

Is the Inclusion Model Good for Students with Hearing Loss?



Special education students are first and foremost general education students. Many, if not most, school districts in the US are actively embracing the inclusion model of education, in which all students are educated in the mainstream classroom, regardless of the diversity of their needs.

Students who are deaf and hard of hearing (DHH) have special needs but not they are not due to learning disorders like most other special education populations. The primary difference between students with hearing loss and their classmates is that they do not access speech as fully. Background noise and distance have exaggerated effects on the student with hearing loss as compared to typically hearing peers. Students who are

DHH-only have learning gaps and unique needs secondary to access to communication issues, not learning disorders.

Basics of inclusion:

Inclusion in education is an approach to educating students with special educational needs. **Inclusion** rejects the use of special schools or classrooms to separate students with disabilities from students without disabilities ([source](#)). Some inclusive classes use a collaborative team teaching (or co-teaching) model with a special education teacher in the room all day. Other inclusive classes have special education teachers 'push in' at specific times during the day. Both teachers are available to help all students. Studies show that inclusion is beneficial for all students – not just those who receive special education services.

Summary of the legal framework supporting appropriate education of students with hearing loss:

- Hearing loss fills the ADA/504 criteria as a life limitation that places a student at high risk for functional and/or performance needs. All students with hearing loss are eligible for 504 Plans and appropriate accommodations.
- Students with hearing loss should be evaluated to determine their level of unique needs including the need for auxiliary aids, related services, and specialized instruction necessary to address academic and/or functional performance issues.
- A high level of academic success does not preclude the need for specialized services or supports. Hearing loss will cause the student to have to expend additional time and effort to comprehend and fully participate, typically with less information perceived due to fragmented hearing, which impacts the ability to function and learn as compared to others.
- Specialized services are tailored to meet the student's unique needs and should provide the support(s) needed for the student to be able to make progress similar to their cognitive peers, as the access issues caused by hearing loss are not learning disorders impacting the level to which a student with hearing loss can learn.

Refer to the end of this article for more specifics and sources of this legal framework.

Changing face of deaf education:

Our students: While the majority of students with hearing loss (DHH-only) appear to have academic skills at the same level, or within 6 months, of age peers, we do continue to have a group that have significant delays. Although almost all students with congenital hearing loss are identified shortly after birth, we still have about 35% of parents who are unresponsive ([source](#)), choosing to not receive early childhood services, having no access to effective EI services, or not attaining consistent amplification use and/or effective use of visual communication. When performed, these actions together minimize the predictable delays observed at school entry. Students with hearing loss are not a heterogeneous population and, while their needs may appear similar to other special needs groups, they have unique needs that set them apart, such as the need to develop auditory skills, sign language expertise, awareness in how their hearing loss impacts them, skills in use/troubleshooting hearing devices, and eventually become competent in self-advocacy skills if they are to become full participants in the classroom. These skills are not extensions of the general education curriculum but are necessary for the student to access/perform in general education at the level of peers.

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Changing district policies:

In the US, we are in a very challenging period for deaf education as many schools have moved toward the inclusion model, which (strongly) discourages any pull-out services by special educators. For students with hearing loss, this move to inclusion is being applied to all students, whether skills are commensurate with classmates or multiple years of delay are present. The inclusion model then means that these itinerant teachers 'push-in' to regular classes to try to address IEP goals rather than pulling students out for specific teaching, or only provide consultative services to school staff.

Detriments/specific issues for children with hearing loss in inclusive settings:

