

HEARING IMPAIRMENT AND SCHOOL INCLUSION: A THEORETICAL REVIEW



<https://doi.org/10.56238/arev7n4-089>

Submitted on: 03/09/2025

Publication date: 04/09/2025

Beatriz Claudino de Souza¹, Felipe da Silva Brito², Maria de Fátima Belancieri³ and Magda Arlete Vieira Cardozo⁴

ABSTRACT

School inclusion requires individualized practices, such as early identification, assessment of the specific needs of each student, the support of interpreters, the use of adapted resources, and access to truly inclusive environments. Thus, this study proposes to understand how legal provisions address the inclusion and rights of people with disabilities; how people with hearing impairment and teachers understand and experience inclusive practices; and, what are the impacts of the performance of families on the development and inclusion of people with disabilities. This is a narrative literature review, with data collected in electronic scientific databases, such as SciELO, LILACS and PEPSIC, based on the descriptors "disability", "hearing impairment" and "school inclusion" in Portuguese. A total of 40 studies were located, 21 of which were selected, which were systematized and categorized through the Content Analysis technique. It is concluded that the Laws and Regulations form a legal basis for the inclusion of students with hearing impairment. From the perspective of students with disabilities, despite inclusive education policies, they still face significant barriers to access and permanence in regular education. For teachers, the inclusion of students with hearing impairment involves a series of pedagogical and emotional challenges, especially when seeking to adapt their teaching methods and use assistive technologies to promote student participation. The family plays a crucial role in the process of school inclusion, since the acceptance and recognition of hearing impairment are fundamental to ensure the necessary support in the learning process.

Keywords: Special Education. Inclusive Perspective. Hearing impairment.

¹Undergraduate student in Psychology
Adamantina University Center
Email: 8820@fai.com.br
LATTES: <http://lattes.cnpq.br/3412299917957572>

²Graduated in Psychology
Adamantina University Center
Email: felipesilvabrito910@gmail.com
LATTES: <http://lattes.cnpq.br/1299764494680337>

³Dr. in Psychology
Adamantina University Center
Email: mfbelancieri@fai.com.br
ORCID: <https://orcid.org/0000-0001-7292-3961>
LATTES: <https://lattes.cnpq.br/7084436217730453>

⁴Dr. in Psychology
Adamantina University Center
Email: magdacardozo@fai.com.br
ORCID: <https://orcid.org/0000-0002-2746-699X>

INTRODUCTION

The choice of the theme school inclusion of students with hearing impairment is due to the identification of the difficulties faced by these people in the school environment and in learning spaces, especially in professional internship activities. In the school context, students with hearing impairment must be served through inclusive and individualized practices. This includes early identification, assessment of the specific needs of each student, the support of interpreters, the use of adapted resources and access to truly inclusive environments. Given this scenario, the following research questions arise: how do legal provisions address inclusion and the rights of people with disabilities? How do people with hearing impairment and teachers understand inclusive practices? What are the impacts of families on the development and inclusion of people with hearing impairment? This is a topic that needs to be widely explored and understood in order to ensure more accessible and effective educational practices. In these terms, the development of this study makes it possible to reflect on the importance of accessibility for children eligible for Special Education services⁵ in their daily lives, enabling a higher quality of life. In addition to raising awareness in society and professionals, it is important to ensure the inclusion not only of people with hearing impairment, but also of individuals with different types of disabilities in all institutional settings. Every child has the right to receive a quality education, regardless of their needs.

According to the dictionary Aurélio (2019), inclusion is defined as the "act or effect of including", as well as that of "understanding and inserting". When this word is associated with the adjective "social", it refers to a set of actions and policies aimed at the insertion of marginalized groups in contexts from which they have historically been excluded. The noun "deficiency" refers to the absence of a certain quality or quantity, resulting in a gap or lack. Thus, the person with disabilities is the one who faces barriers in their interaction with the environment and with the individuals who inhabit it. Mota and Bousquat (2021) highlight the importance of analyzing how a phenomenon is named, as language, being an intrinsic part of human life, has the power to both grant and remove the *status* of citizen. This impacts the way social phenomena are understood and addressed.

⁵ According to Decree No. 67,635/2023, students with **disabilities**, Autism Spectrum Disorder, High Abilities or Giftedness, in addition to those diagnosed with Global Developmental Disorder (São Paulo, 2023), are considered eligible for Special Education services.

The International Classification of Disabilities, Disabilities and Handicaps (CIDID), prepared in 1989 by the World Health Organization (WHO, 1989 *apud* Souza; Lemos, 2021), defines disability as the loss or abnormality of a physiological, anatomical, or psychological structure or function, which can be temporary or permanent. This definition also includes defects or loss of limbs, organs and other tissues, such as hearing impairment. The WHO characterizes hearing loss as an umbrella term used to describe hearing loss in one or both ears. This loss is assessed by means of psychoacoustic measures, such as pure tone threshold audiometry (Souza; Lemos, 2021).

According to Law 14.768/2023, in its Article 1, "hearing impairment is considered the long-term limitation of hearing, total unilateral or partial or total bilateral, which, in interaction with one or more barriers, obstructs the full and effective participation of the person in society, on an equal basis with other people." (Brazil, 2023)

Compared to other disabilities, hearing impairment is one of the most impactful on the individual's interaction with the environment, since it directly affects the development of language, speech and learning, generating impairments in various areas of the subject's life (Cruz *et al.*, 2009; Brook; Katayama, 2024).

