

## The Inclusion of Deaf and Hard-of-Hearing Students

Nicole Lehmann

### **Abstract**

*Students who are deaf or hard-of-hearing (DHH) have long been educated in segregated settings. The move toward inclusion now means that DHH students may choose to have their educational needs met within a non-segregated setting. Challenges face all stakeholders. Students who are DHH may experience significant needs in the areas of communication, social development and academics. Teachers and administrators must work together to model acceptance and provide a positive and successful educational experience.*

For many years, children who are deaf or hard-of-hearing (DHH) have been educated in school settings separate from their hearing peers. Some governments and educators now believe that the concept of inclusion may provide the best education for DHH students. Mandated educational inclusion policies have translated into changes in elementary and secondary schools. There are many issues that must be addressed if school divisions are to be truly prepared to adopt the philosophy and practice of inclusion. Positive teacher attitudes toward hearing impairment translate into classroom experiences that develop positive attitudes for all students successful inclusion of DHH students at the classroom level requires genuine administrative commitment and support, with a focus on developing the students' skill in communication, social development, and academics. Successful inclusion models thus provide for the education of the whole child.

Inclusion is not simply a government policy; inclusion encompasses the attitudes and behaviours of hearing staff, DHH students, and their peers (Hung & Paul, 2006). It is the teachers' responsibility to address negative student attitudes through positive classroom experiences. Despite the obvious differences, DHH students share many similarities with their hearing peers (Marschark et al., 2011). These similarities must be fostered by classroom teachers in order to increase the closeness between DHH and hearing students, which results in more positive attitudes (Hung & Paul, 2006). Teachers' attitudes have a direct influence on the success of an inclusive program (Eriks-Brophy et al., 2006). The attitudes and behaviours of the school stakeholders are crucial to developing positive attitudes of all students toward hearing impairment.

The attitude of the administration must be sincerely positive and supportive, not simply the rhetoric of acceptance. This difference between rhetoric and action is considered "oppressive niceness" (Slobodzian, 2009, p. 187). Administrative support of inclusive programming, training of staff, and embracing Deaf culture impacts the success of the inclusion model (Furlonger et al., 2010). Administrative support for inclusion is a requirement for success.

Developing the communication skills of DHH students is of paramount importance in their education. Hearing loss has a negative effect on the acquisition of speech and language skills (Thagard et al., 2011). Students with severe hearing loss do not hear speech at normal speaking levels and have delays in language acquisition. These students are difficult to understand when they speak (Manitoba Education, Citizenship and Youth [MECY], 2009). It is important to understand that speech and language are different: speech is making sounds with the voice, and language is putting words and sentences together to create meaning. The skills necessary for effective communication profoundly influence the language, social, and incidental learning experiences of DHH students (Bowen, 2008). Language, whether spoken or signed, is crucial because it is essential for interactions between people (Kelman & Branco, 2009). Relationships between people are built on communication (Wilkins & Hehir, 2008). For DHH

students, this communication is a lifelong challenge, affecting social relationships and academic success. Delays exist in the area of pragmatic communication skills for DHH students (Thagard et al., 2011). This skill set is crucial for DHH students in order to develop real and meaningful social relationships. Depending on the mode of communication used by DHH students, whether speech, American Sign Language (ASL), or a combination of the two, students may find themselves isolated if they do not use the same language as their hearing families and friends (Wilkins & Hehir, 2008).

Incidental learning (that is, learning that occurs by chance instead of by design) takes place in any classroom. Teachers must remember that DHH students do not have the same access to incidental learning as hearing students (MECY, 2009). The best way for DHH students to communicate is through their mode of choice, whether spoken or signed. This mode should be supported by the school in terms of providing an interpreter or a qualified teacher of the deaf (Eriks-Brophy et al., 2006). A qualified signing interpreter translates instruction from the teacher into ASL for signing DHH students; however, it is not possible to interpret all the incidental language being used by other people in the room (Slobodzian, 2009). A hearing student may be exposed to 30,000 words every day, but students who are DHH will not hear all those words (MECY, 2009). In a co-enrollment model of inclusion, hearing students are taught ASL as part of their curriculum. This instruction removes the communication barrier between DHH and hearing students (Bowen, 2008). Inclusion does not mean that DHH students should be expected to conform to the dominant language of the classroom (Slobodzian, 2009). To function effectively, DHH students must learn to use communication for language, social, and incidental purposes.

