, and how students can improve their word recognition; for younger ages, in their pre-literacy phase, teacher could implement the use of flashcards with images that explain the words in context to make it easier to remember when reading (Planet Spark, 2021). The fourth strategy is using visual imagery and audiobooks, because the use of images alongside the written text helps the child understand better the story and connect the words to what they see; also, using audiobooks alongside with the physical book could be a great way to encourage the child to listen and read at the same time, improving two different skills at the same time (Planet Spark, 2021). The final strategy is about creating a word bank or “Dolch List”, which consists of teaching the words that constantly appear on books or worksheets, so that the students are able to identify them easier and faster; teacher could create a word bank in

a classroom area where the students can observe and use them every time they need it (Planet Spark, 2021).

Music Therapy has a very large range of techniques to use as a tool in learning, which will help develop the different skills. According to Craig (2019), the general and most effective strategies to use in the classroom to involve music are:

- **Drumming:** students can create or repeat rhythms depending on their likes and knowledge.
- **Listening to music:** a common activity for young learners for more engagement and attention.
- **Music as a relaxation technique:** it is very useful to promote concentration for certain periods or deep breathings.
- **Singing:** the use of either familiar or creative songs to reinforce the topics and memorize easily.
- **Playing instruments:** allowing the students to create their own compositions is important for a more independent and risk-taking learner.
- **Composing:** the students can create from scratch the lyrics or rhythm of a song to transmit their knowledge to a composition.
- **Dance:** moving around and following the beat of a song can help with the gross motor skills.
- **Emotional reaction:** teachers can also use music to help the students understand better how they feel and how they can express their feelings.

The use of music in reading skills also has different strategies that could be applied in the classroom to improve the reading process, and that teacher could combine with materials that the students create to help them even more; some of them were explained by Dohmen (2020), and are the following:

**“Phonological awareness.** Music and singing are all about phonological awareness. Through song, children can segment sounds, create blends and different sound “chunks”. **Letter knowledge and print awareness** also comes at these early stages of literacy. Just as we learn the alphabet by singing the alphabet song, children can recognize letters, and become aware of their structure through music.

**Narration** with music builds comprehension, awareness of plot, characterization, visualization, perspective-taking, and author’s point of view. **Word knowledge and vocabulary** needs application. Singing about vocabulary can provide a unique medium to teach and put words into context. **Writing** goes hand-in-hand with reading. Because Common Core calls for writing that reflects on text, teaching reading skills through effective mediums like song, can improve writing skills”.

It has been previously mentioned that music brings many benefits for the reading process in young learners, but three of the most important benefits are described by Akansha (2023) to understand better what areas it might reinforce and how it will help in the reading process. Starting with the relaxation it brings to listen to music while reading, since it can improve the student’s mood, and hence, their reading performance; also, talking about their performance, it can also boost the reader’s cognitive performance, because it helps to identify previously encountered patterns and their abstract application, to

comprehend the text better (Akansha, 2023). The final benefit is that music improves the concentration in noisy environments like near a busy street or a construction, because it will help reduce the effect of the outside noise and focus their attention to a more soothing environment where they are able to listen and read without a problem (Akansha, 2023). It is important that teachers choose a kind of music that will suit what they are looking for and that suits their students, because it might happen that classical music is not effective for a class, but pop-instrumental music is.

## **CHAPTER III**

# **METHODOLOGICAL FRAMEWORK**

The development of the theory related to Music Therapy and Reading skills was well explained on the previous chapter, which was an important part of the investigation to understand the topic deeply and to help the researcher create the methodologies planned to use for the practical part of this investigation. Along this chapter, the methodological framework will be developed, to explain the different elements that the practical part will include, and how it is going to be executed in the chosen population. It will include the information based on the type of research that will be implemented, the purpose for it, the temporal dimension, the different sources of information to back up the investigation, the statement of a hypothesis, the sampling thought, and the techniques and instruments that will be used for the methodology.

### **3.1 Type of Research**

#### **3.1.1 Purpose (Applied)**

The purpose of a research is an important part to consider since it will determine whether it is theoretical or applied, and it will gather the needed information about the topic with the purpose of solving a problem in a specific population, answer questions or provide more knowledge about the topic (Hassan, 2022b). The purpose is supposed to analyze the different information regarding a topic and try to respond to the necessities of the problem that the chosen population has.

The purpose for this research is Applied, since the aim is to gather information about an issue in a specific population and apply a solution to it that is meaningful and effective. Hassan (2022a) describes this type of research as the following statement:

Applied research is a type of scientific inquiry that focuses on developing practical solutions to real-world problems or situations. It involves the use of existing knowledge, theories, and techniques to address specific problems or challenges in a particular field or industry.

### **3.1.2 Temporal Dimension (Transversal)**

The temporal dimension refers to the amount of time that the research is going to take place, and how it is going to be developed in that specific period. There are two different dimensions that a study usually follows, which are Transversal or cross-sectional, and Longitudinal. The Longitudinal dimension is the observational study that gathers information frequently from the same sample over an extended period of time, which could last for several months or even years to obtain the necessary data for the investigation; this type of research is beneficial because researchers can observe, collect and analyze the changes that might happen over the years and use those characteristics as part of their investigation (Bhat, 2023a). The Transversal dimension is defined as an observational study as well, but with the difference is that the information is collected at a single point in time to study the population and analyze the relationship between their variables; the gathering of information does not change or manipulate the sample environment (Bhat, 2023a).

The temporal dimension for this study is the Transversal, since it is research that will gather the necessary information and analyze the different variables in a specific period, without needing to observe long-term changes in their behavior or environment to complete the study.

### **3.1.3 Framework**

The framework of a research is the range of population that is being studied, and how specific is the sample of study. The delimitation of a population in a study is important to make it more accurate, gather more effective information, and to help more specifically in the situation that the sample of study has; the use of a broad topic or sample might not develop the information as the researcher expects to, and have a more general result of study.

The framework divides in three specific parts: micro, macro and mega, which the three of them will be specified for this study. The micro level refers to the center of the study, which is a specific group or individual person (Eaton, 2020); the micro level for this investigation is the group of children in Preparatory B, with ages from 5 to 7 years old. On the macro level, it refers to the organization and sector that the population belong to (Eaton, 2020); the sector of study is the Pan American School located in Belén. Lastly, the mega level is defined as the community where the population is included and that connects to it in an indirect way, being an important part on the development of the sample (Eaton, 2020); the mega level of study is the province of Alajuela.

### 3.1.4 Sources of information

**Table 1**

*Firsthand sources used in the research process.*

<b>Author/s</b>	<b>University or Organization</b>	<b>Title</b>	<b>Year</b>
	American Music Therapy Association	Music Therapy and Young Children.	2006
	International Baccalaureate	About the IB	2023
İşler, C. & Elmas, B.	The Journal of Language Teaching and Learning	The Impact of the COVID-19 Pandemic on Teaching Speaking Skills.	2022
Kraus, N., Slater, J., Thompson, E. C., Hornickel, J., Strait, D. L., Nicol, T., & White, T.	Journal of Neuroscience	Music enrichment programs improve the neural encoding of speech in at-risk children.	2014
Meinck, S., Fraillon, J. & Strietholt, R.	UNESCO	The impact of the COVID-19 pandemic on education.	2022
	Pan American School [PAS]	About PAS	2023

**Table 2***Secondhand sources used in the research process.*

<b>Author/s</b>	<b>Title</b>	<b>Year</b>
Baker, S.	The Alphabetic Principle: From Phonological Awareness to Reading Words.	2023
Craig, H.	What is Music Therapy and how does it work?	2019
Fehd, H; Gordon, R. & McCandliss, B	Does Music Training Enhance Literacy Skills? A Meta-Analysis.	December, 2015
Tanguay, C.	Music in Early Childhood: Social and Emotional Benefits.	October, 2018
Palmer, J.	The Powerful Impacts of Music for Those with Learning Difficulties	September, 2022

