THE BENEFITS OF AUDIO ENHANCEMENT® AND PHONAK INTEGRATION IN THE CLASSROOM FOR ALL CHILDREN

Executive Summary

In today's educational environment, creating an inclusive classroom that supports the needs of all students is paramount. One of the critical components to achieving this goal is ensuring that all students, including those who are deaf or hard of hearing (DHH), have equal access to the auditory information in the classroom. Audio Enhancement® and Phonak working in partnership, have the potential to be tranformative in advancing inclusivity. When combined, these technologies enhance the learning experience for both DHH students and their hearing peers, fostering an environment where every student can thrive.

This white paper explores a special emphasis on how this integration fosters a more inclusive learning experience for DHH students. Additionally, the paper will highlight the added benefits this integration provides to all students, improving classroom engagement and promoting educational success.

Introduction

Traditionally, students with hearing impairments have faced barriers in the classroom, often resulting in lower academic performance and social isolation. Common challenges include difficulty hearing the teacher, accessing instructional content, and participating in group activities. The emergence of assistive technologies, like Audio Enhancement and Phonak devices, has greatly improved access to education for these students.

The integration of Audio Enhancement and Phonak as leaders in such systems offers a powerful solution. Phonak's Multimedia Hub (MMH), which connects hearing aids to classroom audio systems, ensures that DHH students receive the same auditory signals as their hearing peers. The ability to hear teacher instructions, peer discussions, and the sound from classroom multimedia devices (such as projectors and interactive displays) is a crucial factor in supporting learning for all students. But beyond the classroom DHH students often were left out. Coupling the Audio Enhancement EPIC (Education Paging & Intercom Communications) System® with MMH will create a classroom experience integrated with intercom, bells, paging, and emergency announcements available to all students.

The Importance of Audio Enhancement in the Classroom

1. Improved Sound Clarity for All Students:

    Classroom acoustics can be challenging in many educational environments. Background noise, reverberation, and distance from the teacher can reduce the effectiveness of verbal communication. Audio Enhancement has mastered distributed classroom audio, offering a solution that places multiple speakers in a space to ensure that sound is clear, balanced, and consistent across the classroom. This system amplifies the teacher's voice, reduces classroom noise, and ensures that all students can hear important information, whether they are sitting in the front or back of the room.

2. Enhanced Engagement and Focus:

   When students can hear their teacher clearly, regardless of where they are seated in the room, their engagement and focus improve. Audio Enhancement contributes to a more interactive classroom environment by ensuring that all students can hear verbal cues, classroom instructions, and multimedia content. For DHH students, this benefit is amplified. For example, students with hearing aids who use traditional systems without integration may struggle with background noise and distance. Audio Enhancement systems mitigate these issues, ensuring that the teacher's voice is the focal point of auditory attention, which can reduce fatigue and stress related to hearing challenges.

3. Better Communication and Social Interaction:

   Classroom activities, such as group discussions and peer-to-peer interactions, are essential for social and cognitive development. When DHH students can clearly hear their classmates and respond without strain, they are more likely to engage in these social interactions, improving communication skills and reducing social isolation. Additionally, by ensuring that all students can hear the audio content clearly, the entire class becomes more cohesive and communicative, benefiting not just DHH students, but their hearing peers as well.

The Role of Phonak in Supporting DHH Students

1. Advanced Hearing Technology:

   Phonak's hearing aids and cochlear implants are designed to provide optimal hearing in various environments. These devices enhance sound quality and amplify speech, making it easier for DHH students to hear and understand their teacher and classmates. However, in traditional classroom setups, even the best hearing aids may not be enough to ensure full access to all auditory information, especially when the classroom environment is noisy or when sound sources are located far from the student.

2. The Phonak Multimedia Hub Integration:

   Phonak's Multimedia Hub is a device designed to connect hearing aids to a variety of audio sources, including the classroom's Audio Enhancement system, teacher/student mic, multi-media devices like projectors and interactive white boards along with the Audio Enhancement EPIC System (intercom, bells, paging, and emergency notifications). When this system is integrated into a classroom, it ensures that DHH students have access to all sound sources used within the classroom, not just the teacher's voice.

3. Key Features of the Integration:

• Teacher's Voice:

   Phonak hearing aids connected to Audio Enhancement system allow DHH students to hear the teacher's voice clearly, without distortion, even if they are seated at the back of the room.

- Classroom Multimedia:

  Students can hear sounds from projectors, interactive displays, and video content clearly, enhancing multimedia learning opportunities.

- Classroom Interaction:

  The integrated classroom system ensures that DHH students can hear peer discussions, group activities, and other classroom interactions, improving socialization and engagement. By ensuring that the teacher's voice is clear and consistent, Audio Enhancement help reduces misunderstandings and confusion. This clarity improves communication not only for DHH students but for hearing students as well, promoting a more effective and efficient learning experience.

- Intercom, Bells, Paging and Emergency Notifications:

  The integration also ensures that DHH students hear the intercom announcements, fire drills, and bell systems, promoting safety and communication awareness within the school environment.

4. Promoting Full Inclusion:

  Full inclusion means that all students—regardless of hearing ability—have equal access to the curriculum and school activities. By integrating Phonak hearing devices with Audio Enhancement systems, DHH students receive comprehensive auditory support that includes not only the teacher's voice but all classroom sounds. This inclusion promotes a sense of belonging and ensures that DHH students are not left behind or excluded from important auditory cues.

Conclusion

The partnered integration of Audio Enhancement and Phonak represents a powerful solution for creating a fully inclusive educational environment. By providing clear, consistent sound across all audio sources—teacher's voice, multimedia content, intercom announcements, and peer discussions—this integration ensures that DHH students have full access to classroom auditory information.

Beyond benefiting DHH students, these systems enhance the learning experience for all students by improving communication, engagement, and participation. The result is a more inclusive, collaborative, and effective classroom where every student, regardless of hearing ability, can thrive.

Educational institutions that invest in these partnered technologies will not only improve academic outcomes for DHH students but also foster an environment where diversity is embraced, and all students are empowered to succeed.

Contact

Phonak:
Contact Chip Thompson for more information.

- Phone: 254.716.7416

- Email: chip.thompson@phonak.com

Audio Enhancement:
Contact Audio Enhancement for sales information:

- Phone: 800.383.9362

- Website: AudioEnhancement.com