Social development is critical for personal growth and acceptance of DHH students in an inclusive setting. Developing friendships, increasing participation in school activities, and coping with bullying are all social concerns for DHH students in an inclusive setting (Thagard et al., 2011). Friendships between DHH students and their hearing peers improve social inclusion. These friendships are most effective when the hearing child has developed an awareness of Deaf culture and communication (Hadjidakou et al., 2008). If communication is not a barrier, then personality has a greater effect on friendship choices (Bowen, 2008). Friendships with hearing peers give DHH students more confidence in social situations and improve their self-esteem (Hung & Paul, 2006).

Participation in school activities and extracurricular events can be limited for DHH students because they may have low self-esteem, lack understanding of social nuances, and may not have access to interpreting services after school hours (Hung & Paul, 2006). Teachers must actively recruit DHH students to participate in school activities through direct teaching of the social expectations surrounding the activity (Wilkins & Hehir, 2008). It is crucial that teachers remember that simply being present during an activity, in or out of school hours, is not the same as participating (Slobodzian, 2006).

Students who have an easily identified disability, such as deafness, are twice as likely to be the victims of bullying as their non-disabled peers (Bauman & Pero, 2011). Technology allows DHH students to assume the role of either victim or bully because it is not apparent through a computer message whether the sender is hearing or not (Bauman & Pero, 2011). With the writing challenges experienced by most DHH students, texting is a viable alternative to more formal writing. Unfortunately, DHH students can be more impulsive, and often have lower moral reasoning skills than their hearing peers (Bauman & Pero, 2011). This underdeveloped ability to reason may explain why some DHH students choose to assume the role of bully. While hearing students learn social skills by observing and listening to other people, DHH students are not able to do this independently and must be taught directly through daily interactions with hearing peers and adults (MECY, 2009). Deliberate support is needed for the social experiences of DHH students, because these students must be directly taught the social skills needed to address the effects of bullying.

There are many challenges, for both teachers and students, in an inclusive academic setting. These challenges include appropriate programming, accommodations, and

assessments for DHH students. Teachers must implement supports that will address the specific learning needs of DHH students, and create frequent opportunities for meaningful communication and learning to take place (Hung & Paul, 2006). Effective teachers of DHH students use strategies that facilitate learning (Eriks-Brophy et al., 2006). These strategies include preferential seating, differentiating instruction, and flexible assessment (Eriks-Brophy et al., 2006). If DHH students use lip reading as a receptive communication strategy, then their teacher must face them when providing direct instruction (Berke, 2010). Preferential seating does not necessarily mean the front seat, closest to the teacher. A DHH student could be seated in a back corner to gain better visual access to a screen displaying a speech-to-text translation from the computerized note taker (Stinson et al., 2009). Teachers must address the appropriate programming needs of DHH students in an inclusive classroom.

Because DHH students have different abilities and skills, teachers must provide differentiated instruction and assessment to accommodate students (Angelides & Aravi, 2007). Teachers must directly connect new concepts to the students' background experiences (MECY, 2009). This approach should reduce the need for DHH students to complete extra lessons at home (Angelides & Aravi, 2007). Making accommodations to assessment for DHH students is imperative for their success. Students may require pre-assessment assistance and support from the classroom teacher (Stewart & Kluwin, 2001). During the assessment, DHH students may require ongoing support from the classroom teacher or an educational assistant (Stewart & Kluwin, 2001). Other possible accommodations for assessment include re-writing questions to reflect the student's reading level, providing a scribe, and allowing time extensions for completion (Cawthon, 2011). The demands on teachers of DHH students are substantial and varied, because of the need for differentiated instruction and assessment.