**Table 3***Thirdhand sources used in the research process.*

<b>Author/s</b>	<b>Title</b>	<b>Year</b>
Adoniou, M. & Collins, A.	Learning music early can make your child a better reader.	November, 2018
Dohmen, G.	Using Music to Teach Early Literacy Skills	August, 2020

Martise, E.	Four Macro Skills of Communication	February, 2023
McCormack, H.	The impact of the COVID-19 pandemic on young children's communication and language development.	February, 2023
Wilson, N.	How Music can Improve Reading Skills in Children.	July, 2017

### 3.1.5 Nature (Qualitative)

The nature of a research study is the method used to collect the information and how that data is going to be represented, being quantitative or qualitative. The nature is an important part of the investigation since it is the type of information that will be analyzed and how the results are going to be presented. For this research, the focus is mostly a qualitative nature, since the method of collecting information will be through an open-ended and conversational communication, by gathering the different opinions of people and why they think that way (Bhat, 2023b). The qualitative nature is a non-numeric data that will help the researcher understand how the decisions are made and provide a more detailed insight of the points of view and methods used (Bhat, 2023b). This type of research method permits the researcher to get in-depth probing and questioning from the participants and try to understand the motivation to those responses and their reasons for it to get more accurate conclusions and results (Bhat, 2023b).

The qualitative nature has some specific types or methods that are used to ensure a complete and accurate data collection; some of the types include a one-on-one interview, a focus group, ethnographic research, case study research, a record keeping, and observation (Bhat, 2023b). For this research, the best method for gathering information would be

qualitative, since the data for the analysis is going to be collected by using observations, interviews, and surveys along the process. The use of this method is going to provide a general idea of how often teachers include music during their lessons and how much they think it will improve the students learning process.

### **3.1.6 Character (Descriptive)**

The character of an investigation gives the information about the research design used to gather all the information and to present it in certain way. It is better defined as the strategy that is chosen to integrate the information based on the study in a coherent and logical aspect to ensure the effective resolution of the problem (Nassaji, 2015).

The character for this research is more associated to a descriptive method, where the goal is to observe and describe in detail an specific situation and the different characteristics it might have, being more concerned on “what” rather than the “how” or “why” of a problem; the gathered information involves a more naturalistic data, meaning that the study of language learning occurs in naturally settings without any manipulation in the variables present (Nassaji, 2015).

### **3.2 Subject of study**

The final selection of a population and a sample refers to a subject of study. This part of the investigation is relevant because the chosen sample is specified and explains aspects about it that are going to connect the topic selected with the sample. The subject of study is defined as the sample that participates in the research, whose information is gathered with the purpose of answering a problem or situation concerning the participants (University of Rochester, 2013).

The subject of study for this research is the group of Preparatory B in the Pan American School, since it is the sample of study used to collect the necessary information to complete the investigation in the improvement of reading skills. The general population considered would be all the students in the preschool area in the Pan American School, which is not going to be studied but takes an important role in the process to help students in the same situation in the future.

### **3.3 Sampling and Type**

#### **3.3.1 Sample**

The sample is defined as the frame or group of individuals that are selected in a target population from a specific area, as the sampling of study in a particular topic; since it is just a small part of the population, it is important to carefully analyze it the sample counts with the necessary characteristics to complete the study objectives or hypothesis (Martínez, González, Pereira, Rangel & Bastos, 2016). The main purpose of choosing a sample is to analyze a problem happening in that group and find a solution using investigation.

The sample of study chosen for this investigation is the group of Preparatory B of Pan American School. It was chosen since there is more proximity for the researcher to observe and analyze their behaviors, and find an effective solution for them; also, there was a focus on the reading skill specifically in this age group because it is a skill that they tend to struggle the most and that the pandemic provoked a gap in the acquisition of it.

#### **3.3.2 Type: Non-probabilistic**

The process of sampling, as it was mentioned before, is the process where the researcher frames the group of study in a specific population, to investigate a subject of

interest. It is a process that divides in two main types, these being probabilistic and non-probabilistic sampling. The type of sampling for this investigation assimilates more to the non-Probabilistic sample. It is defined as the one that involves a non-random selection, but instead it chooses a sample based on convenience or similar aspects, giving the target population a nonzero probability to be part of the research study, making the data collection an easier process (Martínez, González, Pereira, Rangel & Bastos, 2016).

### **3.4 Techniques and Instruments**

The techniques and instruments of an investigation refers to the ways the data is going to be collected and analyzed for finding better results. Glamazdina (2022) points at the main objective of this process saying, “The main goal of data collection is to get access to reliable sources of information that will provide data for further analysis and make data-driven decisions possible”. The instruments that will be used for this investigation will be observation, survey, and interview, with the purpose of understanding the way of learning of the students and the experiences that teachers had in previous years involving music in the classroom.

The observation as a research tool is the one that gathers the information through observing, participating or both with the research object or sample (see annex 1); it does not need a report, but instead it uses instruments like checklists and a direct observation (Glamazdina, 2022). The second instrument is the survey or questionnaire (see annex 2), which collects the data through a series of questions relating different topics that will be answered by the target audience to consider the various points of view; it can be done as fixed-alternative, scale, or open-ended questions (Glamazdina, 2022). The third and final instrument thought for the investigation is the interview, which is described as a personal

conversation between the interviewer and the person being interviewed that collects the necessary information for research purposes (see annex 3); it can be structured which are verbal and superficial questions, semi-structured which has key-questions that talks more deeply in the topic, and unstructured which has in-depth questions (Glamazdina, 2022).

### 3.5 Variables

**Table 4**

<b>Operationalization of Variables Chart</b>				
<b>General Objective:</b> To determine the impact of including strategies related to Music Therapy to improve the reading skills in the identification of sounds and letters of students from 5-7 years old in Preparatory B of the Pan American School during the first semester of 2023.				
<b>Specific Objectives</b>	<b>Variable</b>	<b>Conceptual Definition</b>	<b>Instrumental definition</b>	<b>Operational Definition</b>
To determine the difficulties that students have with the letter-sound relation during reading strategies.	The difficulties that students have with the letter-sound relation during reading strategies.	The common struggles learners have when making connections between letters and sounds when reading.	Instrument: Checklist Technique: Observation The use of the checklist will help the researcher observe specific aspects that might occur on each individual and make notes to analyze the information.	In the checklist, the variable would be valid if the items in the checklist are an average of “in progress” or “needs reinforcement”, since it will show the struggles that Preparatory students go through.
To establish the benefits that Music Therapy has for students with difficulties in the letter-sound relation.	Benefits that Music Therapy has for students with difficulties in the letter-sound relation.	The advantages that music can have for the reading learning process in students that struggle on the letter and sounds connections.	Instrument: Questionnaire Technique: Survey The survey will gather different opinions of teachers of preschool levels regarding their experience with	In the questionnaire, the variable would be valid if the most percentage of answers are related with a positive point of view regarding music in learning skills.

			music in the classroom.	
To describe strategies that can be applied as a resource of Music Therapy for the improvement of the letter-sound relation learning.	Strategies that can be applied as a resource of Music Therapy for the improvement of the letter-sound relation learning.	Techniques and activities that include music, which could be beneficial for students with letter-sound struggles.	Instrument: Questionnaire Technique: Interview The interview will collect direct information and ideas from the teachers to consider for the methods including music and connect it to methods for the reading learning process.	In the questionnaire, the variable would be valid if most of the answers provide ideas, connections, and methods on how to implement music in the learning of different skills.

