

# A STUDY ON THE CHALLENGES OF HEARING IMPAIRED STUDENTS IN INCLUSIVE CLASSROOM WITH SPECIAL REFERENCE TO MARGHERITA BLOCK, TINSUKIA DISTRICT OF ASSAM

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## **Abstract**

The inclusion of students with hearing impairments in mainstream classrooms has become a widespread educational practice aimed at fostering diversity and equal opportunities. However, this integration possess unique challenges for both educators and hearing-impaired students. Aiming to this the prime objective of the study was to find out the challenges of hearing impaired students in inclusive classroom. A descriptive survey method was used for the study with an online questionnaire to collect data from 60 students. The findings of the study showed that inclusive classrooms pose multifaceted challenges for hearing-impaired students, primarily stemming from communication barriers. The heavy reliance on spoken language in traditional teaching methods creates difficulties, exacerbated by inadequate accommodations like sign language interpreters or assistive listening devices. Limited access to auditory information, coupled with teachers' insufficient knowledge to adapt, hampers effective curriculum engagement. Social isolation compounds the issue, fueled by communication challenges that hinder peer interactions and group participation. Negative attitudes among peers and educators contribute to the sense of exclusion, impacting the students' well-being. Teacher preparedness is critical, with insufficient training in inclusive strategies diminishing the effectiveness of inclusive education. Professional development opportunities addressing inclusive teaching methods and assistive technology utilization are essential. The absence of appropriate assistive technologies, such as FM systems and visual aids, further impedes accessibility in inclusive classrooms, highlighting the need for increased awareness and resources.

**Keywords:** *Learning Challenges, Hearing Impaired Students, Inclusive Classroom.*

## **1. Introduction**

The integration of hearing-impaired students into inclusive classrooms is a significant step towards achieving an inclusive and diverse educational environment. The adoption of inclusive education practices aims to provide equal opportunities for all students, regardless of their abilities or disabilities. However, the successful integration of hearing-impaired students into mainstream classrooms poses a myriad of challenges that demand careful consideration and proactive strategies. This introduction provides an overview of the multifaceted challenges faced by hearing-impaired students within inclusive educational settings and highlights the importance of understanding and addressing these obstacles to create an inclusive learning environment. In recent years, there has been a growing emphasis on inclusive education, promoting the idea that every student, including those with hearing impairments, should have the opportunity to learn and thrive in the same classrooms as their peers without disabilities. While the overarching goal of inclusive education is laudable, the practical implementation of this approach requires a nuanced understanding of the unique challenges faced by students with hearing impairments. One of the primary challenges lies in the realm of communication. Traditional teaching methods heavily rely on verbal communication, making it difficult for hearing-impaired students to fully engage in classroom activities. From lectures and discussions to group projects, the reliance on spoken language can create barriers that hinder the academic progress and social integration of students with hearing impairments. As a result, educators are confronted with the need to adapt their instructional approaches to ensure that all students, regardless of their hearing abilities, can effectively participate in the learning process. Social integration represents another critical aspect of the inclusive classroom experience for

hearing-impaired students. Beyond the academic curriculum, school life encompasses a myriad of social interactions, extracurricular activities, and collaborative projects. The potential for isolation and exclusion due to communication barriers can impact the overall well-being and sense of belonging of hearing-impaired students within the school community. Consequently, there is a pressing need for strategies that foster a supportive social environment where all students can interact and collaborate seamlessly. Furthermore, technological limitations pose additional challenges for hearing-impaired students in inclusive classrooms. While assistive technologies have advanced significantly, not all educational settings are adequately equipped to address the diverse needs of hearing-impaired students. The absence of appropriate assistive tools may impede access to information and hinder the development of essential skills. In light of these challenges, teacher awareness and training emerge as pivotal factors in facilitating the successful integration of hearing-impaired students. Educators need to be equipped with the knowledge and skills necessary to create an inclusive and accessible learning environment. This includes an understanding of assistive technologies, proficiency in alternative communication methods, and a commitment to fostering a classroom culture that values diversity.

