

Pedagogical practices of music education with deaf students in southern of Chile

Prácticas pedagógicas en la educación musical con estudiantes sordos en el sur de Chile

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-  **Receipt:** 29 - October - 2024
-  **Approval:** 19 - February - 2025
-  **Online publication:** 30 - June - 2025

How to cite this article: Melinao Mayorga, R., Paredes Subiabre, N., Taucán Navarrete, J., Muñoz Vilugrón, K. & Hernández Barrientos, S. (2025). Pedagogical practices of music education with deaf students in southern of Chile. *Maskana*, 16(1), 41-52. <https://doi.org/10.18537/mskn.16.01.01>

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Abstract

Music encompasses various dimensions of human life, significantly impacts all students, and is part of the national curriculum. The objective is to reveal the pedagogical practices used by music teachers to teach deaf students in educational institutions in four cities in southern Chile. The instrument applied was a semi-structured interview with six music education teachers. The results show a central category called pedagogical practices in music education, with three subcategories: methods for teaching music education, music teaching strategies, and material resources. The conclusions highlight that the teaching experience to give an educational response is based on the acquired experiences and their interest. Likewise, using various resources and multisensory strategies is valued, highlighting the willingness to innovate and generate new teaching strategies.

Keywords: inclusion, music, deaf students, pedagogical practices, education

Resumen

La música abarca diversas dimensiones de la vida humana y tiene un impacto significativo en todos los estudiantes y forma parte del currículum nacional. El objetivo es develar las prácticas pedagógicas que utilizan los profesores de música para enseñar a estudiantes sordos en instituciones educativas de cuatro ciudades del sur de Chile. El instrumento aplicado fue una entrevista semiestructurada a 6 profesores de educación musical. Los resultados muestran una categoría central denominada prácticas pedagógicas en educación musical, con tres subcategorías: métodos para la enseñanza de la educación musical, estrategias de enseñanza de la música y recursos materiales. Las conclusiones destacan que la experiencia docente para dar una respuesta educativa se basa en las vivencias adquiridas y en su interés personal, así mismo, se valora el uso de una variedad de recursos y estrategias multisensoriales, relevando la disposición para innovar y generar nuevas estrategias de enseñanza.

Palabras clave: inclusión, música, estudiantes sordos, prácticas pedagógicas, educación.

1. Introduction

Music possesses the unique ability to unite individuals across linguistic and cultural boundaries. It evokes memories, tells stories, and, arguably, enriches the human spirit. Del Barrio et al. (2024) affirm that “among the policies that define a nation’s educational system, access to music education should be included as a key factor promoting cultural development” (p.1). In this context, inclusion, music education, and the presence of deaf students in the classroom demand a high degree of pedagogical and organizational responsibility from music teachers committed to inclusive education.

The musical arts are widely recognized as a means to foster motor, cognitive, and social skills. They are known to enhance processes such as memory, attention, concentration, imagination, emotional expression, balance, muscular development, and creativity (Martínez Romero & Vivas Tamayo, 2021; Silva et al., 2020). The Spanish experience, for instance, highlights the need for teacher training programs in music education to include didactic preparation that ensures all students—regardless of their abilities—can access the same content and develop equivalent skills (del Barrio et al., 2024, p.6).

In Chile, the national Music Education Program positions this discipline as a subject with the potential to significantly impact students’ lives and act as a powerful motivational tool for learning. Its implementation is considered essential due to the wide array of benefits it offers. However, the role and impact of music in the education of deaf students often depend on the teacher’s conceptualization of deafness.

If a teacher approaches deafness from a medical or rehabilitative perspective, the focus tends to be on the “ear” and auditory capacity (Buitrago Ocampo, 2021), which minimizes music’s role as a dynamic and expressive art form. Conversely, from a socio-anthropological viewpoint that values the cultural and linguistic identity of deaf individuals, music is seen through a broader lens—one that acknowledges diverse musical

expressions and alternative forms of access (Silva et al., 2020; Barra & Muñoz, 2020).

It is important to note that when a person is diagnosed with deafness, both possibilities and limitations are commonly defined early on—often by their own family, which may include assumptions about whether or not they can engage with music. In educational contexts, many curricula for deaf students have traditionally emphasized rhythm as a tool for speech development and phonological rehabilitation, thus prioritizing auditory training over visual strategies—despite the latter being more aligned with how deaf individuals typically perceive the world (Brétéché, 2021; Cerda et al., 2021).