## **CHAPTER IV**

# **ANALYSIS OF THE RESULTS**

## **4.1 Diagnostic of current situation**

The following chapter will present the results taken from the instruments implemented in the group of Prep B and among the homeroom teachers at Pan American School. The different information collected will help on the development of the project, by collectively proving the studies about the use of music therapy in the reading process; it will provide relevant data from students and teachers to analyze the population and compare the different experiences between educators.

### **4.1.1 Observation**

An observation was conducted in the group of Prep B at Pan American School, as part of the process of analyzing the reading skills in the studied ages. The instrument applied to every student in the classroom was a checklist, which is defined as the tool that assists teachers to constantly check on the students learning and have documented information about their progress or deficiencies (Radabaugh, 2020). It was implemented to observe the students' progress in their reading skills and point the specific areas where they might be having difficulties when practicing and learning the skill, such as the alphabetic principle, identification of letters, or the student attention.

The implementation of this checklist showed where the students are regarding their learning and what areas they need specific help. The first item to observe in the learners was the Alphabetic Principle, where it was demonstrated that most students understand the letter-sound correspondence but still present difficulties in blending the sounds individually to form words; some of the words that they can form are CVC, but with certain consonants it becomes harder for most of them since they struggle with the correspondence. Students

also tend to confuse or mix up some letters and their sounds, which might be a reason why they struggle with the word formation, and it is why the identification of letters was also an area of observation in the classroom. This specific item had very close results when implementing the checklist, since there are students that struggle more than others when identifying some letters; regardless of that, it was shown that most of the students tend to confuse the letter but gets correct the sound, meaning that they pronounce it well but write it down as another. It was observed that at least half of the students are used to writing some of the ABC's backwards, which might get some letters mixed up and change the meaning of the word unintentionally, such as getting confused "b" with "d". Likewise, some of the students that had difficulties in this area also struggle with their fine motor and spatial skills, which might influence on the identification of letters, specifically when writing them.

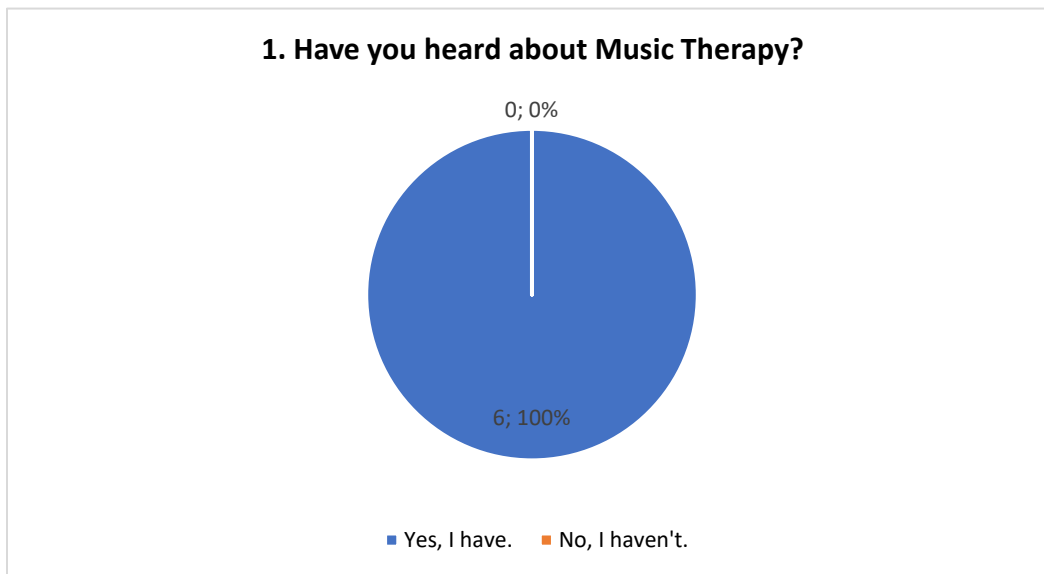
The last area of focus for the observation was about the student attention when they practice reading in the classroom. The great majority of students presented an acquisition of knowledge according to their age, since they were able to make connections between their previous learning and the new experiences, but they also lost track easily. Some of the learners were distracted because they got frustrated of not remembering the phonemes, which makes them want to change activities quickly. The use of music during these types of situations might help their memory, to remember in an entertaining way what they usually struggle with.

#### **4.1.2 Survey**

A survey was conducted among the homeroom teachers from Early Childhood Education of Pan American School, who 6 out of 7 of them answered the questions. It has 8

closed-ended questions and 2 short answers that allowed them to share their experiences in certain areas of the topic. The following graphics will show the data collected from the Annex #2.

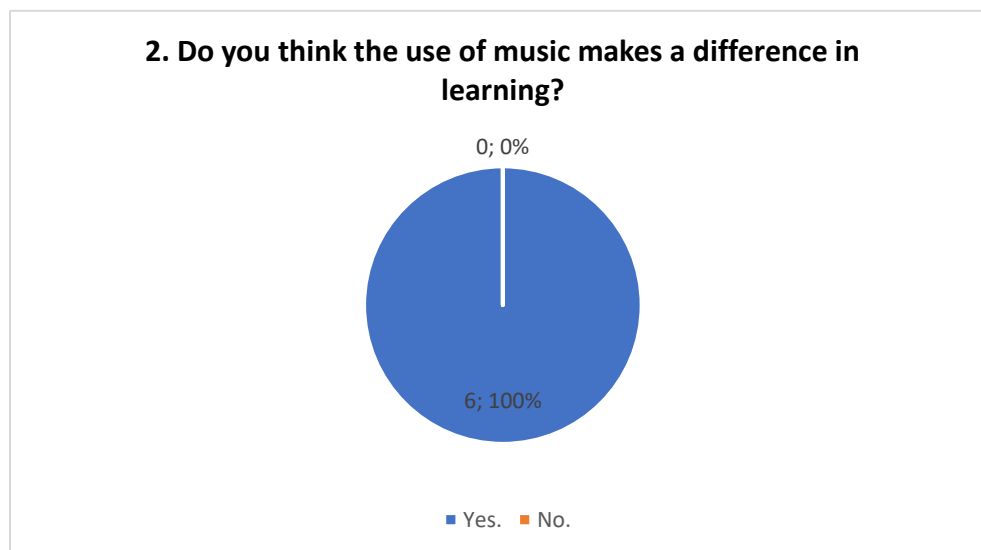
**Figure 1**



**Source:** Survey applied to the homeroom teachers at Pan American School, 2023.

**Results:** The graphic number one shows the percentage of teachers in early childhood at Pan American School that have heard about the term Music Therapy. A 100% of teachers know about the topic.