- **Intrinsic challenges of performing with a hearing loss in a classroom:** A 2014 extensive literature review ([source](#)) examined how children who are deaf or hard of hearing interact with hearing peers in inclusive settings. Children who are DHH have many barriers to communicating, initiating and/or entering into social groups, and maintaining interactions with hearing peers, even though today they are more likely to be identified in early life and fitted with advanced sensory aids from a very young age. Fewer communication interactions occur between children who are DHH and their hearing peers, even when a child has a cochlear implant. Children who are DHH can often understand their peers when in a quiet environment but have difficulty expressing complicated linguistic content. The success rate of children with DHH when initiating communication and maintaining social interactions are much lower as compared to hearing peers, complicated by vocabulary, social interaction, and acoustic challenges. They have been found to be more often rejected or ignored by their hearing peers, who are also impatient when asked to repeat themselves. In summary, children who are DHH face great difficulties in communicating, initiating/entering, and maintaining interactions with hearing peers in inclusive settings.
- **Lack of meeting DHH unique needs:** The inclusion model prevents all the necessary skills from being taught as these skills are designed to improve functional performance and are not an extension of academic skills. Said another way, skills necessary for the student with hearing loss to be able to appropriately access and benefit from the general education environment can only be taught outside of the mainstream classroom. Specifically, it is not possible to teach many auditory development skills because of the noise present in the typical classroom. Developing an awareness of the impact of hearing loss on listening, learning and socialization and hearing device management are specific to our students and teaching does not fit into a small group instructional model as the students are typically the only ones with hearing loss in their schools. These are just two examples of unique needs that are highly unlikely to be met in an inclusive special education model. As an analogy, how could a low vision student be taught orientation and mobility skills within an inclusion classroom? It should not be surprising that the environmental and direct teaching requirements to meet the unique needs of students with limited or no hearing would also be incompatible within the inclusion classroom. In addition, it can be presumed that the typical fragmented auditory perception plus gaps in vocabulary cause students with hearing loss results in a more limited comprehension of surface learning information when the class moves to activities to promote deeper understanding, such as problem-based or small group learning. If a student lacks sufficient surface knowledge, moving to these activities prematurely is ineffective to, and may delay, the overall learning process¹.
- **Itinerant DHH model applied to the inclusion model to meet student needs:** The move to provide specialized instruction at a student's neighborhood school has necessitated the growth of the itinerant DHH teacher service model, in which itinerant teachers of the deaf/hard of hearing go to an average of 10 schools per week, and serve an average of 15-25 students². The number of DHH teachers available in many districts is often insufficient to allow them to provide the intensity of pull-out services required for students with hearing loss to (a) make up language delays missed by lack of access, (b) maintain progress at the expected rate due to decreased access to classroom communication on a daily basis, and (c) teach specifically to develop auditory or sign language skills, build self-advocacy skills, and address other skills unique to the student with hearing loss. The inclusion model presumes that supports will be provided within the classroom. In the inclusion model, the itinerant DHH teacher will be unable to spend all day or very unlikely to spend a portion of every school day in one student's classroom.

- **Lack of sufficient intensity to meet unique needs:** While language delays, auditory or sign language development, building self-advocacy skills, and other skills unique to the student with hearing loss could be efficiently taught in a pull-out model of sufficient intensity, having to provide this teaching as push-in services severely decreases the time available to specifically teach the needed skills. If a student with hearing loss is 6 months behind age peers, an itinerant DHH teacher cannot maintain a year's growth and make up the existing delay with only twice a week 30 minute 1:1 teaching sessions. If this same itinerant DHH teacher is now expected to both close the student's 6-month delay and support keeping pace with classroom learning, it is not possible to do so in a push-in model that allows only small group or team-teaching, which rarely can be directly focused on meeting the needs of the single student with hearing loss. Some students are 1-2+ years delayed due to late identification or lack of communication access (auditory or sign) prior to school entry who are also being placed in inclusive classrooms with the unrealistic assumption that their unique needs will be able to be met through this model. The benefits of inclusion do not replace nor supercede the need for appropriate intensity to appropriately meet the unique needs of the student with hearing loss.
- **Lack of peers with hearing loss:** Many of our students are the only one in their school with hearing devices, have no role models, and rarely or never see another DHH student. Across all educational models (center-based, specialize resource, local groupings, one-and-only), approximately 25% of students reject their hearing devices³. Those who are 'one-and-onlies' are 5 times more likely to reject hearing devices as compared to students who spend time daily or weekly with a cohort of DHH peers. In many school districts it is a rarity for more than 10% of secondary students who are 'one-and-onlies' to consistently use FM/DM systems or even their personal hearing aids. Not using amplification severely decreases access to instruction and results in either the student working immensely harder to keep up, the student performing much more poorly, or both. This high rejection rate can be interpreted as a strong sign that the unique social-emotional needs of these students are not being met. These students require connections with other students who sign or use amplification devices to be able to develop a healthy identity as a person with a hearing loss and as a strategy for exchanging self-advocacy strategies. Teaching to achieve understanding of the impacts of hearing loss, self-advocacy skills to support full participation, and addressing significant social-emotional needs are not unimportant nor perfunctory if the expectation is meet the unique needs of students who are deaf/hard of hearing and prepare them for further education or employment. Due to the move away from center-based programs, addressing the social-emotional needs of students has often been a significant challenge for the itinerant DHH teacher providing 1:1 services. The ability to do so within the inclusion model is remotely possible, or more likely, impossible to achieve.