In summary, the integration of hearing-impaired students into inclusive classrooms is a commendable initiative, yet it comes with its set of intricate challenges. This paper delves into the multifaceted nature of these challenges, emphasizing the importance of recognizing and addressing communication barriers, promoting social integration, tackling technological limitations, and enhancing teacher awareness to ensure the successful inclusion of hearing-impaired students in mainstream educational settings.

## **2. Literature Review**

The cornerstone of effective education is communication, yet for hearing-impaired students, this fundamental aspect becomes a considerable challenge. The work of Marschark and Hauser (2012) underscores the pervasive impact of communication barriers, emphasizing the difficulties in accessing spoken language in traditional classroom settings. These challenges manifest in various forms, from struggles with understanding verbal instructions (Luckner & Slike, 2008) to limitations in participating in class discussions (Antia et al., 2009). Strategies to address these issues often involve a combination of assistive technologies, visual aids, and modifications in teaching methodologies (Moore, 2013). Social inclusion is a vital component of the inclusive education model, yet hearing-impaired students often face obstacles in this realm. The study by Most, Ingber, and Heled-Ariam (2010) delves into the social dynamics within inclusive classrooms, highlighting the potential for isolation and exclusion of hearing-impaired students due to communication difficulties. Peer interactions, group activities, and extracurricular engagements may be challenging, impacting the overall social development and well-being of these students. Interventions, such as peer support programs and awareness campaigns, have shown promise in fostering a more inclusive social environment (Knight & Stinson, 2013). Assistive technologies play a crucial role in mitigating the impact of hearing impairment, yet disparities in accessibility persist. The work of Barker et al. (2018) underscores the significance of technological limitations, particularly in educational settings that lack the necessary tools to support hearing-impaired students. This includes issues related to the availability and adequacy of assistive devices, as well as the integration of inclusive technologies into the broader classroom infrastructure. Strategies to address these limitations involve targeted investment in technology infrastructure and ongoing professional development for educators (Schwartz, 2015). The pivotal role of educators in the successful inclusion of hearing-impaired students is evident in the literature. The study by Padden and Ramsey (2000) emphasizes the importance of teacher awareness and training, citing the need for educators to be well-versed in inclusive teaching strategies, possess knowledge of assistive technologies, and cultivate an understanding of the diverse learning needs within their classrooms. Ongoing professional development programs and collaborative initiatives have been recommended to enhance teacher preparedness and foster a more inclusive educational environment (Luckner & Slike, 2008).

### 3. Objectives of the study

- i. To find out the major challenges of hearing impaired students in inclusive classroom Margherita Block, Tinsukia District of Assam.
- ii. To provide some valuable suggestions for making optimistic learning outcome.

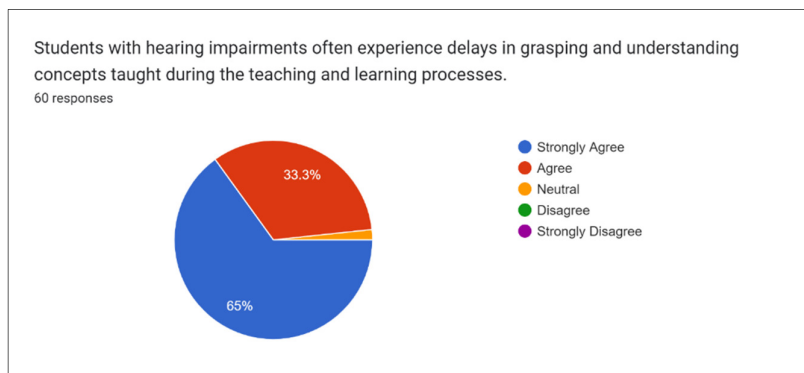
### 4. Methodology

For the study, the researcher used an online survey using Google form. The population of the study was delimited to primary and middle school students of grade 1-8 in Margherita Block, Tinsukia District, Assam. 60 students were randomly selected to fulfill the purpose of the study. The Google form survey was shared through social media apps. The survey includes 8 statements and were interpreted with the help of pie-charts.