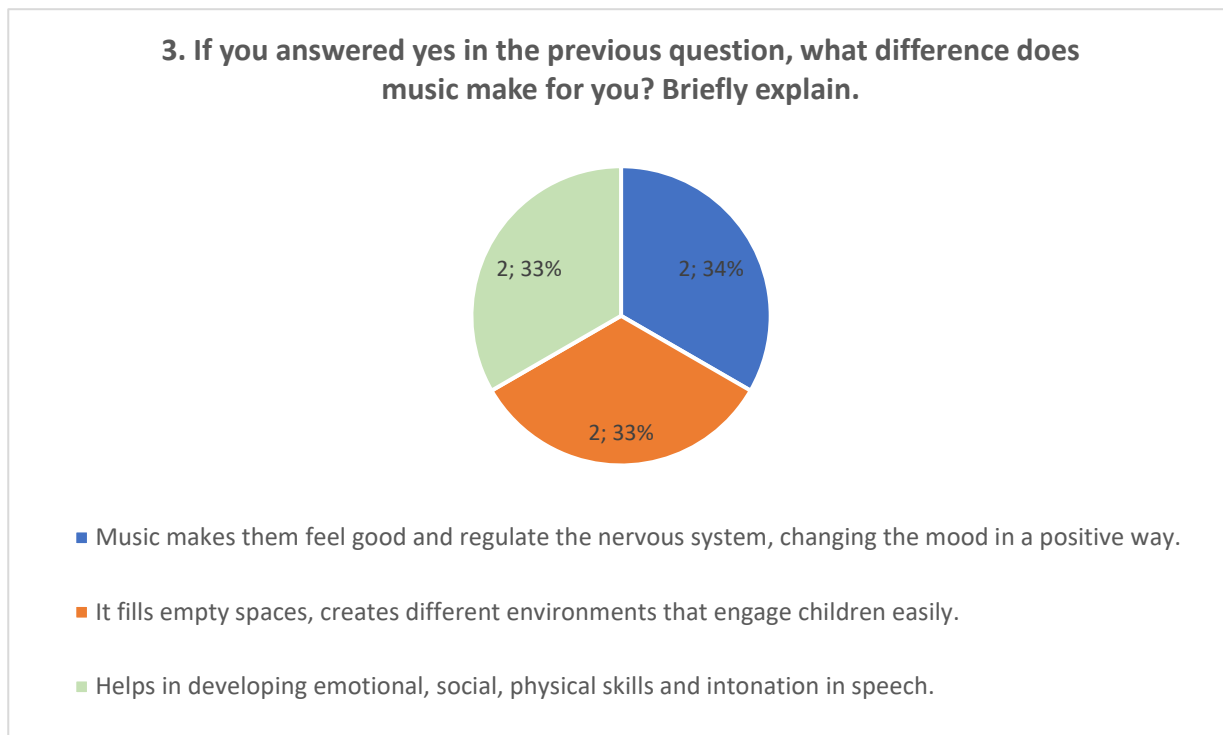
**Interpretation:** Based on the results gotten from the survey, it is shown that all the homeroom teachers (6 in total) have understanding about the term Music Therapy.

**Figure 2**

**Source:** Survey applied to the homeroom teachers at Pan American School, 2023.

**Results:** The graphic number two shows the percentage of teachers in early childhood at Pan American School that consider music makes a difference in the process of learning. A 100% of the teachers consider that it does make a difference.

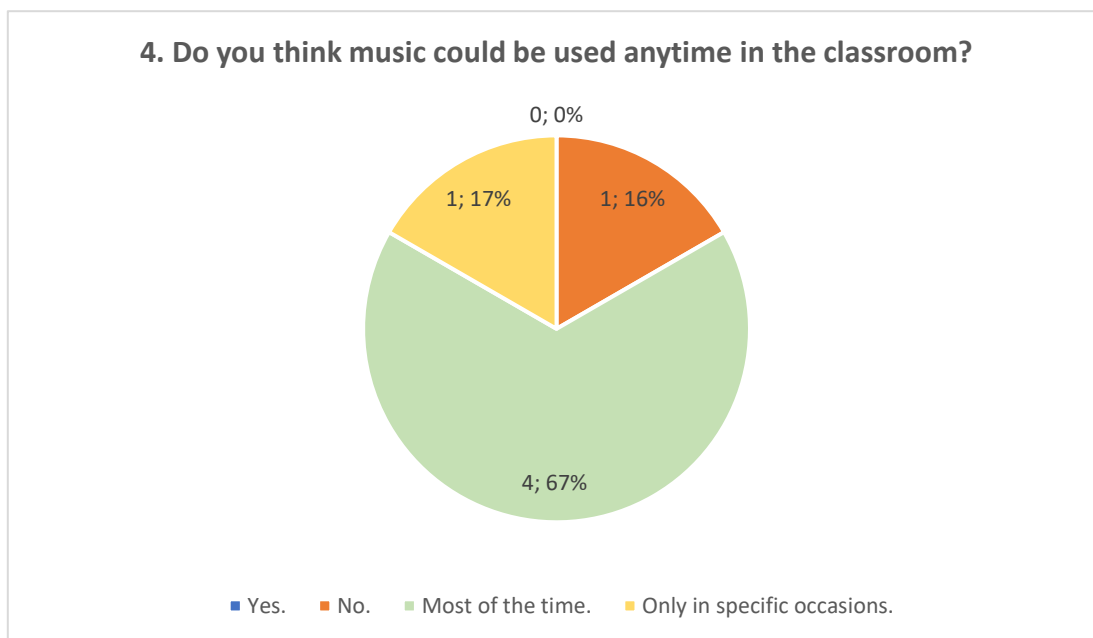
**Interpretation:** Based on the results gotten from the survey, a 100% of the teachers (6 in total) think that the student's learning process is different when music is used in the classroom rather than when it is not used, based on their experiences in different environments.

**Figure 3**

**Source:** Survey applied to the homeroom teachers at Pan American School, 2023.

**Results:** The graphic number three shows the percentage of teachers in early childhood at Pan American School that briefly explain why they think music makes a difference in learning. The answers were categorized and summarized, giving a result of 33% for each category (2 teachers per section).

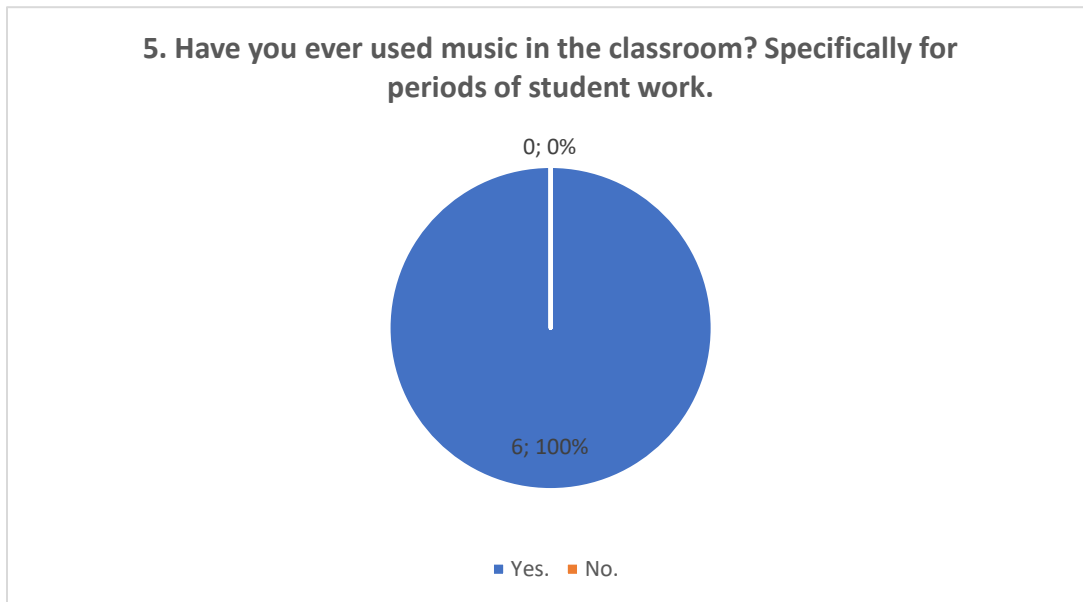
**Interpretation:** Based on the results gotten from the survey, a 33% of teachers (2 in total) consider that music help the students in regulating their nervous system and mood for the classroom work; another 33% of teachers (2 in total) consider that music helps in filling the environmental spaces, easily engaging more the students in the activities; the final 33% of teachers (2 in total) consider that it helps in the development of different skills that the students need for their learning process, such as emotional, social, physical and in their intonation in speech.

