

Concerning the Bilingual/Bicultural Language Development Mode for Deaf Children

Abstract

The recent publication of an essay extolling the bicultural/bilingual language development mode for deaf children in *Psychology Today* (Grosjean, 2011) prompts a review of the scientific literature on this question. Considerable evidence—much of it cited by the most recent position paper of the Joint Committee on Infant Hearing of the American Academy of Pediatrics, shows that the selected communication mode has relatively little impact on the age 3 language development of children with hearing loss. Of far greater importance than communication mode, degree of hearing loss, and most other tested factors are age of identification and degree of family involvement. In this paper Choices argues that family involvement in language development will occur most naturally in the native language of the parents, whatever that language may be (spoken English, ASL, spoken Spanish etc.).

We note here that the bicultural/bilingual communication mode emerged 20 years ago to meet the needs of deaf children of hearing parents, whose literacy levels lagged behind those of Deaf children of Deaf parents. Twenty years ago universal newborn hearing screening and amplification and implantation of infants did not exist. Twenty years ago auditory-verbal methods of therapy were less effective than they are today with infants implanted at 12 months. Today it is routinely possible for children who were born deaf to achieve language skills comparable to those of their typically hearing age peers before kindergarten age. For these reasons, the continuing need for bicultural-bilingual education is questionable.

Introduction

A recent essay in *Psychology Today* (Grosjean, 2011) promotes the advantages of sign language for deaf children. The author writes: “...recent research has shown the many advantages of allowing Deaf children to know and use both a sign language and an oral language. It is the optimal combination that will allow these children to meet their many needs, that is, communicate early with their parents (first in sign and then, with time, also in the oral language), develop their cognitive abilities, acquire knowledge of the world, communicate fully with the surrounding world, and acculturate into their two worlds.” Grosjean does not cite the “recent research” to which he alludes.

Bicultural/bilingual communication mode emerged in the 1990s. It assumes that the primary language of a deaf child is ASL and that English is a second language (De Vera and Dharer, n.d.). Moreover, it is the reading and writing component of English as a second language that bicultural/bilingual emphasizes (Naturale, 2010), although spoken language is a component. A major reason why bicultural/bilingual developed was to improve the achievement levels of the deaf children of hearing parents who were not achieving English literacy levels comparable to those of Deaf children of Deaf parents. Bicultural/bilingual attempts to address shortcomings of Total Communication. (Naturale, 2010).

Key Assumptions and Beliefs

Adult parents have the right to make a fully-informed choice of primary language for their infants and toddlers. (Fully informed choice by an infant, of course, is an absurdity.) The notion that one should allow a deaf infant or toddler in a preschool setting to convey his or her inclination towards one communication mode or another, which inclination then determines subsequent educational choices, is wrong. Here are two corollaries:

1. The Deaf children of Deaf signing parents who celebrate and embrace Deaf culture should not be required to have exposure at any time to Listening and Spoken Language instruction in a school. Parents may *choose* to enable their children to have such an experience, but no school should require it.
2. Deaf children of typically hearing parents who want their children to achieve the language skills of typically hearing children by age 5, should not be required to expose their children to manual forms of language in a school. Parents may *choose* a bilingual/bicultural approach, but no school should require it.

The Issue

Within the context of deaf education, the issue at hand is whether officials of schools for the deaf should employ the bicultural/bilingual approach as a broad foundation for its educational philosophy and practice for all its students. Alternatively stated, should bicultural/bilingual education be offered only to those families that explicitly request such an approach?

Evidence

In his [Psychology Today essay](#), Grosjean writes, “recent research has shown the many advantages of allowing Deaf children to know and use both a sign language and an oral language.” He offers no studies to support this assertion, which is not surprising, as *Psychology Today* is not what one would consider to be a scholarly publication.

The fact is, however, that the preponderance of scientific evidence shows that learning sign language doesn’t make much difference one way or the other in the language outcomes of children whose parents want them to function orally/aurally.

Every few years, the Joint Committee on Infant Hearing of the American Academy of Pediatrics publishes a position paper, most recently in 2007 (Joint Committee on Infant Hearing, 2007). On the subject of communication options for early-identified infants, the paper states that research studies “have not found significant differences in the developmental outcomes by method of communication when measured at 3 years of age.” (p. 908). Table 1 shows references cited by the position statement in direct support of this assertion.

Table 1: Studies Cited by the Joint Committee on Infant Hearing that Support the Absence of Correlation between Developmental Outcomes at Age 3 and Communication Options

Moeller, M.P. (2000). Early intervention and language development in children who are deaf and hard of hearing. *Pediatrics*, 106(3):e43. Retrieved on April 8, 2011 from <http://pediatrics.aappublications.org/cgi/reprint/106/3/e43>

Yoshinaga-Itano, C. (1995). Efficacy of early identification and early intervention. *Seminars in Hearing*, 16, 115-

123.