### 5. Analysis and Interpretation

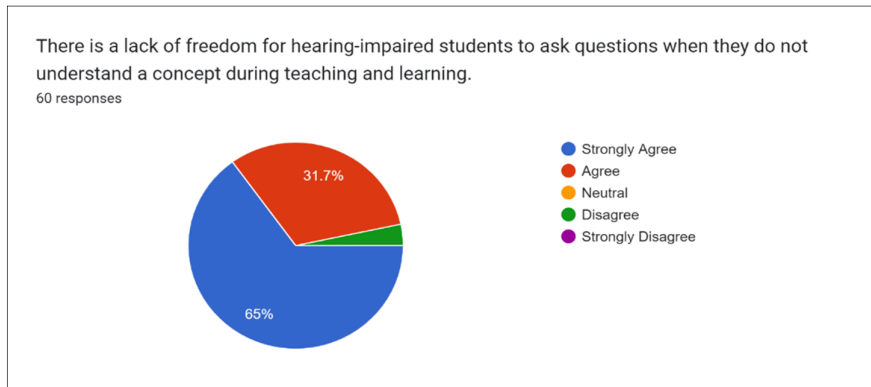
The survey results reveal a substantial consensus among respondents, with 65% strongly agreeing and 33.3% agreeing that students with hearing impairments frequently encounter delays in grasping and understanding concepts during the teaching and learning processes. This overwhelming agreement underscores the perceived challenges faced by this demographic in educational settings. The 1.7% expressing a neutral stance suggests a minor proportion of respondents who may require further clarification or information. The high agreement rates imply a need for targeted interventions and accommodations to address the identified delays, emphasizing the importance of inclusive education practices and support systems for students with hearing impairments.

**Figure 5.1:** Showing comparative analysis of conceptual grasping delays among students with hearing impairments.



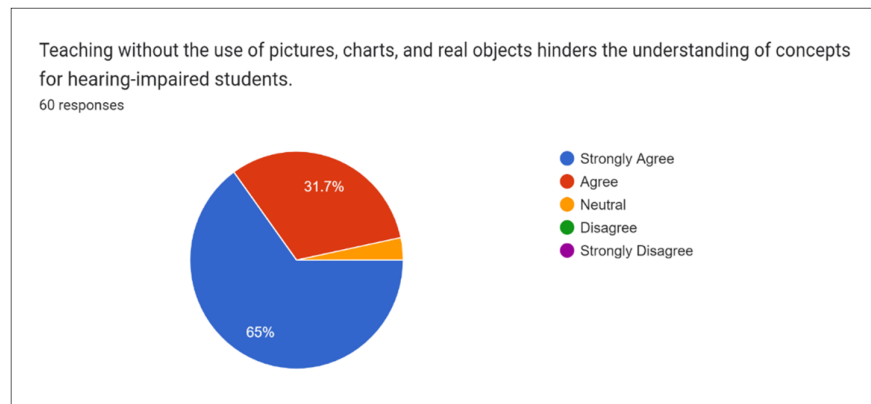
The survey results highlight a notable consensus on the issue of freedom for hearing-impaired students to ask questions during teaching and learning, with 65% strongly agreeing and 31.7% agreeing that a lack of such freedom exists. The 3.3% who disagreed represent a minority perspective. These findings underscore a perceived limitation in the educational environment, suggesting that a substantial majority of respondents believe hearing-impaired students face constraints in expressing their queries about misunderstood concepts. This points to potential communication barriers that need to be addressed, emphasizing the importance of fostering an inclusive and supportive atmosphere that encourages open dialogue and comprehension for students with hearing impairments.

**Figure 5.2:** Showing perception of freedom to ask questions among hearing-impaired students during teaching and learning.