**Figure 4**

**Source:** Survey applied to the homeroom teachers at Pan American School, 2023.

**Results:** The graphic number four shows the percentage of teachers in early childhood at Pan American School that answered the time in the classroom that they think music should be used. A 67% of teachers (4 in total) consider that it should be used most of the time; a 16% of teachers (1 in total) consider that it should be used only in specific occasions; and a 16% of teachers (1 in total) consider that it should not be used anytime in class.

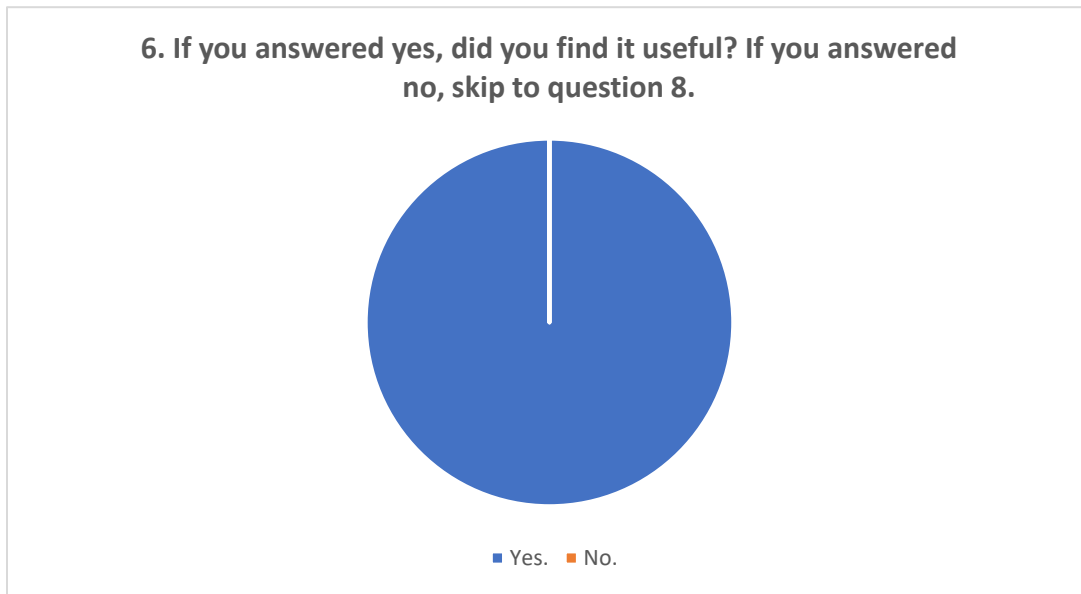
**Interpretation:** Based on the results gotten from the survey, most of the teachers, specifically a 67%, think that music can be used most of the time in the classroom for certain periods of the day where it could be useful in the student engagement. One teacher (16%) consider that music cannot be used at any time, meaning that she probably uses music occasionally and not for specific purposes. The final teacher, which is a 16% of the total, considered that music should be used only for specific occasions, which might be for celebrations or individual objectives in the unit of learning.

**Figure 5**

**Source:** Survey applied to the homeroom teachers at Pan American School, 2023.

**Results:** The graphic number five shows the percentage of teachers in early childhood at Pan American School that have used music in their classrooms at some point. The 100% of the teachers answered that they have used it, being a total of the 6 teachers.

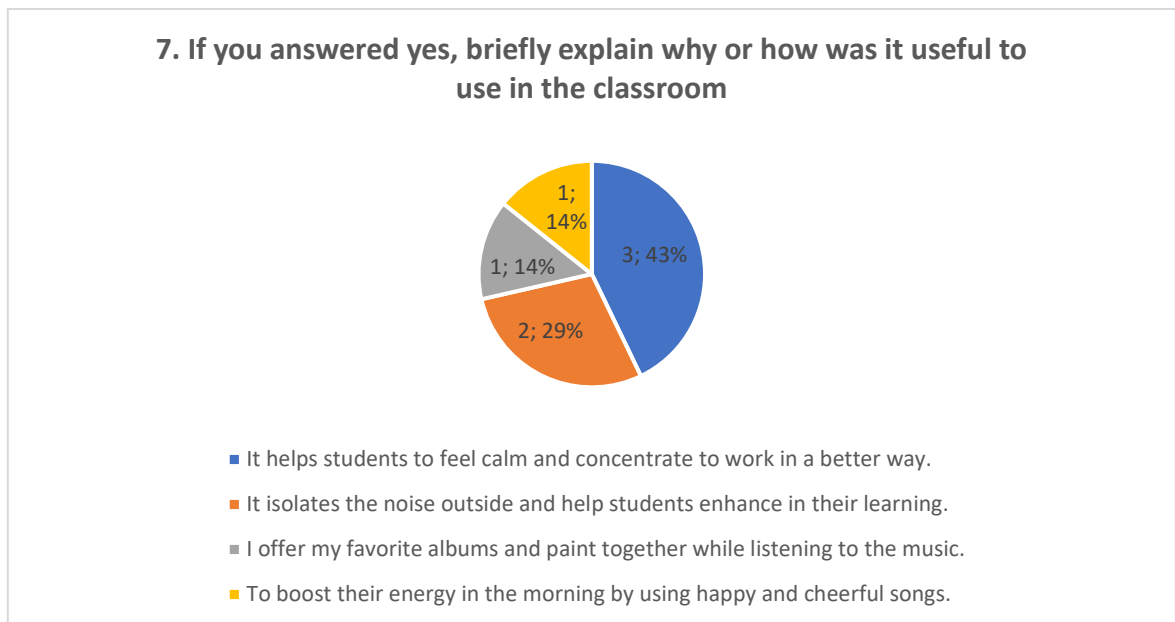
**Interpretation:** Based on the results gotten from the survey, all the teachers that answered the survey have used music in their classrooms, specifically for periods of student work where they have a more independent environment and are working on their own. It is proven that music is a resource that can be adjusted for different situations throughout the day.

**Figure 6**

**Source:** Survey applied to the homeroom teachers at Pan American School, 2023.

**Results:** The graphic number six shows the percentage of teachers in early childhood at Pan American School that finds the use of music useful. The 100% of teachers interviewed on this survey (a total of 6 teachers) answered yes to the question.

**Interpretation:** Based on the results gotten from the survey, it is understood that teachers use music in their classrooms because they find it useful and effective for their students in their learning process. Since the previous question it is shown that teachers have used music at some point, and they might keep using it due to the effectiveness it has on children.