As with any educational concept, there are negative and positive factors associated with the inclusion of DHH students in regular school setting. Some potentially negative aspects are unqualified personnel and the distance from Deaf culture. The best inclusive setting has personnel who are qualified for the position. However, this setting is not always possible. Many teachers of DHH students are not adequately prepared for the students' learning needs, or do not fully understand the knowledge base of DHH students (Slobodzian, 2009). This situation can lead to social exclusion and lower academic performance by DHH students (Angelides & Aravi, 2007). When asked to identify negative aspects of an inclusive setting, DHH students reported personnel who showed little understanding of Deaf culture (Angelides & Aravi, 2007). Schools that have DHH students in their population have a responsibility to provide opportunities for all students and staff to have exposure to Deaf culture (MECY, 2009). These shared experiences foster positive relationships and acceptance within the inclusive setting (Hadjikakou et al., 2008). Unfortunately, overall results indicate that academic success for DHH students, in relation to their hearing peers, has not shown a marked improvement over the past 30 years (Marschark et al., 2011).

Inclusive settings offer advantages to DHH students that they may not experience in a segregated setting. These benefits include exposure to higher level curriculum, opportunities for furthering academic or vocational goals, and experiences to communicate with the hearing world (Nowell & Innes, 1997). Students who are DHH, and educated in an inclusive setting, have exposure to higher level curriculum with higher academic goals and expectations (Angelides & Aravi, 2007). In terms of academic success, DHH students in inclusive education surpass their DHH peers from segregated settings (Eriks-Brophy et al., 2006). DHH students from inclusive environments are more likely than their segregated DHH peers to consider post-secondary or vocational programs paths (Thagard et al., 2011). Students experience the hearing world from a DHH perspective and identify that they require proficient communication skills to be successful (Eriks-Brophy et al., 2006). While segregated educational settings may be more suited to meet the social and cultural needs of DHH students, inclusive settings offer better opportunities to increase academic skills and abilities (Silvestre et al., 2007). These skills enable DHH students to function successfully in post-secondary studies, and to communicate

as part of the hearing world (Nowell & Innes, 1997). Students who are DHH, and educated in an inclusive setting, report an increased academic worth; however, they do not report the same positive feeling toward their social self-esteem (Silvestre et al., 2007). Although segregated settings offer some social benefits, inclusive classrooms provide enriched academic experiences for DHH students.

The legislation of inclusive education policies in recent years has given educators, administrators, and school divisions a new set of challenges to address in order to educate DHH students in a regular school setting. Educators, with the support of administrators, must now increase the positive attitudes of all people associated with the inclusive model, and focus on communication skills, social development, and academic opportunities for DHH students within an accepting and supportive environment. While it may be true that segregated settings can offer DHH students the social comfort of the Deaf community, the inclusive classroom offers the opportunity to function in both the hearing and deaf worlds. Providing the most appropriate education for each student, regardless of hearing ability, is the goal of the inclusive model.