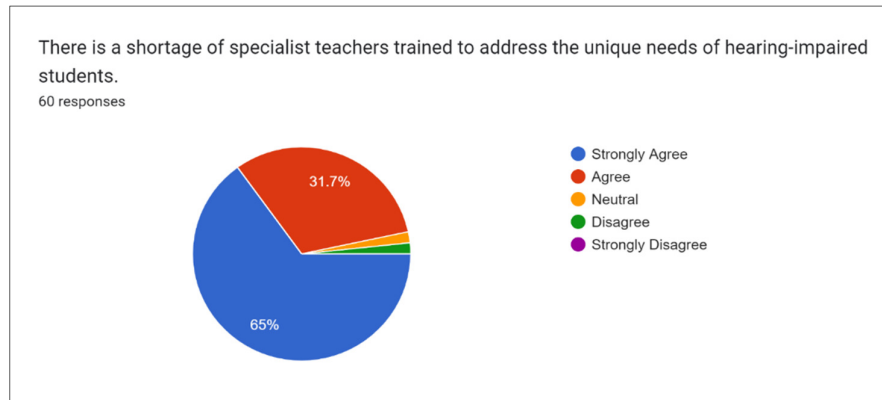
The survey results indicate a strong consensus among respondents regarding the impact of teaching methods on hearing-impaired students, with 65% strongly agreeing and 31.7% agreeing that teaching without the use of pictures, charts, and real objects hinders the understanding of concepts. The 3.3% expressing a neutral stance suggests a small portion of respondents who may require further clarification or hold ambivalent views. The overwhelming agreement underscores the perceived importance of visual aids and tangible resources in facilitating comprehension for hearing-impaired students. These findings emphasize the need for inclusive teaching practices that incorporate diverse instructional materials to enhance the learning experience for this demographic and address potential barriers associated with a lack of visual aids in the educational process.

**Figure 5.3:** Showing impact of teaching methods on conceptual understanding for hearing-impaired students.



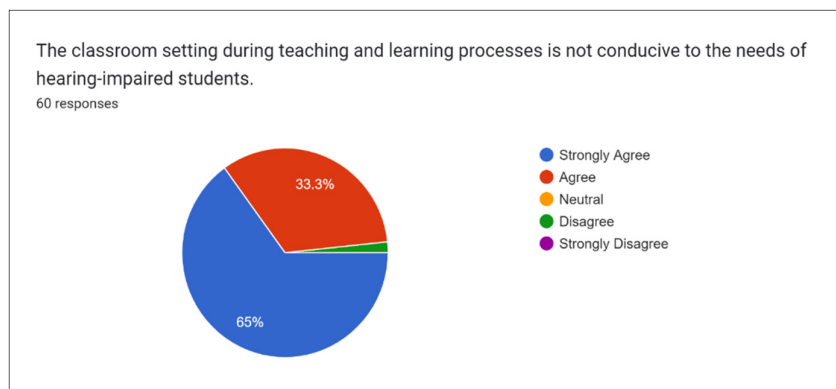
The survey results highlight a significant consensus among respondents, with 65% strongly agreeing and 31.7% agreeing that there is a shortage of specialist teachers trained to address the unique needs of hearing-impaired students. The 1.7% expressing a neutral stance and the additional 1.7% disagreeing indicate a minor divergence of opinions. This overwhelming agreement underscores the perceived inadequacy in the availability of educators with specialized training to cater to the distinctive requirements of hearing-impaired students. The inclusion of neutral and dissenting responses suggests a nuanced perspective, possibly influenced by varying experiences or interpretations of teacher preparedness. These findings emphasize the urgent need for targeted efforts to address the shortage of qualified specialists in the field of hearing-impaired education to ensure effective support and inclusivity in academic settings.