**Figure 7**

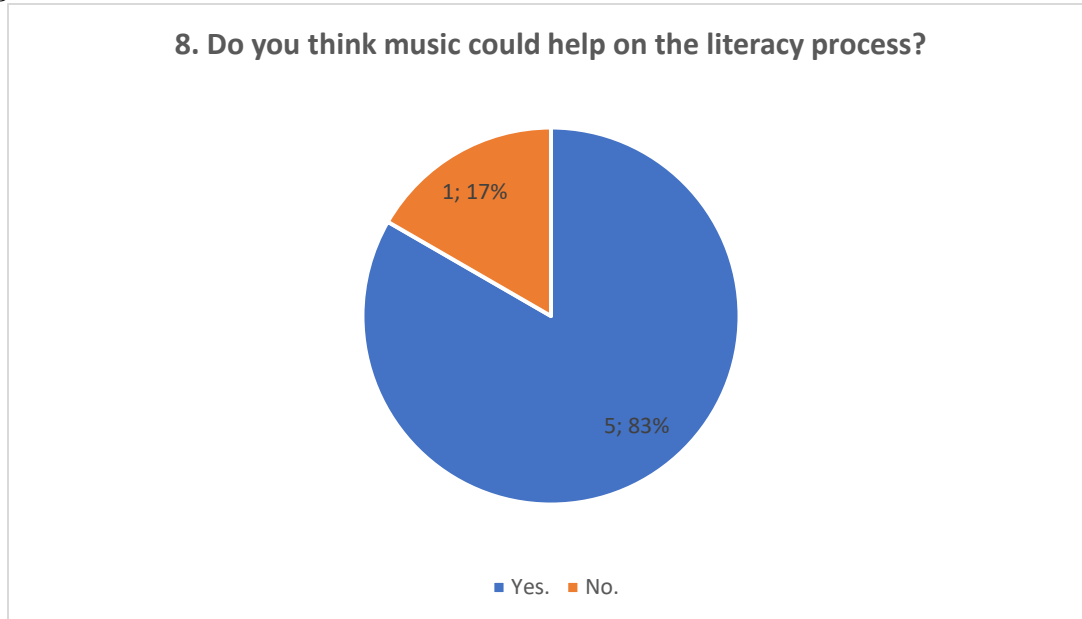
**Source:** Survey applied to the homeroom teachers at Pan American School, 2023.

**Results:** The graphic number seven shows the percentage of teachers in early childhood at Pan American School that briefly explain why or how it was useful to use music in the classroom. Most of the teachers, specifically a 43% of the teachers (3 in total) answered about how music help in the student concentration and calm emotions. A 29% (2 in total) answered about how music isolates the surroundings noise and help in enhancing the class. A 14% of the teachers (1 in total) answered about how music helps her to paint with the students in a better way. The final 14% of the teachers (1 in total) answered that it is useful to cheer the students in the mornings through happy music.

**Interpretation:** Based on the results gotten from the survey, it is shown that most of the teachers consider that music is more useful during periods where students need a calmer environment and to increase their concentration spans. Aspects about the students' surroundings and how they express themselves through music are important as well for

teachers but not as much as the aspects mentioned above, since it is shown that they use it more often for specific classroom periods.

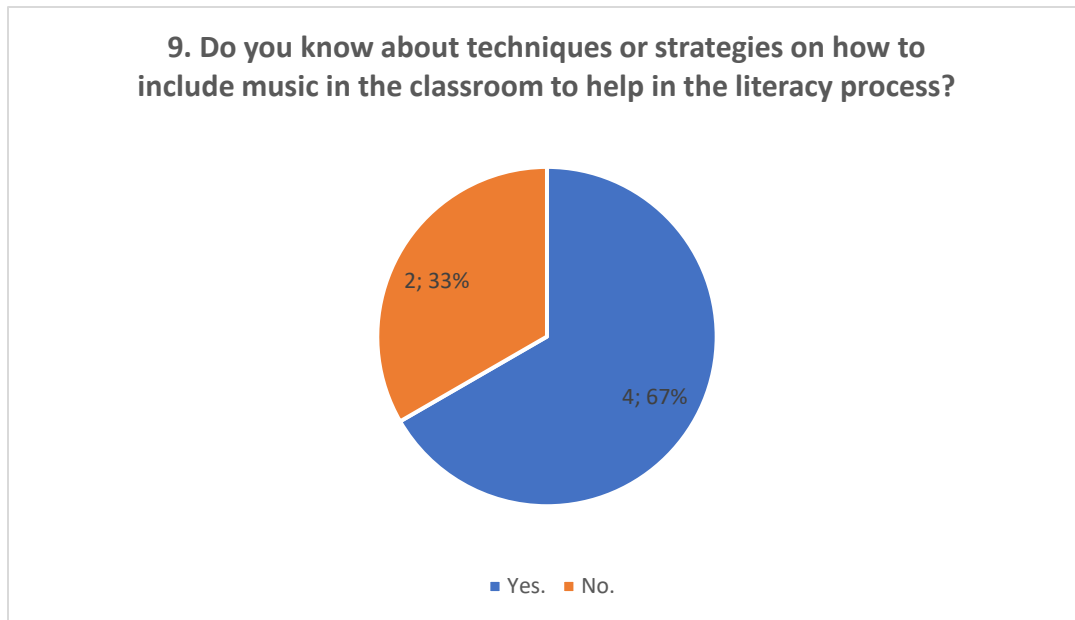
**Figure 8**



**Source:** Survey applied to the homeroom teachers at Pan American School, 2023.

**Results:** The graphic number eight shows the percentage of teachers in early childhood at Pan American School that consider if music is or is not helpful on the literacy process of the students. Almost all of the teachers, specifically an 83% (5 in total) consider that music is helpful for the learning of literacy skills; the rest of the percentage, specifically a 17% (1 in total) consider that it is not helpful in the process mentioned.

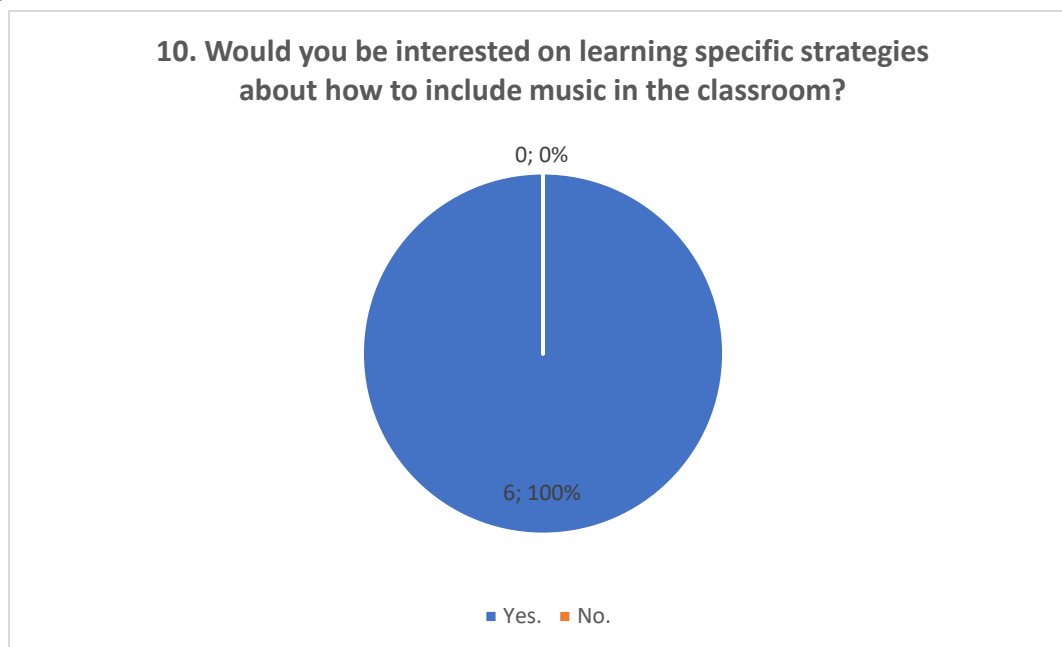
**Interpretation:** Based on the results gotten from the survey, it is understood that most of the homeroom teachers in preschool at Pan American School, specifically five out of six, consider that music could be helpful when it is used in the classroom during specific literacy activities, being beneficial in the student learning process.

**Figure 9**

**Source:** Survey applied to the homeroom teachers at Pan American School, 2023.

**Results:** The graphic number nine shows the percentage of teachers in early childhood at Pan American School that knows or does not know about strategies on how to include music in the classroom to help on the literacy process. A 67% of the teachers (4 in total) do know about ways of how to use music in the classroom for these specific skills, while the 33% of teachers (2 in total) do not know about strategies on how to apply it to reinforce the area.