Otero (2015) explains that for deaf individuals, rhythm is perceived primarily through vibration—a central component of their musical experience rather than a supplementary one. Music is experienced through the entire body. In this sense, signed music emerges as a powerful art form that combines lyrical and non-lyrical performance in sign language, deeply rooted in Deaf culture and developed by Deaf musicians themselves (Cripps, Witcher, & Youssouf, 2022).

As Otero (2015) suggests, “the power of music lies in its ability to awaken the desire to share feelings, practices, worldviews, and meanings that people build and challenge through interaction” (p.135). These insights invite us to reconsider the importance of offering music experiences to deaf students—not necessarily through hearing, but through pedagogical actions that promote alternative, inclusive access to music.

Pedagogical practices, therefore, are deliberate strategies designed to facilitate learning and promote interaction throughout the teaching-learning process. They encompass the construction of knowledge, values, procedures, and habits (Bravo, 2008; Gamboa et al., 2013; Gamboa, 2017). In today’s diverse classrooms, music teachers often find themselves working with deaf students who use Chilean Sign Language

(Government of Chile, 2021), a situation that requires rethinking both the concept of deafness and the teaching strategies applied to ensure inclusive learning environments.

Despite this growing need, many music teachers report being insufficiently prepared to teach deaf students or adapt their instructional strategies accordingly. Latorre (2013) notes that most teacher education programs fail to provide adequate preparation to address students' individual needs. Yet, the current curriculum increasingly demands that arts teachers adopt inclusive approaches and respond to student diversity as a pedagogical imperative.

In Latin America, music education programs rarely offer coursework or seminars addressing student diversity. Instead, they tend to focus on developing competencies in instrumental and vocal performance, as well as in the symbolic language of music notation and structure (Gardner, 2011; Martínez Romero & Vivas Tamayo, 2020). Curriculum plans are generally aligned with grade-level educational objectives rather than inclusive pedagogical frameworks.

However, studies on individual learning differences underscore the need to design flexible curricula that reflect the variety of skills and learning styles found in any classroom. Music, known for its cognitive and emotional benefits, should be equally accessible to all students—including those with disabilities—as part of a broader strategy for inclusive education.

While classroom instruction is typically designed for all students, the learning process is inevitably unique to each individual. Students internalize and interpret knowledge based on their prior experiences and contexts. Research involving deaf students often focuses on comparing their abilities to those of hearing students, inadvertently framing them as disadvantaged. Instead, we should ask: must deaf students experience music the same way as their hearing peers? Or can they develop their own unique relationship with music?

Indeed, deaf students do not perceive sound through hearing in the same way as their hearing peers. However, they can engage with music

through alternative sensory pathways such as sight and touch. Tools that translate song lyrics into visual elements, for instance, allow deaf students to follow rhythm and tempo. Rhythm is not solely an auditory phenomenon—it is also embedded in the body's natural functions, such as heartbeat, breathing, and blinking (Cerdeña et al., 2021).

The concept of “deaf listening” challenges traditional, audiocentric models of musical experience. Deaf individuals experience sound through its visual, tactile, and vibratory dimensions. Their musical engagement extends beyond hearing, making music a truly embodied and visual reality (Brétéché, 2021). Music, therefore, is not limited to sound—it involves the eyes, the body, and alternative sensory experiences.

Lafuente (2019) highlights the cognitive and emotional benefits of music for diverse learners, including those with dyslexia, language delays, or hearing loss. Despite this, there is still limited research in Chile on how music impacts deaf individuals or on effective teaching strategies tailored to their needs.

Morales and Verdugo (2022) call for visually oriented didactic methods that are grounded in Deaf culture. They advocate for a pedagogical shift away from sound-centered instruction. Similarly, Sabbatella (2008) introduces the concept of the “inclusive music educator”—a teacher who understands each student's unique characteristics and adapts their teaching methods to ensure equitable access for all.

The literature reviewed supports the idea that musical experiences can be enriching and accessible for deaf students, provided they are adapted to their cultural and linguistic context (Ministry of Education, 2022). Díaz Santamaría and Moliner García (2020) affirm that music facilitates participation and learning, particularly among students from marginalized or traditionally excluded groups.