**Figure 5.4:** Showing perceived shortage of specialist teachers for hearing-impaired students.



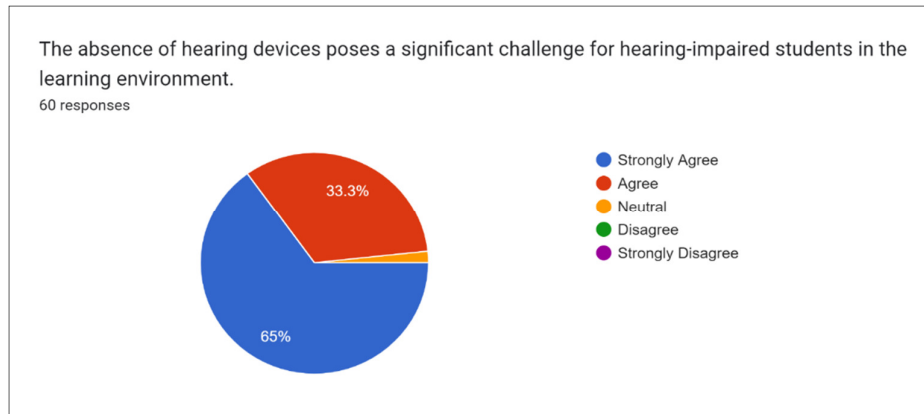
The survey results reveal a substantial consensus among respondents, with 65% strongly agreeing and 33.3% agreeing that the classroom setting during teaching and learning processes is not conducive to the needs of hearing-impaired students. The 1.7% expressing disagreement suggests a minority perspective. This overwhelming agreement underscores the perceived inadequacies in the current classroom environment to meet the specific needs of hearing-impaired students, indicating potential challenges in accessibility or inclusivity. These findings emphasize the importance of reevaluating and adapting classroom settings to create a more accommodating and supportive learning environment for students with hearing impairments. Addressing these concerns could contribute to enhanced educational experiences and outcomes for this demographic.

**Figure 5.5:** Showing perceived conduciveness of classroom setting for hearing-impaired students during teaching and learning.



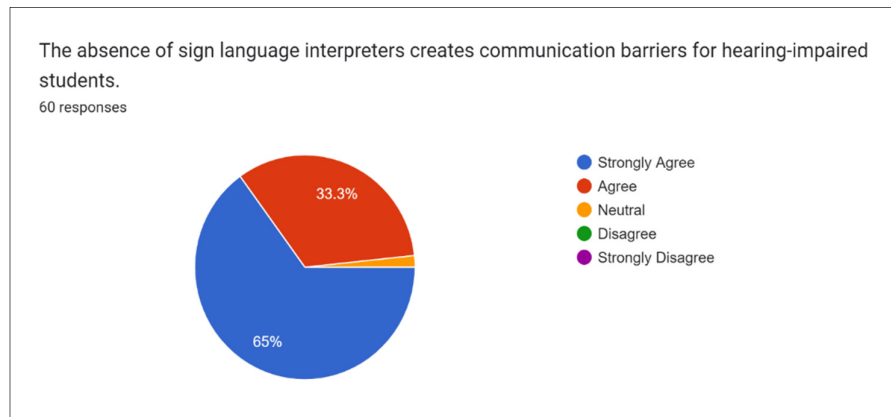
The survey results demonstrate a strong consensus among respondents, with 65% strongly agreeing and 33.3% agreeing that the absence of hearing devices poses a significant challenge for hearing-impaired students in the learning environment. The 1.7% expressing a neutral stance suggests a small portion of respondents requiring further clarification or holding ambivalent views. The overwhelming agreement underscores the perceived importance of hearing devices for the educational experience of hearing-impaired students. These findings emphasize the need to ensure the availability and accessibility of appropriate assistive technologies to address potential challenges and enhance the learning opportunities for this student demographic.

**Figure 5.6:** Showing impact of absence of hearing devices on hearing-impaired students in the learning environment.



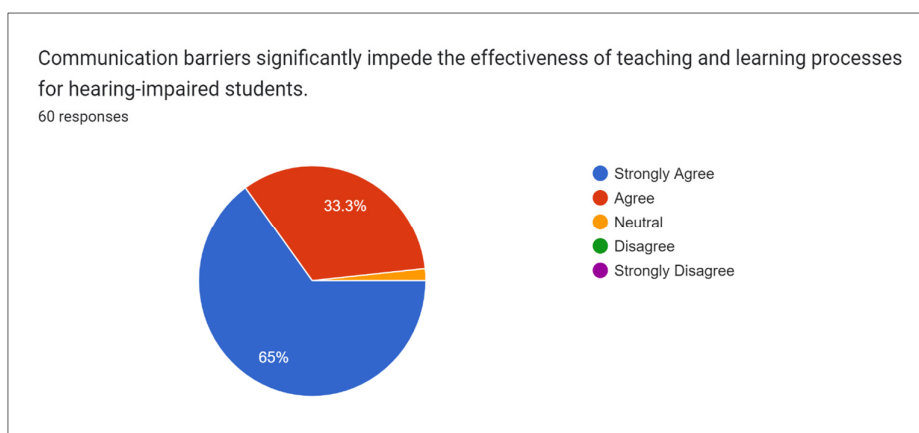
The survey results demonstrate a robust consensus among respondents, with 65% strongly agreeing and 33.3% agreeing that the absence of sign language interpreters creates communication barriers for hearing-impaired students. The 1.7% expressing a neutral stance indicates a small proportion of respondents who may require further clarification or hold ambivalent views. The overwhelming agreement highlights a shared recognition of the critical role sign language interpreters play in facilitating effective communication for hearing-impaired students. This underscores the significance of addressing the absence of interpreters to mitigate communication barriers, promoting inclusivity and ensuring an accessible learning environment for this student demographic. The neutral responses suggest potential areas for exploration or improvement in communication support services.