### References

- Angelides, P., & Aravi, C. (2007). A comparative perspective on the experiences of deaf and hard of hearing individuals as students at mainstream and special schools. *American Annals of the Deaf*, 151(5), 476-487. <https://doi.org/10.1353/aad.2007.0001>
- Bauman, S., & Pero, H. (2011). Bullying and cyberbullying among deaf students and their hearing peers: An exploratory study. *Journal of Deaf Studies and Deaf Education*, 16(2), 236-253. <https://doi.org/10.1093/deafed/enq043>
- Berke, J. (2010, July). *Education – Including deaf and hard of hearing children in the classroom*. Retrieved July 17, 2011 from <http://deafness.about.com/od/schooling/a/inclassroom.htm>
- Bowen, S. K. (2008). Co-enrollment for students who are deaf or hard of hearing: Friendship patterns and social interactions. *American Annals of the Deaf*, 153(3), 285-293. <https://doi.org/10.1353/aad.0.0052>
- Cawthon, S. W. (2011). Making decision about assessment practices for students who are deaf or hard of hearing. *Remedial and Special Education*, 32(1), 4-21. <https://doi.org/10.1177/0741932509355950>
- Eriks-Brophy, A., Durieux-Smith, A., Olds, J., Fitzpatrick, E., Duquette, C., & Whittingham, J. (2006). Facilitators and barriers to the inclusion of orally educated children and youth with hearing loss in schools: Promoting partnerships to support inclusion. *Volta Review*, 106(1), 53-88.
- Furlonger, B. E., Sharma, U., Moore, D. W., & Smyth King, B. (2010). A new approach to training teachers to meet the diverse learning needs of deaf and hard-of-hearing children within inclusive Australian schools. *International Journal of Inclusive Education*, 14(3), 289-308. <https://doi.org/10.1080/13603110802504549>
- Hadjikakou, K., Petridou, L., & Stylianou, C. (2008). The academic and social inclusion of oral deaf and hard-of-hearing children in Cyprus secondary general education: Investigating the perspectives of the stakeholders. *European Journal of Special Needs Education*, 23(1), 17-29. <https://doi.org/10.1080/08856250701791211>
- Hung, H., & Paul, P. V. (2006). Inclusion of students who are deaf or hard of hearing: Secondary school hearing students' perspectives. *Deafness and Education International*, 8(2), 62-74. <https://doi.org/10.1002/dei.190>
- Kelman, C. A., & Branco, A. U. (2009). (Meta)communication strategies in inclusive classes for deaf students. *American Annals of the Deaf*, 154(4), 371-381. <https://doi.org/10.1353/aad.0.0112>
- Manitoba Education, Citizenship and Youth. (2009). *Educators' resource guide: Supporting students who are deaf and/or hard of hearing*.

- Marschark, M., Spencer, P. E., Adams, J., & Sapere, P. (2011). Evidence-based practice in educating deaf and hard-of-hearing children: Teaching to their cognitive strengths and needs. *European Journal of Special Needs Education, 26*(1), 3-16. <https://doi.org/10.1080/08856257.2011.543540>
- Nowell, R., & Innes, J. (1997, August). *Educating children who are deaf or hard of hearing: Inclusion*. Retrieved July 17, 2011, from <http://www.cec.sped.org/AM/Template.cfm?Section=Home&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=4168>
- Silvestre, N., Ramspott, A., & Pareto, I. D. (2007). Conversational skills in a semi-structured interview and self-concept in deaf students. *Journal of Deaf Studies and Deaf Education, 12*(1), 38-54. <https://doi.org/10.1093/deafed/enl011>
- Slobodzian, J. T. (2009). The devil is in the details: Issues of exclusion in an inclusive educational environment. *Ethnography and Education, 4*(2), 181-195. <https://doi.org/10.1080/17457820902972804>
- Stewart, D. A., & Kluwin, T. N. (2001). *Teaching deaf and hard of hearing students: Content, strategies, and curriculum*. Allyn and Bacon.
- Stinson, M. S., Elliot, L. B., Kelly, R. R., & Liu, Y. (2009). Deaf and hard-of-hearing students' memory of lectures with speech-to-text and interpreting/note taking services. *Journal of Special Education, 43*(1), 52-64. <https://doi.org/10.1177/0022466907313453>
- Thagard, E. K., Hilsmier, A. S., & Easterbrooks, S. R. (2011). Pragmatic language in deaf and hard of hearing students: Correlation with success in general education. *American Annals of the Deaf, 155*(5), 526-534. <https://doi.org/10.1353/aad.2011.0008>
- Wilkens, C. P., & Hehir, T. P. (2008). Deaf education and bridging social capital: A theoretical approach. *American Annals of the Deaf, 153*(3), 275-284. <https://doi.org/10.1353/aad.0.0050>