LANGUAGE AND LITERACY DEVELOPMENT IN PRELINGUALLY-DEAF CHILDREN

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ABSTRACT

This paper attempts to address the issue of language development in hearing impaired children. It argues that interpreters, teachers or peers can provide deaf children with language exposure so that they can acquire their native languages more easily. It also argues that the provision of a developmentally appropriate print-rich environment is the key to literacy success and that providing deaf students with the opportunity to respond to and ask questions in the classroom will help them acquire language. It is noted that if peers learn to sign, and if teachers teach them to sign, it will increase the opportunity for social interaction for deaf students whereby affecting their learning outcomes. It stresses the point that the presence of deaf students in a class should be a learning experience for everyone. It also discusses strategies that can be incorporated into teaching by teachers for helping children with hearing impairments achieve more.

Keywords: Prelingual deafness, Hearing impairment, Language Development, Literacy development, Sign language, Signed English.

INTRODUCTION

A person who is not able to hear is called deaf and one who hears with great difficulty is called hearing impaired. Deafness is a kind of physical disability which may be with the infant at birth or may occur at a later time in life. If deafness is with the child from birth or if it happens before the child has the opportunity to acquire language, it is called prelingual deafness. Since deafness is not a highly frequent disability, teachers often do not have a full understanding of students who are deaf or hearing impaired. This often affects the quality of education such students receive; they do not receive the education they should do. To ensure that such students will receive quality instruction and education, educators must have a correct understanding of the specific educational needs of this population. A multitude of factors may be at work to provide quality education for these students. However, language development is the most important one since it plays a vital role in their literacy learning.

This paper addresses the issues of language and literacy development in deaf or hearing impaired children born into hearing parents and underscores the fact that such children show a delay in the commencement of communication. It then provides suggestions about appropriate classroom techniques that can help to alleviate this situation.

1. Troubles of Deaf children in hearing families

Language development requires exposure. No child is able to acquire his or her mother tongue in the absence of naturalistic exposure to that language. This requirement is the same for both hearing and deaf children. Exposure to language should be frequent and consistent. Children should have access to communication so that language development will ensue (Marschark, 2001). The mode of communication (sign language vs. spoken language) is not a determining factor in child language mastery. Moreover, even children who are born into totally deaf families can acquire language provided that they receive exposure (Marschark, 2001).

On the contrary, prelingually-deaf children who are born into hearing families usually experience some difficulties in language acquisition. It is often the case that their deafness is not identified in their first year of age (Marschark, 2001). As a result, the amount of exposure

they receive is not as rich as that which deaf children of deaf parents or hearing children of hearing parents receive. In other words, there is a dearth of exposure for this group of children. This causes them to commence language acquisition at a later age than their peers (Marschark, 2001).

This delay in language acquisition is quite natural. Parents and caregivers in these families do not know either the American Sign Language (ASL) or Signed English (SE). They must start to learn one of these languages to be able to communicate with their deaf children and this takes some time. In many cases, such parents or caregivers do not learn the correct forms of these languages at the beginning. As such, they provide poor and problematic exposure for their deaf children. This means that such children will begin their language learning at a later stage than their peers and will quite frequently learn wrong linguistic forms (Kuntze 1998). On the contrary, deaf children born into deaf families or hearing children born into hearing families do not suffer from this because in the former case the parents already know the American Sign Language (ASL) or Signed English (SE) and in the latter case the parents know the natural spoken language. According to Kuntze, 90 percent of deaf children born into homes with only hearing caregivers experience delays in language acquisition compared to hearing children in hearing families and deaf children in deaf families (Kuntze, 1998).

Along the same lines, Moores (2001) noticed that it is not surprising to see language delays from most of the deaf children because they do not have deaf parents. According to Moores, many of the children in this population remain *language deprived* up until their school exposure which is probably their first experience with a competent and naturalistic language model.

This does not mean that such children cannot receive exposure to meaningful language before school age. In fact, Katasse (1997) noticed that it was possible to provide such children with quality exposure so that they, too, can begin to acquire language on a par with their peers. Katasse (1997) even recommended several strategies to counteract language deficits in families with hearing parents and deaf children and to provide meaningful language experiences for deaf children within these families. According to Briggle (2005), these recommendations include:

- Model social and public encounters as an adult who is deaf would. Using notes in restaurants and stores is an important way to model successful, nonverbal communications.
- Use written language to communicate within the family and classroom. Informal notes, journal entries, and drawings can serve as an effective communication in both settings.
- Keep up-to-date on learning sign language. This includes enrollment in refresher and more advanced classes.

Katasse (1997) further suggested that teachers should not only share these suggestions with families but should also remember them in their own teaching.