In Brazil, Special Education has historically been based on welfare and segregationist models, in which the education of students with disabilities took place in isolated spaces within the school. This modality originated in the nineteenth century, initially through extragovernmental actions inspired by foreign models (Mantoan, 2003 *apud* Greguol; Gobbi; Carraro, 2013).

From the 1990s onwards, the Brazilian State signed international agreements aimed at overcoming illiteracy, consolidating the discourse that all students have the right to schooling in a regular school (Kassar, 2014).

In the 2000s, specific proposals were prepared to improve school attendance for students with disabilities. In this context, the Multifunctional Resource Rooms Program was implemented, allowing these students enrolled in regular schools to have their needs met in specialized spaces for this purpose (Kassar, 2014).

In 2015, to promote and ensure the social inclusion of people with disabilities, Law 13.146/2015 - Statute of Persons with Disabilities - was instituted, which ensures equal opportunities and prohibits any form of discrimination and segregation. This legislation guarantees the right to access the inclusive education system throughout life and at all levels of education. In addition, it assigns to the public power the duty to develop, ensure

and encourage the improvement of educational systems, aiming at inclusion. It also establishes collective and individual measures that favor the academic and social development of students with disabilities, ensuring their access, participation and permanence in educational institutions.

However, although Brazilian legislation ensures these rights, data from the Ministry of Education (MEC, 2016) reveal that only 30% of schools that register enrollment of students with disabilities offer specialized educational interventions. In addition, only 26% of these schools have multifunctional resource rooms, and only 4% of teachers have a specialization in Special Education.

Given this scenario, this study proposes to understand how legal provisions address the inclusion and rights of people with disabilities; how people with hearing impairment and teachers understand and experience inclusive practices; and, what are the impacts of the performance of families on the development and inclusion of people with disabilities.

METHODOLOGY

This study is a narrative review of the literature, whose objective was to identify, evaluate and synthesize, in a comprehensive and systematic way, the relevant empirical studies on a given theme (Gil, 2002).

Data collection was carried out in scientific and electronic databases, such as *Scientific Electronic Library Online* (SciELO), Latin American and Caribbean Health Literature (LILACS) and Electronic Journals in Psychology (PEPSIC).

For the selection of the material, the descriptors "disability", "hearing impairment" and "school inclusion" were crossed, using only national scientific articles published between 2014 and 2024 as filters. All abstracts were analyzed and, based on the inclusion criteria, only the works that presented discussions aligned with the objectives of this research were selected. On the other hand, the exclusion criteria eliminated duplicate articles or those that did not meet the objectives, being limited to discussions only tangential to the proposed theme.

A total of 40 studies were located, distributed as follows: 12 in SciELO, all of which were selected; 28 in LILACS, of which nine were chosen; and no studies were located in PEPSIC. Thus, of the total of 40 studies identified, 21 were selected, systematized and categorized based on the Content Analysis technique, proposed by Bardin (2016), a versatile tool widely used in qualitative research.

The methodology adopted is structured and allows the analysis of textual data in a systematic and objective way. Thus, the analysis process was divided into three stages: pre-analysis, with the identification of the themes and concepts that would be analyzed; analysis of the material, with the detailed investigation of the data, with the definition of the analysis categories and their respective indicators; data treatment, with the interpretation of the findings in the light of the research question.

Based on this procedure, the selected works were organized into four categories, according to similarities in their contents:

- 1) The Laws and Regulations on the Inclusion of Persons with Hearing Impairment: encompasses studies that address the legal provisions that underlie the inclusion and rights of people with disabilities.
- 2) Inclusion through the Eyes of Students with Disabilities: brings together research that analyzes how people with hearing impairment perceive and experience inclusive practices.
- 3) Inclusion Under the Teacher's Gaze: includes studies that investigate teachers' understanding of school inclusion and their pedagogical practices.
- 4) The Family and its Role in the Inclusion Process: includes works that discuss the impacts of the role of families on the development and inclusion of people with hearing impairment.

RESULTS

In view of the procedures adopted, a total of 21 studies were selected, 12 in SciELO and nine in LILACS, as shown in the following table:

Chart 1 – Studies selected to compose the analyses.

Database	Title	Authors / Year	Goals
1 SciELO	Assistive technologies for visual and hearing impairment offered to medical students in Brazil.	Birth; Towers; Ribeiro (2022)	To analyze which assistive technologies have been made available in medical courses in Brazil to support students with reduced hearing and/or vision.
2 SciELO	Brazilian legislation and the school inclusion of individuals with communication disorders.	Godoy <i>et al.</i> (2019)	To verify whether the current Brazilian legislation effectively guarantees school inclusion to individuals with communication disorders.