Vivas and Martínez (2019) propose a pedagogical model for enhancing musical awareness among deaf students, which includes physical rhythm

exercises like clapping or tapping, the use of tactile objects (e.g., balloons to feel sound vibrations), and instruments that produce high-frequency tones. These strategies underscore the increasing need for inclusive pedagogical practices that recognize and respond to the diversity within classrooms.

In Colombia, Osorio Medina et al. (2024) describe how educational curricula have been adapted using the Kodály methodology to foster practical and participatory music learning among deaf students. The most significant takeaway from such studies is that deaf students must no longer be excluded from musical experiences. Their auditory differences should not be viewed

as barriers, but as opportunities to rediscover and reconstruct music with them (Cerdeja Caicedo, 2022).

These reflections lead us to reconsider which subjects—beyond the core areas of language, math, or science—are essential to holistic human development. The arts, and particularly music, play a crucial role in the formation of both hearing and deaf individuals. In this context, music teachers' pedagogical practices, strategies, and adaptations are vital to ensuring inclusive and meaningful learning. Therefore, this research seeks to uncover the pedagogical practices used by music teachers to instruct deaf students in educational institutions across four cities in southern Chile.

2. Methodological framework

Approach and Design

This study adopts a qualitative approach, as it involves collecting and analyzing data, and identifying new questions during the interpretation phase (Hernández et al., 2014; Hernández & Mendoza, 2018). Furthermore, a multiple case study design is utilized. As López (2013) explains, this design enables the simultaneous analysis of several individual cases in order to explore, describe, explain, evaluate, or intervene in a given educational reality. In this study, the focus is on the pedagogical practices that form part of the daily teaching experiences of music educators working with deaf students.

Participant

The participant group consisted of six music education teachers who currently teach deaf students. These educators work in a range of

educational settings, including regular schools at the kindergarten, elementary, and middle school levels, as well as special education institutions and institutions of higher education. To preserve anonymity, participants are referred to using the codes PM1 through PM6.

Instrument

For this study, a semi-structured interview protocol was designed, covering three dimensions: methods, strategies, and resources. Each dimension included three guiding questions. The instrument was validated by expert reviewers in educational research, and their suggestions were incorporated into the final version. Before conducting the interviews, participants signed an informed consent form to ensure compliance with ethical research standards.

3. Results

The collected data were transcribed and analyzed using content analysis. This process led to the identification of a central category—Pedagogical Practices in Music Education—and three subcategories: Methods for Teaching Music Education, Teaching Strategies, and Material Resources.

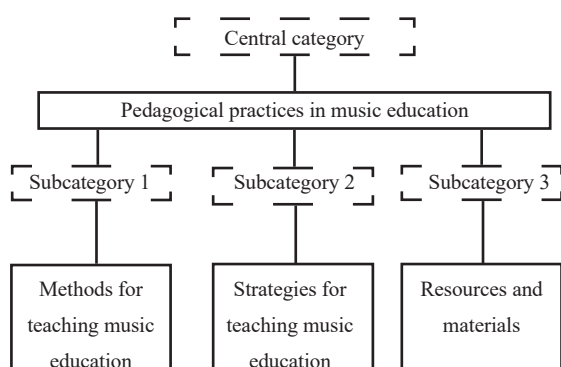


Figure 1: Central category and Subcategories
Source: Own elaboration

3.1. The central category, pedagogical practices in music education, reflects the everyday teaching experiences of music educators across various educational settings. These practices are guided by curriculum requirements and aim to develop students' musical knowledge and skills (Díaz, 2006).

Subcategory 1. *Methods for teaching music education* refer to the diverse instructional approaches that, when applied in combination, aim to help deaf students experience and enjoy the process of learning music.

In relation to this subcategory, participants use various teaching methods, such as the Kodály method, which benefits deaf students by representing musical notes through signs, facilitating their participation in class,

I began using the Kodály method, which employs a universal musical language represented through hand signs for each note. I adopted this component, and it worked well—the student quickly understood it” (PM2)

They also use the Colores method, which is characterized by providing support by assigning colors to each musical note. This methodology offers the deaf student the possibility of playing instruments through visual support,

Now we are playing instruments, with the support of colors... with him we are doing the following... in the score we paint the notes, for example, we paint the C in blue, the F in orange and so on, then without listening, he is supported by the colors (PM2).

Subcategory 2. Teaching strategies for music education refers to the ways used to implement the methods mentioned above.