Benefits of the inclusion model for students with hearing loss

The 5 benefits specified in italics below were taken from this [source](#). Comments have been added to each to relate these benefits to the unique needs of students with hearing loss.

Benefit #1: Differentiated Instruction

All students learn differently. This is a principal of inclusive education. One key teaching strategy is to break students into small groups. By using small groups, teaching can be tailored to the way each student learns best. This is known as [differentiated instruction](#). Teachers meet everyone's needs by presenting lessons in different ways and using [Universal Design for Learning \(UDL\)](#). For example, they may use [multisensory instruction](#). In math, that may mean using visual aids and manipulatives like cubes or colored chips to help kids learn new concepts. (See more examples of [multisensory math techniques](#).)

Differentiated instruction and UDL are very positive aspects of inclusive education. Many students with hearing loss benefit with attention to learning syntax, morphology, vocabulary, reading comprehension, etcetera, which would be amenable to differentiated instruction and small group learning. Since students with hearing loss are so low incidence, they would likely be grouped with students who are learning disabled or who have language disorders. Teaching to disorders is not necessarily the same as closing gaps due to delays, especially when the gaps can be very spotty ("Swiss cheese language"). A DHH student's reason for not understanding is likely to be related to fragmented hearing, which would benefit from acoustic highlighting, stating information in different ways, or support via sign language, which would likely not occur in teaching a group of students. The quality of a sign language interpreter directly impacts the

level of comprehension of the student who is DHH and a visual or visual plus auditory communicator. Many school districts do not hire fully qualified sign language interpreters which inadvertently undermines the outcomes of many students who are deaf ([source](#)). Teaching to the vocabulary development needs of students who are hard of hearing or deaf is not likely to be sufficient in a small group learning situation within the inclusive environment.

Benefit #2: Supportive Teaching Strategies

In an inclusive classroom, teachers weave in specially designed instruction and support that can help students make progress. Kids may be given opportunities to move around or [use fidgets](#). And teachers often put [positive behavioral interventions and supports](#) (PBIS) in place. These strategies are helpful for all students—not only for students with learning and attention issues.

Teaching strategies that support quieter classrooms during communication would be excellent for the student with hearing loss. The fact that inclusive classrooms tends to group students to work together more often than traditional classrooms will result in an overall noisier environment. While some supportive teaching strategies may indeed be good for the student with hearing loss, it can be assumed that some will be detrimental as well. Per Title II of the American's with Disabilities Act, the consistent use of necessary accommodations must always be kept in mind ([source](#)). Teacher accommodations during lecture are often consistently implemented. As about 1/3 of the school day is devoted to group learning activities ([source](#)), use of accommodations to reduce noise can be very problematic to consistently implement. Although there have been some technological advances, it continues to be difficult to achieve consistent and effective use of the FM/DM system in small group discussions due to the communication dynamics of active discussion.

Benefit #3: Reduced Stigma

Inclusive classrooms are filled with diverse learners. That lets kids talk about how everyone learns in their own way. They may find that they have more in common with other kids than they thought. This can go a long way in reducing stigma for kids with learning and attention issues. It can also help kids [build and maintain friendships](#).