3 SciELO	School Inclusion: School Professionals' Conceptions of the Deaf and Deafness	Silva <i>et al.</i> (2018)	Understand what the workers of a school say about the role of LIBRAS.
4 SciELO	Strategies of Physical Education Teachers to Promote the Participation of Students with Hearing Impairment in Classes.	Fiorini; Manzini, (2018)	To analyze successful strategies used by Physical Education teachers to promote the inclusion of students with hearing impairment.
5 SciELO	Training and qualification of teachers to work with students with hearing impairment: a study at the Federal Institute of Espírito Santo.	Gates; Gates; Firm (2016)	To assess the current situation of training and qualification of teachers at the Federal Institute of Espírito Santo in relation to the inclusion of students with hearing impairment in the regular classroom.
6 SciELO	Resilience and Protective Processes of Adolescents with Physical Disabilities and Deafness Included in Regular Schools	Libório <i>et al.</i> (2015)	Identification and analysis of protective processes associated with resilience.
7 SciELO	Assessment of student satisfaction with disabilities in higher education	Warrior; Almeida; Silva Filho (2014)	Identification of the level of satisfaction of students with disabilities through the use of an instrument developed by one of the authors, called the Scale of Satisfaction and Attitudes of People with Disabilities - ESA.
8 SciELO	Inclusion and Schooling Processes: Deaf Narratives About Teaching Pedagogical Strategies	Silva; Silva; Silva (2014)	To identify what deaf people say about their teachers when analyzing certain peculiarities of teachers' pedagogical practices and the strategies that privileged (or not) their learning processes.
9 SciELO	The Process of Inclusion of Children with Hearing Impairment in Regular School: Teachers' Experiences	Rivers; Novaes (2009)	To present and discuss the process of inclusion of children with hearing impairment in regular schools, based on the experience of teachers.
10 SciELO	Some considerations about the interface between the Brazilian Sign Language (LIBRAS) and the Portuguese Language in the initial construction of writing by the deaf child	Peixoto (2006)	To carry out a psycholinguistic reflection on the conceptual constructions of children with hearing impairment regarding writing.
11 SciELO	The school inclusion of deaf students: what students, teachers and interpreters say about this experience	Lacerda (2006)	An experience of inclusion of a deaf student in a regular school, with the presence of Sign Language interpreters. Students, teachers and interpreters involved were interviewed and their testimonies analyzed.

12 SciELO	Hearing impairment: schooling and learning of Sign Language in the opinion of mothers	Petean; Borges (2002)	To know the schooling process of people with hearing impairment and the mothers' perspective on school inclusion and the learning of LIBRAS.
13 LILACS	Perception and performance of teachers on students with hearing loss at school	Santos; Prado; Frederique- Lopes; Delgado- Pinheiro(2021)	Verification of the perception and performance of teachers about students with hearing loss, users of individual sound amplification devices and/or with cochlear implants, which use oral communication.
14 LILACS	Teachers' knowledge about the inclusion of students with hearing impairment in regular education	Silva; Fidencio, (2021)	To evaluate teachers ' knowledge about hearing loss, hearing aids and strategies to favor the learning of students with hearing impairment in regular education
15 LILACS	Use of the listening assistant system with students with hearing impairment: identification of barriers and facilitators	Esturaro; Mendes; Deperon; Novaes (2020)	To identify the relationship between the consistent use by teachers and students with hearing impairment of the remote microphone system (SMR), investigating whether such use favored or hindered the adaptation and school development of these students.
16 LILACS	Investigation of the knowledge of teachers of regular schools in a region of the Federal District about the modulated frequency system	Fidêncio <i>et al.</i> (2020)	To investigate the knowledge of regular school teachers regarding the Frequency Modulation System (FM System).
17 LILACS	The inclusion of the discipline of Libras in undergraduate courses: vision of the future teacher	Iachinski <i>et al.</i> (2019)	To present the perception of undergraduate students in relation to the discipline Brazilian Sign Language - Libras, regarding its organization and importance in professional training, as well as the understanding of academics about Libras and deafness.
18 LILACS	Facilitators and barriers to the use of the FM System in students with hearing impairment	Miranda; Brazorotto (2018)	To analyze the barriers and facilitators of the use of the FM System in students with hearing impairment.
19 LILACS	The use of Frequency Modulated System by children with hearing loss: benefit from the perspective of the family member	Rock; Scharlach (2017)	To evaluate the benefit of using the adapted frequency modulated (FM) system in children with sensorineural hearing loss, from the perspective of the family member.
20 LILACS	The experience of Physical Education teachers in the process of school inclusion of deaf students	Pedrosa <i>et al.</i> (2013)	From the perspective of school inclusion, to identify the preparation of Physical Education teachers to work with students with hearing impairment, through their experience.
21 LILACS	The inclusion of deaf students in regular education from the	Tenor; Novaes; Trenche;	To investigate how the inclusive education policy and its implementation process with deaf students have been

	perspective of teachers in a city in São Paulo	Carnion (2009)	perceived and put into practice by teachers in a city in São Paulo.
--	---	-------------------	--

Source: prepared by the authors (2025).

In view of the proposed objectives, the systematized data are presented according to the four categories of analysis established.

CATEGORY 1 - LAWS AND REGULATIONS ON THE INCLUSION OF THE HEARING IMPAIRED PERSON

The cornerstone for the discussion on people with disabilities in society was the Salamanca Declaration in 1994. Subsequently, the Law of Guidelines and Bases of Education (Law No. 9,394/1996) was enacted, whose Article 50 contemplates Special Education as a teaching modality in the regular education network, representing the first significant advance in Brazilian legislation on the subject (Godoy *et al.*, 2019).