One strategy involved teaching musical notes using Chilean Sign Language—not just for the deaf student, but for the entire class since he believes that this could be useful for everyone and not only for one student in particular,

For example, I use my hands to do the DO, RE, MI, DO, DO, RE, MI, DO, MI, MI, FA, SOL, MI, FA, SOL. Then all the children participated and learned the notes in Sign Language... All this as group work then, I understood that in reality it is useful for everyone, not only for him (PM2).

On the other hand, the use of these strategies facilitates musical learning through playful activities, as pointed out by another participant,

There is another strategy that works very well or works at least for me, it had to do with dancing, through this strategy the deaf student manages to dance cueca [Chile's national dance] and other dances. How did we do it? without shoes (PM6).

Subcategory 3. Material Resources consider those resources that can manifest in physical or virtual formats and have the fundamental objective of motivating the students' interest. It is essential

that they adjust to the physical characteristics of the student body, at the same time facilitating the teaching task by serving as orientation, and have the remarkable virtue of adapting to a wide variety of contents

For example, one participant mentions that he used metallophones, applying this instrument in conjunction with the Colores method,

For example, with a class we played metallophones, I brought some metallophones from school and taught them music in colors and that is visual, and although they did not hear what they were playing they did associate it to the colors and so I taught them some little songs (PM3).

On the other hand, another participant prefers melodica since the use of this instrument in his classes allows the deaf student to play it while observing the blackboard. In addition, the incorporation of this instrument benefits the way the student learns,

Particularly I teach melodica, I do not like the metallophone because the child needs to see the blackboard and also the instrument, but the melodica, which is similar to the piano, the child can see and play, even if the instrument

does not sound for the child, he knows he is doing it well because he knows where the notes are located (PM1).

Most of the participants also emphasize the use of speakers, as they generate high vibrations. This statement is supported by the experiences of another participant, who incorporated a subwoofer, a device that reproduced bass sounds. All this, in relation to his previously mentioned strategy of taking off his shoes, allowing the deaf student to feel the musical rhythm,

What I did was to place the speakers on the table and a subwoofer on the floor and what this does is to generate a strong and powerful vibration that can be felt in the feet, so she did not listen, but she felt the rhythm in her feet and I emphasize again the rhythm, not the melody (PM6).

In addition to the above, another participant also mentions that he used a speaker and a water balloon, through which the deaf student could perceive the vibrations of the music,

Sometimes I would put a balloon over him to make him feel the music, through how the water moved (PM5).

4. Discussion

Teachers, as facilitators of learning and key actors in the educational process, are responsible for employing appropriate pedagogical methods tailored to the diverse ways in which students process and internalize knowledge (Chica et al., 2021). In the field of music education, teachers implement multisensory teaching approaches that move beyond auditory-based methods. This aligns with Morales and Verdugo (2022), who advocate for a redefinition of sound as the dominant element in music instruction.

In this context, music educators who participated in the study reported a lack of formal training to address the educational needs of diverse student populations. This limited preparation restricts their ability to adapt instruction to the realities of inclusive classrooms—an issue also identified by Latorre (2013), who argues that teacher education programs often fail to equip future teachers with the tools needed to address diversity. In response, Del Barrio et al. (2024) recommend incorporating didactic training that ensures all students are able to achieve learning goals equitably.

Although the participants lack formal training in inclusive education or deaf pedagogy, they exhibit a strong willingness to independently seek out information and resources. This self-initiative enables them to adapt instructional activities and assessment methods, developing strategies that foster the integration of all students. These efforts align with the national music curriculum and with Lafuente's (2019) findings, which highlight music's role in supporting cognitive and emotional development through its motivational and facilitative properties.

This reflects a clear connection with the theoretical framework, particularly the concept of the Inclusive Music Educator. Teachers in this study align with this profile by combining their limited formal knowledge with independent inquiry and the adaptation of resources, enabling them to address the diverse needs of deaf students. In doing so, they contribute to the development of deaf listening, challenging the pervasive myth that deaf individuals cannot access or appreciate music—a belief often rooted in viewing deafness solely as a disability (Buitrago, 2021).

Participants described using the Music in Colors method, which associates each musical note with a specific color, thereby reinforcing rhythmic and melodic learning through visual cues. This strategy taps into the visual culture of deaf students and fosters natural engagement with music. These methodologies aim not to cultivate professional musicianship but to develop an early appreciation for music and introduce a distinct, culturally relevant way for deaf individuals to interpret and experience it (Navarro Solís, 2017; Buitrago Ocampo, 2021).