2. Literacy development

The development of literacy in hearing impaired children is not a unifaceted issue. It is possible to find a good number of parallels to literacy development in their hearing peers; however, there are many elements that are unique to the population of deaf or hearing impaired students (Briggle, 2005; Ewoldt, 1985; Padden and Ramsey, 1993; Rottenberg, 2001; Rottenberg and Searfoss, 1992; Rottenberg and Searfoss, 1993). Once they fully understand and appreciate these commonalities and differences, teachers will be able to plan more appropriate and meaningful literacy activities and tasks for their classes. According to Briggle (2005), some class activities that are beneficial to hearing impaired or deaf children include:

1. Time to explore writing, drawing, books, and environmental print;
2. Story time translated into sign; and
3. Journal writing using invented spelling.

Like their hearing peers, hearing impaired or deaf children should have the opportunity to participate in literacy events. They should also use written language in many

ways that are typical to their hearing peers. According to Briggle (2005) and Williams (1994), the teacher should provide them with the opportunity of demonstrating the following uses of language in signed or spoken form:

- to interact socially with peers and adults while writing,
- to provide information about written text,
- to label written creations,
- to monitor the construction of text,
- to request assistance with writing tasks from adults and peers,
- to challenge others' knowledge of literacy, and
- to evaluate literary works.

Rottenberg (2001) and Williams (1994) also noticed that it was possible to draw similar parallels for early literacy experiences with reading (See also Briggle, 2005). In this connection, they noticed that hearing impaired and deaf children showed an interest in print and drawing in much the same way as their hearing peers did. In this connection, Rottenberg (2001) and Williams (1994) argued that hearing impairment and deafness could not significantly differentiate the process of literacy development provided that the classrooms are print-rich and that homes and families are supportive (see also Ewoldt, 1985; Padden and Ramsey, 1993; Rottenberg, 2001; Rottenberg and Searfoss, 1992; and Rottenberg and Searfoss, 1993). Teachers should also notice that deaf and hearing impaired students also use literacy in ways unique to their deafness (Briggle, 2005).

3. Communication strategies

Whereas speech is the preferred mode of communication for hearing children, hearing impaired and deaf children rely heavily on writing as a mode for social communication and the path to literacy development (Maxwell, 1985; Rottenberg and Searfoss, 1992). In this connection, Rottenberg and Searfoss (1992) noted that deaf or hearing impaired children usually use literacy as a replacement for verbal communication. In other words, such children see the ability to write in their mother tongue as a compensation for their inability to speak. Earlier in 1985, in an empirical study Maxwell had noted that deaf or hearing impaired children relied heavily on drawing or writing to express themselves when all attempts at signed communication failed. In their study in 1992, Rottenberg and Searfoss noticed that if deaf or hearing impaired children who are not yet able to write or draw were scaffolded by a communication partner, they would show environmental print (e.g. name tags, charts, signs, and labels) to this partner to help communication move forward. They further noticed that this compensation strategy usually finds the status of a personal culture "continues throughout the life of adults who are deaf" (Briggle, 2005, p. 70).

Williams (1994) also noticed that hearing impaired or deaf children also fail to correctly perceive sound-symbol relationships in written communication; this is especially crucial when words begin with consonants. Such words, Williams (1994) noted, provide a significant challenge for hearing impaired or deaf children in such school activities as dictation. "Without the ability to hear initial consonants in words, using the strategy of sounding out a word is not a useful approach" (Briggle, 2005, p. 70). Ruiz (1995) argued that this can be solved by the use signinitial consonant correspondence (i.e., visual cues provided by the hand shape of the sign for the word). Briggle (2005, p. 70) argued that "While this works for some words, such as names, the strategy has been observed to be overgeneralized by children to include other words without signinitial consonant correspondence" (*c.f.*, Ruiz, 1995 and Williams, 1994).

In their study, Padden and Ramsey (1993) found out that hearing impaired or deaf children used finger spelling strategies to record words in print. They noticed the coincidence between such children's acquisition of finger spelling strategies and the emergence of corresponding words in their writing. In other words, when hearing impaired or deaf children started to use the finger spelling for a word, that word appeared in their writing.