Diversity in the classroom is a plus for any student with 'differences.' Students will naturally come to see themselves as belonging to one or more groups within the classroom setting. Most classrooms will have students who have LD, ESOL, attention issues, etc. Since it is unlikely that there is another student with hearing loss in class, the result is that these students will emotionally and/or intellectually strive to join a group where they find acceptance. Therefore, the urge to reject hearing aids and 'become LD' or 'become one of the kids who don't comply' may be even stronger in an inclusive setting than in more traditional educational models. Due to the hearing loss, the social communication issues (especially in noise) will continue to set them apart, even among their 'chosen' groups, which will continue to be a basis for teasing or bullying. Without the opportunity to leave the class to meet with someone knowledgeable in DHH who can help them work through identity and emotional issues related to hearing loss, the student who is deaf or hard of hearing may feel even more isolated and unsuccessful socially in an inclusive class than they would in a pull-out model of support.

Benefit #4: Effective Use of Resources

In more traditional special education settings, many kids are "pulled out" for [related services](#), like speech therapy or for other specialized instruction. An inclusion class often brings speech therapists, [reading specialists](#) and other service providers into the classroom. These professionals can provide information and suggestions to help all students.

Increased focus on basic communication skills, vocabulary, syntax, morphology, improving comprehension – all are issues where inclusive settings would be of benefit. The itinerant DHH teacher going in to the mainstream may be able to work with a small group that includes the student with hearing loss on these issues. It is unlikely that the itinerant DHH teacher will be able to address the needs that are truly unique to students with hearing loss. DHH teachers are increasingly challenged by school administration with "What do you that is different than the SLP or LD teacher?" In the inclusive model in general, strategies specific to teach reading to DHH are not appropriate to use in a group, or self-advocacy skills that feature focusing on *what* was heard so the student can appropriately request clarification of information missed, or other needs unique to students with hearing loss are NOT appropriate to teach to a group of students who all do not have hearing loss. If the only skills that are applicable to teach in inclusive settings are the communication and academic supports that can also be provided by SLPs and LD teachers, then the value of having a highly trained teacher specifically for students with hearing loss is likely to be dismissed as unnecessary. With this in

mind, it is projected that the greater the implementation of fully inclusive settings, the less valued and effective will be the teacher of the deaf/hard of hearing AND the students' unique needs specific to hearing loss will go unmet, with increasing numbers of students performing more poorly academically, socially, emotionally, and/or behaviorally over time. Inclusion is beneficial to students with hearing loss, but only to the degree that the student is able to learn effectively and the appropriate level of support is provided.

Benefit #5: High Expectations for All

Individualized Education Program (IEP) goals should be based on the academic standards for your state. Those standards lay out what all students are expected to learn in math, reading, science and other subjects by the end of the school year. Differentiated instruction and co-teaching in a general education classroom make it easier for students with standards-based IEPs to be taught the same material as their classmates. In some schools, only certain classrooms are inclusion classes. In that case, schools may assign general education students randomly to inclusive or non-inclusive classes. Other schools may choose students who benefit from the emphasis on meeting the needs of all learners at all ability levels.

Common core standards based IEPs strongly support development of skills that result in full participation in the classroom, and therefore have a positive influence on the education of students with hearing loss. Unlike students with hearing however, the unique needs that must be met for students with hearing loss to become full participants in the classroom are beyond that of their classmates, and distinctly different than other special education populations. Achieving goals to address the unique performance needs secondary to hearing loss largely requires pull-out services into environments supportive for learning these listening, social, and self-advocacy goal areas.