Law No. 10,436/2002 established the Brazilian Sign Language (Libras) as the official means of communication and expression of the deaf community. Subsequently, Decree 5.626/2005 ensured the right of this group to Education, stipulating, among other guidelines, the mandatory inclusion of the discipline of Libras in teacher training courses, covering teaching degrees and Speech Therapy courses (Iachinski *et al.*, 2019).

The publication of the National Policy on Special Education in the Perspective of Inclusive Education (PNEEPEI), in 2008, marked a process of renewal in the Special Education policy. However, with Law No. 12,796/2013, there were changes in the definitions and concepts of Special Education, aiming to reorganize it from an inclusive perspective. Among the principles of this legislation, the expansion of service to students with disabilities stands out (Gonçalves; Gates; Firme, 2016).

Sign Language plays a fundamental role in the life of individuals with hearing impairment, as it is through it that the first contact with the world occurs, from the appropriation of writing in childhood to insertion in the labor market in adult life. In addition, Sign Language is essential for the construction and maintenance of psycho-affective bonds.

Peixoto (2006), based on a constructivist and psychogenetic perspective, states that the deaf child actively interacts with the reality around him, building hypotheses about the world based on pre-established references. In her research, carried out with 15 children

aged between 4 and 11 years, all with severe or profound hearing loss, the author analyzed the process of writing acquisition and the role of Sign Language for this learning.

The research pointed out four translation strategies by the children, namely: initialization: occurs when there is a correspondence between the initial of the word in the Portuguese language and the sign of Libras; lexical borrowing: happens when the sign is similar to a spelling at a fast pace; absence of reference to linguistic borrowing: the translation has no direct relationship with words in the Portuguese language; and, by group of compound signs: formed by two (or more) radicals, whose translation into Portuguese corresponds to a non-compound word. In some cases, the children wrote words accompanied by drawings, such as the word "Brazil" that was represented next to the drawing of the flag. When it came to words that were difficult to illustrate, the children chose to draw the signs corresponding to these words, evidencing a characteristic of Sign Language: its visual nature. This finding demonstrates how Sign Language serves as a basis for the construction of writing and reinforces its importance for the inclusion of deaf people.

Fiorini and Manzini (2018) conducted a study with three Physical Education teachers and three students with hearing impairment, with the objective of identifying the methods used to include and integrate students in the activities. For this, four classes of each teacher were recorded, totaling 12 videos, which were later analyzed. The researchers identified five distinct strategies adopted by teachers to promote student inclusion, namely: previous strategies: advance planning of activities considering the needs of students with hearing impairment; strategies for helping through a peer tutor: support from a peer to facilitate communication and understanding of the activities; strategies for teaching the activity: adaptation of the content and instructions to make the activities accessible; strategies that result from the student's response or action with DA: adjustments made based on the student's response and participation; and, communication strategies: use of visual, gestural and Libras resources to ensure the understanding of instructions.

The first strategy was identified when teachers made sure of the students' degree of attention and understanding before the activity was carried out. The second strategy refers to one of the professionals who took advantage of a pre-existing bond of the deaf student, using this connection to offer more individualized support. For this, the consent of the student tutor who would assist in this process was considered. The third strategy was manifested through the attentive monitoring of deaf students, taking into account their

subjectivity and specific needs. In addition, the teachers provided positive and corrective feedback, with the aim of enhancing the student's participation and performance in the activity. The fourth strategy consisted of adapting rules, taking into account the student's capabilities, replacing verbal signs with gestures to make communication more accessible. The fifth strategy was observed through the use of gestures, movements and facial expressions, aiming to facilitate the understanding and interaction of deaf students during the activities.

Nascimento, Torres, and Ribeiro (2022) conducted a survey to verify how many medical courses in Brazil offer Assistive Technologies (ATs) for students with disabilities. The results showed a predominance of private institutions in the provision of these technologies, which aggravates the challenges faced by this public, which, in addition to the barriers imposed by its conditions, has to deal with financial difficulties. In addition, it was highlighted that, even in institutions that had ATs, these resources were not always available to students.

It is also noteworthy that, despite the inclusion technologies, the clinical phases of the medical course that involve the auscultation of heart, lung and intestinal sounds, represent a great challenge for students with hearing impairment. It is estimated that almost 10% of medical courses do not offer any type of AT, evidencing the difficulty in ensuring that this public is properly recognized and served, despite the numerous legal provisions that support inclusion and integration.

Esturaro *et al.* (2020) researched the factors that facilitate or hinder the use of the auxiliary listening system in educational institutions. It was possible to identify three groups: those who use the resource regularly at school; those who voluntarily stop using it, either due to loss, theft or need for repair or refusal of the teacher to use it; and, those who do not use the resource involuntarily, either because they chose to return the equipment, study in specialized schools for students with hearing impairment or refuse to use the device on their own initiative. The researchers highlight that the effective use of ED is favored by the partnership between education professionals, school and family.

Miranda and Brazorotto (2018) also analyzed factors that promote or hinder the use of EDs. Among the main aspects identified, the following stand out: the previous history of use of these technologies, the development of the student's language and hearing, the family's awareness of the importance of these resources, the work of speech therapists and technical issues, such as the breakage of devices. Thus, the need for an alliance

between all agents involved in the educational process is evidenced to ensure the effective use of ATs.