**Interpretation:** Based on the results gotten from the survey, it is shown that the homeroom teachers might be used to the use of music in the classroom during different moments of the day, where they might apply methods or strategies to include it strategically to improve the student's learning process. There are two teachers in the survey that do not know about the different ways to apply music during literacy periods, which may be benefited to learn about it.

**Figure 10**

**Source:** Survey applied to the homeroom teachers at Pan American School, 2023.

**Results:** The graphic number ten shows the percentage of teachers in early childhood at Pan American School that would be interested on learning strategies on how to effectively use music in the classroom. The total of teachers that answered the survey, specifically a 100% (6 in total), have an interest on learning about it.

**Interpretation:** Based on the results gotten from the survey, it is shown that there is a great interest in homeroom teachers to learn about specific strategies to implement music during the literacy activities. It would be beneficial for them to learn about it to help in the improvement of the reading and writing skills in students.

#### **4.1.3 Interview**

An interview was conducted to the homeroom teachers in the levels of Early Childhood Education, at Pan American School. The instrument applied was a questionnaire, which McLeod (2018) define as “a research instrument consisting of a series

of questions for the purpose of gathering information from respondents. Questionnaires can be thought of as a kind of written interview”. It was performed to 7 teachers in total, going from Playkids to Prep educators. The purpose of the interview was to gather different opinions from members of the preschool levels regarding their experience with music in the classroom and discuss how beneficial its use could be for reading purposes.

The interview started with the teachers’ journey, to observe the different levels they have taught and the time they have spent in education. In general terms, they have spent between 5 to 24 years teaching, and most of them have worked mostly in kindergarten levels, but also in primary years. Since the pandemic is a topic of interest, this interview also focused on this period where education had to adjust the different methods to an online and distanced teaching. All the educators taught during the worldwide pandemic, and they all agreed that it had an enormous impact on the student’s socio-emotional area. One of the teachers explained that the lockdown was like giving them “time out” constantly or for a long period, and children were not functioning the same way after it.

The following questions were focusing more on the literacy skills for students after the pandemic, and how different they felt their learning before and after it. Teachers referred as very fluent and easy going the period before the online learning regarding the reading process, but after it they described it as a harder skill for students to obtain, even though the most affected area was the socio emotional. An educator explained that for her, the distanced learning left a gap in a lot of skills that eventually help students to be interested or ready to read and write.

The instrument included important questions regarding two essential definitions for this research: Alphabetic Principle and Music Therapy. It was shown that 2 out of 7

teachers knew the term Alphabetic Principle, defining it as the phonemic awareness or the ability of learners to associate sounds with letters. When it was given the definition to the teachers that responded negatively, they recognized exactly what it was said but have not heard about the term itself. Regarding Music Therapy, all the teachers explained that it is a beneficial method for health and educational purposes, helping to regulate emotions and providing positive outcomes for students.

The last two questions were about the use of music in the classroom and how they would connect the use of this method with the literacy process. In general terms, teachers described that they implement the use of music most of the time in the classroom, using it to regulate the students' emotions, to present it as a concentration tool during student guide periods, or for transitions and commands; they provided specific examples like using joyful and happy music during their arrival and morning meeting, using instrumental music for concentration, and white sounds for relaxation and resting periods. Finally, teachers provided great ideas on how to include music in the literacy process, which most of them were about using songs to connect phonetic sounds and using it as a tool to practice vocabulary, rhyming, accent reduction and develop their language skills.

The implementation of the interview showed that teachers in a play-based school are aware of the benefits music has when it is used in the classroom and how effective it could be for the student learning. They were very open to sharing ideas for the research and to learn about new perspectives.

## **CHAPTER V**

# **CONCLUSIONS AND RECOMMENDATIONS**

## 5.1 Conclusions

The use of music in preschool ages is an important and effective tool to use, not only to entertain or for routines but also as an educational method. Teachers are used to including music for dancing or as background sounds, but it has been shown along the research that it also has benefits in the literacy skills if it is used purposefully. The investigation was developed to provide support in a problem found in Prep B classroom at Pan American School, about the reading difficulties due to the aftermath of COVID-19 pandemic, regarding the identification of letters and sounds during the reading provocations.

Even though the investigation was completed in a private institution, it is also effective to apply it in a public educational system, since music can provide more engagement and entertainment for students in their second language, and be beneficial for vocabulary, rhymes, and phonics in their first language. Also, the use of music therapy can be applied in both English or Spanish, to provide a tool that will make the reading activities more effective for students to learn sounds and letters. The activities suggested can be adjusted to any preschool population, since they include mostly strategies that do not require a budget or material, but instead they need consistency and good attitude in their application.

The data documented for this research was gathered by different instruments like a checklist, a survey, and an interview, which they answer to the specific objectives stated in the first chapter of the investigation.

**Regarding the general objective:**

As a conclusion for the general objective, it was shown throughout the research that Music Therapy is an effective tool to use in the classroom for the improvement of the reading skills in students from early ages that are starting their literacy process, since there are beneficial strategies that might help with the identification of sounds and letters.

**Regarding the first specific objective:**

Regarding the difficulties that students present with the letter-sound relation during the reading strategies, it was reflected that the three areas they struggle the most are about the alphabetic principle, the letter identification, and the attention when reading. These were analyzed by using an observation, and the information was gathered with a checklist; the level of difficulty for each student was documented to help improve it.

**Regarding the second specific objective:**

It is concluded that Music Therapy has great benefits for preschool students, since it is a very effective tool to help in the emotional, psychological, and social aspects of learners. It was shown that music is a way to help in the improvement of different areas for early childhood, such as their artistic ideas and their cognitive development (like their attention span and the connections they make with their language learning).

**Regarding the third specific objective:**

For the third and final objective, it was concluded that music can be involved in different strategies to use in the classroom for the literacy process, and this was shown

through the short videos created with important information about Music Therapy and its benefits, and three strategies on how to implement it in the routine of students, either on group periods or individual work.

## **5.2 Recommendations**

The considered recommendations are thought as a suggestion for future investigations regarding the use of music in the literacy process, and as a guide to implement it in the classroom.

As an observant in the classroom, it is important to analyze each student individually in all the activities and aspects of learning, which it would be recommended to divide the instrument in more specific items that describe in detail what could happen or find a more effective instrument to collect the data concisely. For some students, there were some characteristics that were combined between the items, and even though they were explained above, they were not defined in detail due to the haste of the moment.

Also, the collection of data during the observation could be done in small groups or in different days, since it is needed detailed observation for better understanding and gathering of information. The instrument was applied in a big group, and even though the students were working in centers, the information could have focused more on one specific activity where students rotate and show their progress regarding the information needed.

As it was shown in the implementation of the survey, few teachers understand or have ideas on how to connect the use of music with the reading skill, and it was proven that all the educators are interested as well in learning about this implementation for a better understanding for their students. For future references, it is recommended to provide

workshops where teachers can learn about the integration of music in the classroom in different ways that will improve the acquisition of knowledge and share their own experiences on what might be beneficial for the different ages.

Finally, it was shown that teachers connect more the use of music with the social-emotional area of students, and not specifically to their literacy skills. These areas are very important in every single learning the learner will have, which is why it is recommended to research more in depth how music could also help in the regulation of behaviors and emotions in children, and not only focus on a specific skill; it is a way to understand the situation more in depth.