Yoshinaga-Itano, C. (2004). Levels of evidence: Universal newborn hearing screening (UNHS) and early hearing detection and intervention systems (EHDI). *Journal of Communication Disorders*, 37, 451-465.

Yoshinaga-Itano, C., Abdala de Uzcategui, C. (2001), Early identification and social emotional factors of children with hearing loss and children screened for hearing loss. In E. Kurtzer-White, D. Luterman (Eds.). *Early Childhood Deafness*. Baltimore: York Press, 13-28.

Yoshinaga-Itano, C., Apuzzo, M. (1998). The development of deaf and hard of hearing children identified early through the high-risk registry. *American Annals of the Deaf*, 143, 416-424.

Yoshinaga-Itano, C., Apuzzo, M. (1998). Identification of hearing loss after age 18 months is not early enough. *American Annals of the Deaf*, 143, 380-387.

Yoshinaga-Itano, C., Coulter, d., Thomson, V. (2000). Hearing screening project effects on speech and language development for children with hearing loss. *Journal of Perinatology*, 20, S132-S137.

Yoshinaga-Itano, C., Coulter, D., Thomson V. (2001). Developmental outcomes of children with hearing loss born in Colorado hospitals with and without universal newborn hearing screening programs. *Seminars in Neonatology*, 6, 521-529.

Yoshinaga-Itano, C., Sedey, A. (1998). Early speech development in children who are deaf or hard-of-hearing: interrelationships with language and hearing. *The Volta Review*, 100, 181-211.

Yoshinaga-Itano, C., Sedey, A., Coulter, D., Mehl, A. (1998). Language of early – and later-identified children with hearing loss. *Pediatrics*, 102, 1161-1171.

We examined the relevant sections in two of these 10 papers. In so doing, we found these results.

1. By far the most important factor that correlates with language achievement level for children with normal cognitive abilities was age of identification (Yoshinaga-Itano, C., Sedey, A., Coulter, D., & Mehl, A., 1998). This language advantage “was found across all test ages, communication modes, degrees of hearing loss, and socio economic status.” (p. 1161). These authors also found, using eight two-way ANCOVA analyses, that only male gender, among demographic variables, was correlated with higher LQs [language quotients].
2. Moeller (2000) also discovered that early intervention was the critical variable. However, she also found that family involvement strongly contributed to vocabulary development.

Yoshinaga-Itano’s review of the literature (2003) states, with respect to communication mode:

The studies discussed in this section indicate that early identification of hearing loss with early intervention was associated with better language development for all families regardless of method of communication. Families with early identification and early intervention who chose oral methods of communication, as well as those whose families chose communication with sign language, had children with significantly higher language quotients than children who were later-identified. No significant difference in the language quotients of the children by mode of communication selected by the families was found.

Discussion

Early identification and effective early intervention matter far more than communication mode and most other factors commonly associated with language development in determining the language quotients of deaf and hard of hearing children. Exposing children to sign language when they are on a path to Listening and Spoken Language provides no significant benefit. These results contradict proponents of bicultural-bilingual education. This is not the same as saying that the bicultural-bilingual approach causes harm. Rather, it simply does no good. It is not an evidenced-based good educational practice as required by the No Child Left Behind Act.

More than 90% of children born with permanent hearing loss have parents with typical hearing (Mitchell and Karchmer, 2004). Therefore, the following assertion by Grosjean (2011) would seem highly questionable.

It is the optimal combination that will allow these children to meet their many needs, that is, communicate early with their parents (first in sign and then, with time, also in the oral language), develop their cognitive abilities, acquire knowledge of the world, communicate fully with the surrounding world, and acculturate into their two worlds.

It is counterintuitive to think that two adults with typical hearing will want to communicate with their deaf child using sign language, particularly in a 21st century world in which the following protocol is routinely possible:

What	Before
Identification	1 month
Amplification	3-6 months
Implantation	1 year
Achievement of listening and spoken language comparable to typically hearing age peers	5 years

Because, as Moeller (2000) shows, language results improve when family involvement is greater, it is reasonable to think that children of typically hearing parents will get such involvement in a pure Listening and Spoken Language mode.

Conclusion

There is no empirical evidence to support the broad use of bicultural-bilingual language development approaches. Bicultural/bilingual education was developed 20 years ago to address the needs of deaf children of hearing parents—children whose language achievement levels lagged behind those of Deaf children of Deaf parents. In 2011 the combination of universal newborn hearing screening, early medical intervention, and modern methods of auditory-verbal therapy and auditory-oral education make the need for bilingual/bicultural communication mode questionable.

References

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