CATEGORY 2 – INCLUSION FROM THE PERSPECTIVE OF STUDENTS WITH DISABILITIES

Several studies were conducted to investigate the opinion of students with hearing impairment about the degree of accessibility and preparation of professionals to promote proper inclusion and immersion of the student in that environment. Silva, C., Silva, D. and Silva, R. (2014), as well as Libório *et al.* (2015), through interviews with students with hearing impairment, aged between 14 and 17 years and between 14 and 18 years, respectively, in order to identify both the institutional characteristics that favor inclusion and those that contribute to segregation.

Both studies highlight the importance of an adaptive relationship between students, school professionals and their peers, with Libras being the main tool for the immersion of students with hearing impairment in the school universe. In addition, the empathy and solidarity of colleagues and school professionals, manifested through strategies such as the use of drawings and figures in teaching, were also pointed out as factors that favor inclusion. The authors point out that the Libras interpreter is not always able to fully translate everything that happens in the classroom. As a consequence, deaf students have access to a smaller volume of information compared to hearing students, being on the sidelines of discussions and secondary comments that circulate in the school environment.

Libório *et al.* (2015) emphasize the importance of the presence of cultural practices recognized and valued by the environment of students with hearing impairment, as this enables their participation in activities shared by all.

Guerreiro, Almeida and Silva Filho (2014) evaluated the degree of satisfaction of students with disabilities in higher education based on four factors: structural: which refers to satisfaction with the physical infrastructure of the campus; operational: covers the elements that facilitate the movement and communication of people with disabilities within the institution; psycho-affective: it is related to the student's intra and interpersonal satisfaction, considering the feeling of belonging and inclusion in the institution; Attitude towards obstacles: these are the strategies and behaviors adopted by students to deal with difficulties. The authors found a high degree of dissatisfaction among students in relation

to the operational factor of the institution, especially with regard to communication with teachers during classes.

In addition, the research data indicated the importance of psycho-affective factors for the integration and permanence of the student in the institution. However, the need for a strong articulation between these internal factors and the structure and operationalization of the institution is highlighted.

Lacerda (2006) also emphasizes the relevance of affective bonds and problematizes the fact that students with hearing impairment often remain isolated within their own classroom, unable to establish full contact with classmates and teachers, even with the presence of interpreters. Although this situation may not be perceived by the deaf student himself, this occurs precisely because he has no other reference for interaction.

CATEGORY 3 - INCLUSION UNDER THE TEACHER'S GAZE

The inclusion of students with hearing impairment in the school environment presents a series of challenges and implications for teachers. According to Tenor *et al.* (2009), these challenges are not restricted only to the planning and execution of adapted pedagogical strategies, but also cover emotional and psychological aspects that directly impact teaching practice.

To meet the educational needs of students, teachers must adapt their teaching methods in a meaningful way. This includes the use of visuals such as captioned images, graphics, and videos, as well as the incorporation of TAs. Among these technologies, FM systems stand out, an electronic device that complements the use of hearing aids or cochlear implants, improving sound capture in noisy environments, with distant sound sources and reverberation. The main objective of this system is to transmit sound directly to the user's ears, minimizing interference.

According to Gagne and Piche (2007 *apud* Fidêncio, 2020), these technologies play a crucial role in promoting active participation and effective student learning. However, implementing these strategies can require a considerable investment of time and resources, posing an additional challenge for teachers.

Santos *et al.* (2021) clarify that there was also a verification of the perception and performance of teachers in relation to students with hearing loss who use individual sound amplification devices or cochlear implants to assist in oral communication.

The challenges faced by teachers are not restricted to technical and pedagogical issues, but also involve emotional and psychological aspects. The lack of specific training and limited support can generate feelings of frustration and stress. Many teachers report feeling overwhelmed with the responsibility of adapting their practices without proper institutional support and without adequate training. For Silva and Fidêncio (2021), it is essential to assess the level of knowledge of teachers about their students' hearing loss and develop strategies that favor the learning of these students in regular education. Similarly, Silva *et al.* (2018) highlight the need to understand the conception of school professionals about the role of Sign Language in the educational process. Even because, the feeling of inadequacy can compromise the confidence of teachers and negatively impact the quality of the education offered.

Lacerda (2006) identified a generalized lack of information among teachers about deafness, in addition to the absence of planning activities together with the interpreters and the lack of awareness about problems arising from the lack of action in pedagogical practice. To overcome these challenges, it is essential that teachers receive continuous training and adequate support. Pedrosa *et al.* (2013) analyzed the experience of teachers, specifically of Physical Education, to identify their level of preparation in working with deaf students within the perspective of school inclusion. Rios and Novaes (2009) point out that, many times, teachers need to individually seek strategies to approach deaf students, without this issue being discussed with the school's technical staff. Thus, the institution does not promote transformations in its structure and practices to adequately welcome these students.

Collaboration with hearing loss experts, the implementation of ATs, and the development of inclusive pedagogical practices are essential to creating an educational environment that meets the needs of all students. In addition, the recognition and appreciation of the work of teachers, as well as the provision of emotional and professional support, are fundamental aspects to ensure effective and quality inclusive education.