**CHAPTER VI**

**PROPOSAL**

## **6.1 Proposal**

The proposal for this research will use the information gathered through the instruments to provide a specific range of suggestions for the student benefit and for the teachers at Pan-American School to implement in the classroom, to help on the improvement of the reading skills. The main purpose of this proposal is to collect the different strategies and methods on how to include Music Therapy in the reading learning process and use it as a tool for teachers that might never try it in the classroom, or that could find it useful for difficulties in the reading process. The way of presenting this information would be through short videos of 45 seconds to 1 minute long, presented as informative capsules for teachers.

## **6.2 Name of the proposal**

Strategies and methods using Music Therapy to implement in the classroom for the reinforcement of the reading skills in Preparatory B students.

## **6.3 Place to be developed**

The proposal will be developed in the Preparatory B group of Pan-American School, to help on the improvement of the reading learning process.

## **6.4 General and specific objectives**

### **6.4.1 General objective of the proposal**

- a) To reinforce reading skills with the use of Music Therapy in students of Preparatory B of Pan-American School.

#### **6.4.2 Specific objectives of the proposal**

- a) To apply reading activities that can be used with Music Therapy for Preparatory students at Pan-American School.
- b) To understand the importance of music in young ages for their development of skills.
- c) To share strategies for the identification of sounds and letters through music and rhythms.

#### **6.5 Necessary budget of the proposal**

The budget for this proposal is very flexible and affordable since the idea is to create informative capsules for teachers about activities to use in the classroom, with materials that are normally in the Pan-American School classes and connecting it to the institution's methodology of Play Based Learning.

#### **6.6 Suggested activities**

The following activities are intended to be presented as short videos with information and strategies to implement in the classroom when using Music Therapy. To start, the definition, importance and benefits about Music Therapy will be explained, how it is linked to reading and how it could improve it. The video is shown in **Annex 4**. "Music Therapy for Reading Skills".

The following will be some strategies for teachers using music. The first strategy is a general one, which is playing music as a background while the students are meant to be working on their own. For example, if the students are working on an activity relating the Alphabetic Principle like pairing the sound with an image of a word that starts with that

sound, the teacher could play some background relaxing music for them to have longer periods of concentration and help with their focus. The video is shown in **Annex 5**.

“Strategy #1 for teachers: Background music”.

The second strategy is about finding a rhythm that the students might remember easily and use it to create songs with them. For example, when reviewing together the sounds of letters, you can use the lyrics “A, has the sound of \_\_\_; B, has the sound of \_\_\_” and in the blank spaces the students are the ones responding. When they manage the part of recognition, they can start giving examples and change the lyrics to “A, as in \_\_\_; B, as in \_\_\_”. Doing it with students instead of playing YouTube videos might be beneficial for their memorization and motivates them to participate. The video is shown in **Annex 6**.

“Strategy #2 for teachers: Sounds song”

The third strategy to use in the class is singing together a song the students like and then reviewing some words from the lyrics by trying to read them and sounding them out. For example, teachers could use “The Wheels on the Bus”; when the song is done, the teacher will write on the board words like “bus”, “go”, “horn”, “baby”, and “wheels”, and the students have to sound out the word together to figure out the word. The video is shown in **Annex 7**. “Strategy #3 for teachers: Sounding out songs”.

The final activity suggested could be used during the period of Storytime. It is a combination of using the sound song created with the students, and the previous activity. The teacher will choose a book according to the level of reading of the students to participate and read on their own. The teacher will read most of the sentences, but on certain words she will ask a student to “sound it out” and read it. If the students struggle, the teacher can help them with the song of “A, has the sound of \_\_\_”. This activity will

help the students by remembering a melody or rhythm, which will connect to the information they need to understand the word. The video is shown in **Annex 8**. “Strategy #4 for teachers: Storytime”

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# **Annexes**

**Annex 1.****Instrument #1: Checklist**

The use of the checklist will help the researcher observe specific aspects regarding the reading process on each student, to analyze the difficulties in the classroom.

1 = The process needs to be reinforced, specifically in that area.

2 = The student is acquiring the knowledge in an effective way.

3 = The student has in general a good level of knowledge for their age, regarding an area.

	<b>Needs reinforcement 1</b>	<b>In progress 2</b>	<b>Achieved 3</b>
Alphabetic Principle	The student struggles with the letter-sound correspondence, by not communicating an understanding in their connection.	The student understands the letter-sound correspondence but experience difficulties in blending individual sounds to make words.	The student understands the base for the Alphabetic Principle according to their age, by blending or segmenting sounds to create words.
Identification	The student confuses some letters, therefore confuse the sound identification (such as “b” with “d” or “p” with “q”).	The student tends to confuse the letter but not the sound (Example: they write “b” as “d” but pronounce the sound correctly).	The student makes no confusions within the letter-sound identification, which does not affect the rest of their learning.
Attention	The student does not retain the information reviewed regarding the reading process, harming their track of learning.	The student can make certain connections between knowledge but may lose track easily.	The student can communicate previous learning and make connections, which allows them to participate and be active learners.
<b>Comments:</b>			

**Annex 2.****Instrument #2: Survey**

The survey will gather different opinions of teachers of preschool levels regarding their experience with music in the classroom.

1. Have you heard about Music Therapy?
  - a) Yes.
  - b) No.
2. Do you think that music makes a difference in learning?
  - a) Yes.
  - b) No.
  - c) I don't know.
3. If you answered yes, what difference does music makes?  
\*Short answer\*
4. Do you think music could be used anytime in the classroom?
  - a) Yes.
  - b) No.
5. Have you ever used music in the classroom? Specifically for periods of student work.
  - a) Yes.
  - b) No.
6. If you answered yes, did you find it useful? If you answered no, skip to question 8.
  - a) Yes.
  - b) No.
7. If you answered yes, could you explain in a short idea why it was useful?  
\*Short answer\*
8. Do you think music could help on the literacy process?
  - a) Yes.
  - b) No.
9. Do you know about techniques or strategies on how to include music in the classroom?
  - a) Yes.
  - b) No.
10. Would you be interested on learning specific strategies about how to include music in the classroom?
  - a) Yes.
  - b) No.

**Annex 3.****Instrument #3: Interview**

The interview will collect direct information and ideas from the teachers to consider for the methods including music and connect it to methods for the reading learning process.

1. Full name.
2. Previously explain your teaching journey.
3. Were you teaching during the pandemic?
4. Do you feel a difference in the student learning between the before and after of the COVID lockdown?
5. Have you taught students that are starting to read and write? How was the experience?
6. If you answered yes, do you think the pandemic left a gap on the literacy learning in students?
7. Have you heard about the Alphabetic Principle? Explain what you know about it.
8. What do you know about Music Therapy?
9. Have you included music in any way in the classroom? Explain.
10. Do you think there might be a way to connect the use of music with the literacy process? How would you connect it?

**Annex 4.**

**“Music Therapy for Reading Skills” video:**

[https://youtube.com/shorts/Zh9w\\_ip04O4](https://youtube.com/shorts/Zh9w_ip04O4)

**Annex 5.**

**“Strategy #1 for teachers: Background music” video:**

[https://youtube.com/shorts/NP\\_QZqoXCH0](https://youtube.com/shorts/NP_QZqoXCH0)

**Annex 6.**

**“Strategy #2 for teachers: Sounds song” video:**

[https://youtube.com/shorts/Uw0bVU\\_W0dI](https://youtube.com/shorts/Uw0bVU_W0dI)

**Annex 7.**

**“Strategy #3 for teachers: Sounding out songs” video:**

<https://youtube.com/shorts/7bLw0lQHHos>

**Annex 8.**

**“Strategy #4 for teachers: Storytime” video:**

<https://youtube.com/shorts/zBuIjVw56yc>