**Figure 5.7:** Showing impact of absence of sign language interpreters on communication for hearing-impaired students.



The survey results demonstrate a strong consensus among respondents, with 65% strongly agreeing and 33.3% agreeing that communication barriers significantly impede the effectiveness of teaching and learning processes for hearing-impaired students. The 1.7% expressing a neutral stance suggests a small portion of respondents who may require further clarification or hold ambivalent views. The overwhelming agreement underscores a shared recognition of the substantial impact that communication barriers have on the educational experiences of hearing-impaired students. These findings emphasize the urgent need to address and alleviate communication obstacles, highlighting the importance of implementing effective strategies, including the provision of appropriate support services, to enhance the overall effectiveness of teaching and learning processes for this student demographic. The neutral responses may point to areas for further investigation or improvement in communication support measures.

**Figure 5.8:** Showing impact of communication barriers on teaching and learning effectiveness for hearing-impaired students.



## 6. Findings

The survey results consistently portray a significant consensus among respondents, with 65% strongly agreeing and 33.3% agreeing that students with hearing impairments often encounter delays in grasping concepts during the teaching and learning processes. This overwhelming agreement underscores the perceived challenges faced by this demographic in educational settings, emphasizing the need for targeted interventions and accommodations to address the identified delays. The 1.7% expressing a neutral stance suggests a minor proportion of respondents who may require further clarification, while the high agreement rates imply a critical need for inclusive education practices and support systems for students with hearing impairments. Moreover, the survey highlights a notable consensus on the lack of freedom for hearing-impaired students to ask questions during teaching and learning, with 65% strongly agreeing and 31.7% agreeing. The 3.3% expressing disagreement represent a minority perspective, revealing a perceived limitation in the educational environment. This underscores the importance of fostering an inclusive and supportive atmosphere that encourages open dialogue and comprehension for students with hearing impairments, addressing potential communication barriers. The impact of teaching methods on hearing-impaired students is also a shared concern, with 65% strongly agreeing and 31.7% agreeing that teaching without visual aids hinders concept comprehension. The 3.3% expressing a neutral stance suggests a small portion of respondents requiring further clarification, emphasizing the need for inclusive teaching practices that incorporate diverse instructional materials to enhance the learning experience for this demographic. Furthermore, the survey underscores a significant consensus regarding the shortage of specialist teachers trained to address the unique needs of hearing-impaired students, with 65% strongly agreeing and 31.7% agreeing. The 1.7% expressing a neutral stance and an additional 1.7% disagreeing indicate a nuanced perspective, possibly influenced by varying experiences or interpretations of teacher preparedness. This emphasizes the urgent need for targeted efforts to address the shortage of qualified specialists in the field of hearing-impaired education for effective support and inclusivity in academic settings. Concerns about the non-conductive nature of the classroom setting for hearing-impaired students are evident, as 65% strongly agree and 33.3% agree that the classroom setting is not conducive to their needs. The 1.7% expressing disagreement suggests a minority perspective, emphasizing the importance of reevaluating and adapting classroom settings to create a more accommodating and supportive learning environment for students with hearing impairments. Additionally, the absence of hearing devices is perceived as a significant challenge, with 65% strongly agreeing and 33.3% agreeing that it poses a hindrance to the learning environment. The 1.7% expressing a neutral stance suggests a small portion of respondents requiring further clarification, emphasizing the need to ensure the availability and accessibility of appropriate assistive technologies to address potential challenges and enhance the learning opportunities for this student demographic. Similarly, the survey indicates a robust consensus that the absence of sign language interpreters creates communication barriers for hearing-impaired students, with 65%