3.4 CATEGORY 4 - THE FAMILY AND ITS ROLE IN THE INCLUSION PROCESS

From a psychological point of view, forcing deaf children to learn a language that is not natural to them can have significant impacts on identity development and self-esteem. According to Vygotsky (1978 *apud* Godoy *et al.*, 2019), cognitive development is closely linked to the social and cultural context in which the child is inserted. For deaf children, the

imposition of the conventional Portuguese language can create an environment of frustration and a sense of inadequacy, negatively affecting their emotional and social development.

According to Peixoto (2006), Sign Language, which is the natural and visuospatial language of the deaf, plays a crucial role in the formation of this identity. The imposition of an oral language can be seen as an attempt at assimilation that ignores and devalues the deaf culture, resulting in an internal conflict and the possibility of feelings of alienation.

From an educational point of view, the effectiveness of teaching a conventional oral language to deaf children can be questioned. The literature points out that Sign Language is often more effective for communication and early cognitive development in these children. Studies carried out by researchers such as Ladd (2003 *apud* Peixoto, 2006), indicate that bilingual education, which integrates Sign Language and Portuguese Language (or another oral language), can be more beneficial for the acquisition of linguistic and academic skills, in addition to promoting better social adaptation.

Denial of hearing impairment by families can have profound implications for deaf children's access to education and overall development. When families do not recognize or accept their child's hearing impairment, a number of challenges can emerge, affecting both the quality of education and the child's psychological well-being. In addition, this denial can delay diagnosis and, consequently, early intervention. When hearing impairment is not identified and accepted, children miss out on the opportunity to receive specialized support from an early age, which can lead to significant delays in language development and the acquisition of academic skills.

If families do not accept hearing impairment, they may stop seeking or prevent their children from having access to adapted educational methods, such as bilingual education. The study by Schlesinger and Meadow (1972 *apud* Iachinski *et al.*, 2019) highlights the importance of educational methods that include Sign Language and other strategies adapted for deaf children. However, without acceptance of disability, families may opt for traditional methods that do not meet the specific needs of these students, compromising their educational progress.

Denial of disability can generate barriers in communication and social interaction. When hearing loss is not recognized, children may face difficulties communicating effectively with their peers and teachers. The absence of adequate communication strategies can lead to social isolation and a negative school experience, directly impacting

their participation and academic performance (Petean; Borges, 2002). Thus, the adoption of adapted communication strategies, such as Sign Language, is essential to promote the social and academic integration of deaf children.

Rocha and Scharlach (2017) conducted a survey with 26 family members of children who use Individual Sound Amplification Devices (ISADs) or cochlear implants. The participants answered the questionnaire Evaluation of the FM System, which allows a subjective analysis of the use and benefits of the HA and FM System. The results indicated a significant improvement in children's speech comprehension with the use of FM, in addition to an increase in attention during school activities.

Of the 26 subjects analyzed, four did not use the FM system at school, as the equipment was restricted at the institution. Although the parents recognized the benefits of the device, since the children were able to communicate orally, the family members accepted the school's decision.

Petean and Borges (2002), in an interview with guardians of deaf children, observed a refusal on the part of parents to allow their children to learn Sign Language, prioritizing the supremacy of oral language. One of the reasons for such resistance was the belief that learning Sign Language would prevent the child from learning, or even from wanting to learn, the spoken language. In addition, it was evidenced that the school can act as a bridge for the socialization of the child, helping him to constitute his subjectivity, promoting the proper integration and understanding of the subject in its totality and meeting its needs.

CONCLUSION

The inclusion of students with hearing impairment is a key goal for building a truly accessible and equitable education system. However, achieving this goal involves a number of challenges and considerations ranging from laws and regulations to the perspective of students, teachers, and families. A detailed analysis of the four main aspects – laws and regulations, students' perception, teachers' views and the role of families – reveals the complexity and need for integrated approaches to promoting true inclusion.

Laws and regulations form the legal basis for the inclusion of students with hearing impairments. While there are policies and guidelines that promote inclusion, their effectiveness depends on practical implementation and institutional support, which is often insufficient.

As for the students' perspective, despite inclusive policies, they still face significant barriers. Reliance on interpreters and a lack of adapted materials limit access to information and full participation in school activities. The Brazilian Sign Language (Libras) is essential for inclusion, but its effectiveness depends on the quality of the training of professionals.

From the point of view of teachers, they still face pedagogical and emotional challenges when adapting their teaching methods and using assistive technologies. The lack of specific training and adequate institutional support results in frustration and stress, compromising the quality of teaching. Thus, continuous training and emotional support are essential for the effectiveness of inclusion.

As regards the role of families, the acceptance and recognition of hearing impairment by families is key to ensuring that children receive the necessary support from an early age. Denial of disability can delay early diagnosis and intervention, impairing children's linguistic and academic development. In this sense, collaboration between family, school and professionals is essential to promote effective inclusion.

In summary, for inclusion to be successful, the implementation and enforcement of policies, adequate training for teachers, continuous support and full acceptance of children's needs by families are essential. Further studies could explore specific teacher training strategies, the impact of different models of bilingual education, and ways to strengthen collaboration between family, school, and professionals to improve the inclusion and integral development of children with hearing impairment.