Summary

The inclusion model of special education has been adopted by many school districts throughout the US. The positives of having a diverse learning community, implementing differentiated learning, varied teaching strategies, and universal design for learning principles are all beneficial aspects of the inclusion model. Many students - both regular education and special education students - thrive in inclusion classrooms. The participation of all children is a purpose of inclusive practice and classroom activities. However, it cannot be assumed that social communication and interaction between children who are D/HH and hearing peers will occur naturally. It is essential that opportunities for all children to interact with each other must be appropriately designed, supported, and developed in inclusive educational practice. Specialized services, by law, are tailored to meet the student's individual needs. In the case of DHH-only students, an appropriate inclusion/support network is needed to provide the support(s) for them to be able to make progress commensurate with their cognitive peers. Meeting all the unique needs of students with hearing loss within the inclusive classroom environment is at best unrealistic, if not highly unlikely. The student with hearing loss does not know what he does not hear because he did not hear it. Specific teaching needs to occur if the student is to be able to successfully identify and request appropriate support when faced with road blocks. If the statement "He hears just fine" continues to be made by school staff, we can assume that the unique access and learning needs of students with hearing loss are not being adequately or appropriately met within the inclusion environment.

As a continuum of services and supports are required by IDEA to allow individual needs to be met, the fully inclusive model cannot be put forth as the only model of special education support provided by a school district. Gone are the days when most student with hearing loss were educated primarily in a center-based DHH-specific program. Despite the move away from this intensive model, students with hearing loss do continue to require some pull-out services by persons specialized in the unique educational needs of students who are deaf and hard of hearing so that they can learn necessary skills to allow them equal access to, and the ability to fully participate in, the general education setting. Hearing loss is not a learning disorder. Hearing loss is a communication access issue that is predictive of listening, interaction, and learning challenges. The inclusion environment is GOOD for students with hearing loss, as long as they are receiving the specialized support they require to keep pace in the classroom AND their access and learning needs are fully supported during ALL classroom activities.

Karen L. Anderson, PhD, Director, Supporting Success for Children with Hearing Loss, Early October Bimonthly Update, 2017. <http://successforkidswithhearingloss.com> This information is not intended as legal advice.

References:

1. Fisher, D., Frey, N., & Hattie, J. (2010). Visible Learning for Literacy: Implementing the Practices that Work Best to Accelerate Student Learning. PP 36-44.
2. Survey results: Role/Duties of an Itinerant Teacher of the Deaf/Hard of Hearing. Conducted by Supporting Success for Children with Hearing Loss, April – May 2017 (267 respondents).
3. Survey results: Children Rejecting Hearing Devices: Who, Why, When? Conducted by Supporting Success for Children with Hearing Loss, August 2016 – April 2017 (88 respondents representing a total caseload of 1863 students with hearing loss).

Legal frameworks defining services for students with special needs:

1. The purpose of 2004 IDEA, as specified in the Commentary, is...to ensure that all children with disabilities have available to them a free appropriate public education that emphasizes special education and related services **designed to meet their unique needs and prepare them for further education, employment, and independent living**. [Source](#)
2. All elementary and secondary school students who are qualified individuals with disabilities, as defined by Section 504, and who need special education and/or related aids and services are entitled to a free and appropriate education (FAPE). Under Section 504, FAPE is the provision of regular or special education and related aids and services that are designed to meet the individual educational needs of students with disabilities as adequately as the needs of non-disabled students are met and are based on adherence to procedures governing educational setting, evaluation and placement, and procedural safeguards. [Source](#) page 10.
3. A student with a disability may achieve a high level of academic success but may nevertheless be substantially limited in a major life activity due to the student's impairment because of the additional time or effort the student must spend to read, write, or learn compared to others. A school district must evaluate a student if it has reason to believe the student has a disability and the student needs special education or related services as a result of that disability, even if the student only exhibits behavioral (and not academic) challenges. [Source](#) page 12, 14. Behavior is interpreted broadly and includes challenges in performance or keeping pace with peers, not just acting out or conduct issues.
4. The March 2017 US Supreme Court threw out the *de minimis* standard applied to acceptable educational benefit to special education students and concluded that ... To meet its substantive obligation under IDEA, a school must offer an IEP reasonably calculated to enable a child to make progress appropriate in light of the child's circumstances.... It must...aim to enable the child to make progress; the essential function of an IEP is to set out a plan for pursuing academic and functional advancement.....at the core of the IDEA, and the directive that States offer instruction "specially designed" to meet a child's "unique needs" through an individualized education program. [Source](#)