strongly agreeing and 33.3% agreeing. The 1.7% expressing a neutral stance indicates potential areas for exploration or improvement in communication support services, emphasizing the critical role interpreters play in promoting inclusivity and ensuring an accessible learning environment. Lastly, the survey reveals a strong consensus that communication barriers significantly impede the effectiveness of teaching and learning processes for hearing-impaired students, with 65% strongly agreeing and 33.3% agreeing. The 1.7% expressing a neutral stance may point to areas for further investigation or improvement in communication support measures, emphasizing the urgent need to address and alleviate communication obstacles to enhance the overall effectiveness of teaching and learning processes for this student demographic.

## 7. Discussion and Suggestions

The challenges faced by hearing-impaired students in inclusive classrooms are multifaceted and demand a comprehensive approach for effective resolution. Communication barriers, stemming from the heavy reliance on spoken language in traditional teaching methods, present a significant hurdle for these students. The lack of necessary accommodations, such as sign language interpreters or assistive listening devices, exacerbates these communication difficulties (Marschark, 2007). Furthermore, limited access to auditory information, including lectures, discussions, and audio-visual materials, impedes the ability of hearing-impaired students to follow the curriculum effectively. The lack of knowledge or resources among teachers to adapt their methods adds an additional layer of complexity to this issue (Luckner & Slike, 2008). Social isolation becomes another critical concern, as communication challenges hinder peer interactions and participation in group activities. Negative attitudes or a lack of awareness among classmates and educators contribute to a sense of isolation and exclusion, negatively impacting the overall well-being of hearing-impaired students (Antia et al., 2009). The effectiveness of inclusive education for hearing-impaired students is closely tied to the preparedness and training of teachers. Insufficient training in strategies for accommodating these students may result in a less inclusive and supportive classroom environment. Professional development opportunities focused on inclusive teaching methods and the utilization of assistive technologies are crucial for addressing these challenges (Padden et al., 2010). The absence of appropriate assistive technologies in inclusive classrooms poses a significant hurdle for hearing-impaired students. Technologies such as FM systems, captioning services, and visual aids play a crucial role in enhancing accessibility. However, the lack of awareness and resources may limit the seamless integration of these technologies into the inclusive classroom setting (National Deaf Center, 2018). The findings of the study allowed the investigator to come along with the following suggestions:

- i. Conduct regular professional development sessions for teachers focused on inclusive teaching practices and strategies for accommodating hearing-impaired students.
- ii. Implement awareness programs for students to foster understanding and empathy towards hearing-impaired peers.
- iii. Create and provide learning materials in various formats, including written, visual, and auditory, tailored to the needs of hearing-impaired students.
- iv. Collaborate with support services such as sign language interpreters and resource teachers to provide additional assistance when needed.
- v. Design classrooms with flexible arrangements that consider the needs of hearing-impaired students, optimizing seating positions, acoustics, and lighting for improved accessibility.
- vi. Conduct ongoing assessments of the evolving needs of hearing-impaired students and adjust support mechanisms, technologies, and teaching methods accordingly.
- vii. Foster an inclusive environment by encouraging open communication among all students and providing opportunities for active participation.



## 8. Conclusion

Effectively addressing the challenges encountered by hearing-impaired students in inclusive classrooms necessitates a holistic strategy. This approach should incorporate comprehensive teacher training, promoting heightened awareness among peers, and seamlessly integrating assistive technologies. The key to ensuring equal opportunities for learning and social participation lies in a steadfast commitment to understanding and accommodating the unique needs of hearing-impaired students. This commitment should be an ongoing effort, continually assessing and addressing evolving needs, and constructing a flexible and responsive educational framework. By embracing such a holistic strategy, inclusive environments can genuinely guarantee a supportive educational experience for all students, irrespective of their hearing abilities.

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