REFERENCES

1. Bardin, L. (2016). *Análise de conteúdo* (3rd ed.). São Paulo, Brazil: Edições 70.
2. Brasil. (2015). Lei nº 13.146, de 6 de julho de 2015. Institui a Lei Brasileira de Inclusão da Pessoa com Deficiência (Estatuto da Pessoa com Deficiência). *Diário Oficial da União*, seção 1, p. 2. https://www.planalto.gov.br/ccivil_03/_ato2015-2018/2015/lei/l13146.htm
3. Brasil, Ministério da Educação. (2016, May 3). Dirigentes estaduais discutem modelos para educação especial. Portal MEC. <http://portal.mec.gov.br/ultimas-noticias/222-537011943/43101-dirigentes-estaduais-discutem-modelos-para-educacao-especial>
4. Brasil. (2023). Lei nº 14.768, de 22 de dezembro de 2023. Define deficiência auditiva e estabelece valor referencial da limitação auditiva. https://www.planalto.gov.br/ccivil_03/_ato2023-2026/2023/lei/L14768.htm
5. Cruz, M. S., et al. (2009). Prevalência de deficiência auditiva referida e causas atribuídas: Um estudo de base populacional. *Cadernos de Saúde Pública*, 25(5), 1123–1131. <https://doi.org/10.1590/S0102-311X2009000500019>
6. Dessen, M. A., & Brito, A. M. W. de. (1997). Reflexões sobre a deficiência auditiva e o atendimento institucional de crianças no Brasil. *Paidéia* (Ribeirão Preto), (12-13), 111–134. <https://doi.org/10.1590/S0103-863X1997000100010>
7. Esturaro, G. T., Mendes, B. de C. A., Deperon, T. M., & Novaes, B. C. A. C. (2020). Uso do sistema auxiliar de escuta com estudantes com deficiência auditiva: Identificação de barreiras e facilitadores. *Distúrbios da Comunicação*, 32(4), 678–689. <https://doi.org/10.23925/2176-2724.2020v32i4p678-689>
8. Ferreira, A. B. de H. (2019). *Novo dicionário Aurélio da língua portuguesa* (8th ed.). Curitiba, Brazil: Positivo.
9. Fidêncio, V. L. D., et al. (2020). Investigação do conhecimento de professores de escolas regulares de uma região do Distrito Federal sobre o sistema de frequência modulada. *Audiology - Communication Research*, 25, e2278. <https://doi.org/10.1590/2317-6431-2020-2278>
10. Fiorini, M. L. S., & Manzini, E. J. (2018). Estratégias de professores de educação física para promover a participação de alunos com deficiência auditiva nas aulas. *Revista Brasileira de Educação Especial*, 24(2), 183–198. <https://doi.org/10.1590/S1413-65382418000200003>
11. Gil, A. C. (2002). *Como elaborar projetos de pesquisa*. São Paulo, Brazil: Atlas.

12. Greguol, M., Gobbi, E., & Carraro, A. (2013). Formação de professores para a educação especial: Uma discussão sobre os modelos brasileiro e italiano. *Revista Brasileira de Educação Especial*, 19(3), 307–324. <https://doi.org/10.1590/S1413-65382013000300002>
13. Godoy, V. B. de, et al. (2019). A legislação brasileira e a inclusão escolar dos indivíduos com distúrbios de comunicação. *Revista CEFAC*, 21(3), e15518. <https://doi.org/10.1590/1982-0216/201921315518>
14. Gonçalves, W., Gonçalves, V. M. F., & Firme, L. P. (2016). Formação e capacitação de docentes para atuar com alunos com deficiência auditiva: Um estudo no Instituto Federal do Espírito Santo – IFES. *Ensaio: Avaliação e Políticas Públicas em Educação*, 24(93), 866–889. <https://doi.org/10.1590/S0104-40362016000400004>
15. Guerreiro, E. M. B. R., Almeida, M. A., & Silva Filho, J. H. da. (2014). Avaliação da satisfação do aluno com deficiência no ensino superior. *Avaliação: Revista da Avaliação da Educação Superior (Campinas)*, 19(1), 31–60. <https://doi.org/10.1590/S1414-40772014000100003>
16. Iachinski, L. T., et al. (2019). A inclusão da disciplina de Libras nos cursos de licenciatura: Visão do futuro docente. *Audiology - Communication Research*, 24, e2070. <https://doi.org/10.1590/2317-6431-2018-2070>
17. Kassar, M. de C. M. (2014). A formação de professores para a educação inclusiva e os possíveis impactos na escolarização de alunos com deficiências. *Cadernos CEDES*, 34(93), 207–224. <https://doi.org/10.1590/S0101-32622014000200004>
18. Lacerda, C. B. F. de. (2006). A inclusão escolar de alunos surdos: O que dizem alunos, professores e intérpretes sobre esta experiência. *Cadernos CEDES*, 26(69), 163–184. <https://doi.org/10.1590/S0101-32622006000200004>
19. Leonardo, N. S. T. (2008). Inclusão escolar: Um estudo acerca da implantação da proposta em escolas públicas. *Psicologia Escolar e Educacional*, 12(2), 431–440. <https://doi.org/10.1590/S1413-85572008000200014>
20. Libório, R. M. C., et al. (2015). Resiliência e processos protetivos de adolescentes com deficiência física e surdez incluídos em escolas regulares. *Revista Brasileira de Educação Especial*, 21(2), 185–198. <https://doi.org/10.1590/S1413-65382115000200003>
21. Miranda, E. S., & Brazorotto, J. S. (2018). Facilitadores e barreiras para o uso do FM Sistema em crianças em idade escolar com perda auditiva. *Revista CEFAC*, 20(5), 583–594. <https://doi.org/10.1590/1982-021620182053718>
22. Mota, P. H. dos S., & Bousquat, A. (2021). Deficiência: Palavras, modelos e exclusão. *Saúde em Debate*, 45(130), 847–860. <https://doi.org/10.1590/0103-1104202113014>