The material resources described by teachers align with the findings of Morales and Verdugo (2022), who stress that deaf students experience music through multiple senses. In this context, educators employ multisensory strategies such as using speakers, incorporating physical games,

utilizing water balloons, playing percussion instruments, and even removing shoes to enhance tactile perception. These practices create varied entry points for deaf students to engage with music.

Given that deaf individuals naturally develop strong visual processing skills, it becomes essential to offer materials that leverage these strengths (Guerrero-Arenas et al., 2023; Muñoz et al., 2024). Analysis of the data revealed additional teacher-developed strategies, including the creation of concrete, tactile materials. These included learning guides that paired musical notes with their respective signs in Chilean Sign Language, thereby fostering symbolic learning through visually rich and accessible resources.

Giraldo Menjura (2024, p.99) states that “musical experience is essentially a form of learning, which invites pedagogy to critically examine how to support such practices.” This reinforces the importance of music as a social integrator—a universal language that transcends linguistic and cultural barriers, fostering relationships, collaboration, and community (Shirokij et al., 2008). The reflections of the participants in this study echo this view, as they intentionally include all students in music instruction and recognize the specific benefits it offers to deaf learners.

Looking to the future, Giraldo Menjura (2024, p.100) expresses that “the experience in the classroom would allow elucidating deaf artists as guides in signed music for deaf schoolchildren,” giving the opportunity to new generations of hearing peers know other ways of understanding, approaching and performing music, so that by including them in this subject, they have perceived that they have a positive attitude during the activities and a feeling of belonging is generated, providing the opportunity to express themselves and channel emotions, feeling on equal terms as their hearing peers.

5. Conclusions

The conclusions are organized around four key points. First, this study contributes to the limited body of research on pedagogical practices in music education for deaf students. It also underscores the need for further research to explore the effects and benefits that music instruction can offer this linguistic and cultural minority.

Second, it is essential that future music teacher training programs include coursework on inclusive education and strategies for addressing student diversity. Such content would prevent the continued marginalization of deaf students in music classrooms, challenging medical-rehabilitative models that view the “ear” as the only access point to music. Instead, a more comprehensive and effective pedagogical approach should be adopted—one that addresses the actual needs of deaf learners and fosters a more inclusive and equitable educational environment.

Third, music teachers do have access to instructional resources for working with deaf students, and they predominantly employ multisensory strategies. These strategies often emphasize visual, tactile, and motor skills and include tools such as speakers, aerophones, and percussion instruments, along with instructional

guides that incorporate Chilean Sign Language. Overall, teachers demonstrate a continual effort to adapt their methods to the learning styles of deaf students.

Fourth and finally, establishing professional networks among music teachers who work with deaf students is essential. These networks would facilitate the exchange of experiences, methods, strategies, and practical resources, all while promoting awareness of deaf diversity. In addition to strengthening individual teaching practices, such collaboration would highlight, validate, and recognize the significant efforts made by educators to foster inclusion—affirming that deaf students are equally capable of valuing and experiencing music alongside their hearing peers.

Finally, it can be affirmed that teachers demonstrate a genuine commitment to their deaf students, visualizing them as any student with the right to a quality education, showing a genuine interest in their learning and inclusion, recognizing the importance of their subject, and advocating for greater recognition among their colleagues and the educational community that continues to believe that deaf students do not benefit from the musical arts.

6. Recommendations

This study highlights the importance of continuing research in the field of music education for deaf students, particularly to identify which pedagogical practices most effectively support their cognitive development. Additionally, future studies should include the perspectives of deaf

students themselves, exploring their experiences, preferences, and challenges with music education. Expanding the participant pool to include a larger and more diverse group of music educators would also strengthen future research outcomes.

7. Acknowledgments

We extend our sincere gratitude to the teachers who participated in this study for their dedication and genuine commitment to all their students, including those who “hear” music differently. This article was developed as part of a seminar for the degree program in Special Education at

the Universidad Austral de Chile – Puerto Montt, and forms part of the thesis titled *Pedagogical Practices Used by Music Teachers with Deaf Students in Educational Institutions Across Four Cities in the Los Lagos Region*.

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