23. Nascimento, M. I. do, Torres, R. C., & Ribeiro, K. G. F. (2022). Tecnologias assistivas para deficiência visual e auditiva ofertadas aos estudantes de medicina no Brasil. *Revista Brasileira de Educação Médica*, 46(1), e037. <https://doi.org/10.1590/1981-5271v46.1-20210165>
24. Pedrosa, V. S., Beltrame, A. L. N., Boato, E. M., & Sampaio, T. M. V. (2013). A experiência dos professores de educação física no processo de inclusão escolar do estudante surdo. *Revista Brasileira de Ciência e Movimento*, 21(2), 106–115. <https://portalrevistas.ucb.br/index.php/rbcm/article/view/3703>
25. Peixoto, R. C. (2006). Algumas considerações sobre a interface entre a Língua Brasileira de Sinais (LIBRAS) e a Língua Portuguesa na construção inicial da escrita pela criança surda. *Cadernos CEDES*, 26(69), 205–229. <https://doi.org/10.1590/S0101-32622006000200006>
26. Petean, E. B. L., & Borges, C. D. (2002). Deficiência auditiva: Escolarização e aprendizagem de Língua de Sinais na opinião das mães. *Paidéia (Ribeirão Preto)*, 12(24), 195–204. <https://doi.org/10.1590/S0103-863X2002000300005>
27. Ribeiro, D. M. G., & Katayama, L. C. S. (2024). Os direitos da personalidade e a inclusão das pessoas com deficiência auditiva: Desafios e a aplicabilidade de tecnologias assistivas. *Revista Aracê*, 6(4), 17137–17152. <https://doi.org/10.56238/arev6n4-356>
28. Rios, N. V. de F., & Novaes, B. C. de A. C. (2009). O processo de inclusão de crianças com deficiência auditiva na escola regular: Vivências de professores. *Revista Brasileira de Educação Especial*, 15(1), 81–98. <https://doi.org/10.1590/S1413-65382009000100006>
29. Rocha, B. da S., & Scharlach, R. C. (2017). O uso de Sistema de Frequência Modulada por crianças com perda auditiva: Benefício segundo a perspectiva do familiar. *CoDAS*, 29(6), e20160236. <https://doi.org/10.1590/2317-1782/20172016236>
30. Santos, F. R. dos, Prado, L. T., Frederigue-Lopes, N. B., & Delgado-Pinheiro, E. M. C. (2021). Percepção e atuação de professores sobre o aluno com perda auditiva na escola. *Distúrbios da Comunicação*, 33(3), 437–446. <https://doi.org/10.23925/2176-2724.2021v33i3p437-446>
31. São Paulo. (2023). Decreto nº 67.635, de 06 de abril de 2023. Dispõe sobre a Educação Especial na rede estadual de ensino e dá providências correlatas. <https://www.al.sp.gov.br/repositorio/legislacao/decreto/2023/decreto-67635-06.04.2023.html>
32. Silva, J. S. S. D. (2022). Deficiência, diversidade e diferença: Idiossincrasias e divergências conceituais. *Educação em Revista*, 38, e36551. <https://doi.org/10.1590/0102-469836551>

33. Silva, C. M. da, Silva, D. N. H. e, & Silva, R. C. da. (2014). Inclusão e processos de escolarização: Narrativas de surdos sobre estratégias pedagógicas docentes. *Psicologia em Estudo*, 19(2), 261–271. <https://doi.org/10.1590/1413-737225618>
34. Silva, C. M. da, et al. (2018). Inclusão escolar: Concepções dos profissionais da escola sobre o surdo e a surdez. *Psicologia: Ciência e Profissão*, 38(3), 465–479. <https://doi.org/10.1590/1982-370300322017>
35. Silva, J. B., & Fidêncio, V. L. D. (2021). Conhecimento de professores sobre a inclusão de alunos com deficiência auditiva no ensino regular. *Portal Regional da BVS*, 6, 1–15. <https://pesquisa.bvsalud.org/portal/resource/pt/biblio-1349305>
36. Souza, V. C., & Lemos, S. M. A. (2021). Classificação Internacional de Funcionalidade, Incapacidade e Saúde em usuários adultos e idosos de serviços de audiologia. *Revista CEFAC*, 23(4), e7820. <https://doi.org/10.1590/1982-0216/20212347820>
37. Tenor, A. C., Novaes, B. C. A. C., Trenche, M. C. B., & Cárnio, M. S. (2009). A inclusão do aluno surdo no ensino regular na perspectiva de professores de um município de São Paulo. *Portal Regional da BVS*, 21(1), 7–14. <https://pesquisa.bvsalud.org/portal/resource/pt/biblio-1417255>