This has a very interesting connotation for linguistic research; hearing children have access to two repertoires of words: (a) active vocabulary, and (b) passive vocabulary. Active vocabulary appears in both speech production and writing. Passive vocabulary, on the other hand, is only perceived, but not produced; in other words,

children understand them when others use them in writing or speech, but they themselves do not use them in their speech or writing. The connotation of the study conducted by Padden and Ramsey (1993) might be that deaf or hearing impaired children only possess a repertoire of active vocabulary and lack passive vocabulary knowledge. Along the same lines, Briggle (2005) argues that finger spelling should be,

> "*encouraged as a viable strategy when presenting new words in the classroom. Hearing peers also find this technique helpful for remembering difficult spellings and words*" *(p. 70).*

4. Inside the classroom

In the sections above, the commonalities and differences between hearing impaired or deaf children and the hearing ones were discussed. It is of crucial importance that teachers keep in mind these similarities and differences in considering the appropriate learning environment for hearing impaired or deaf children. Both healthy and hearing impaired or deaf students should be given the chance to read and enjoy books alone, with peers, and with teachers. Employing drawing and writing to explore the written word is also beneficial to both of these student populations. All students should be given enough time to discuss their literacy experiences among themselves and with other (Briggle, 2005).

Teachers should also be encouraged to learn to sign, they should be encouraged to combine written notes with signing to interact with deaf or hearing impaired students. If a student from a class is unable to find the appropriate sign for a word, the teacher should assist him or her in looking up the sign. At the same time, the teacher should provide him or her with the written form of the word and should also give an actual example. The use of written and sign labels for classroom objects (e.g. desk, chair, etc.) will also help students to connect signs to spoken language.

Hearing impaired and deaf children will benefit most from a classroom which is organized in such a way as to maximize the visual input they receive. To ensure this, students should have access to information in a clear and efficient manner. To this end, Briggle (2005) recommended the following techniques:

- Teachers should write the most important and crucial points (including keywords, phrases, and assignments) on the board.
- Whenever possible, teachers must provide their students with additional access to information presented in their classes by using visual aids.
- Teachers should use new technologies (e.g. video projectors, overhead projectors, electronic boards, closed-captioned videos, etc.) instead of chalkboards. This is important since chalkboards force teachers to have their backs to their students while new technologies allow teachers to face the students which, in turn, allows lip reading and eye contact possible.
- Teacher should employ seating arrangements in their classes in such a way as to make it possible for hearing impaired and deaf children to 'both see and hear' what is occurring during class. The seating arrangement should be such that sources of outside light (e.g. windows or open door) are behind the students. This is very important since light often interferes with visual cues.
- To allow students to recognize the words and signs during the lesson, and to maximize comprehension, teachers should present new vocabulary to students prior to the lesson.
- Teachers should insist that students raise hands and be identified before speaking or responding in class. This visual cue enables hearing impaired or deaf students to know who is speaking and allows them to make the necessary adjustments.

In brief, teachers should introduce small changes in their daily teaching to create a classroom environment which is rich in visual cues (i.e., a visual classroom). A visual class is undoubtedly supportive of hearing impaired or deaf children. It also provides hearing students with additional and more comprehensible input. Moreover, teachers should plan their lessons and classroom activities in such a way as to guarantee maximum availability of visual input.

For instance, teachers can alter their story time so that they can sign as they read. They may also have an interpreter sign the story as they themselves read it aloud. Briggle (2005) argues that the interpreter should sign near the book to emphasize the connection between the written words, the oral story, the pictures, and the signs. As yet another high-interest successful activity, teachers can explore students' names to show the interrelatedness of sign and English.

Conclusion

Overall, teachers should not dramatically change the way they teach simply because they have hearing impaired or deaf students in their classes. Literacy success can be ascertained in a class with a print-rich environment and developmentally appropriate milieu. To encourage language development in hearing impaired or deaf children, teachers can expose them to competent language models (e.g. interpreters, or peers). It will also help if hearing impaired or deaf students are given the opportunity to ask questions and respond in class. Signing on the part of hearing peers will also increase the amount of social interaction in the class and enhances literacy and language development in hearing impaired or deaf students. Hearing impaired or deaf students are not a threat in a classroom; rather, their presence in a class environment is an opportunity for teachers to improve the quality of education they provide, and for hearing students to achieve more.

References

[1]. Briggle, S. J. (2005). Language and literacy development in children who are deaf or hearing impaired. *Kappa Delta Pi Record, 41* (2), 68-71.

[2]. Ewoldt, C. (1985). A descriptive study of the developing literacy of young hearing impaired children. *Volta Review, 87* (5), 109-126.

[3]. Katasse, C. (1997). Deaf children and English: More ways parents can help. *Perspectives in Education and Deafness, 15* (4), 45.

[4]. Kuntze, M. (1998). Literacy and deaf children: The language question. *Topics in Language Disorders, 18* (4), 115.

[5]. Marschark, M. (2001). *Language development in children who are deaf: A research synthesis.* Alexandria, VA: National Association of State Directors of Special Education. ERIC ED 455-620.

[6]. Maxwell, M. (1985). Some functions and uses of literacy in the deaf community. *Language in Society, 14* (2), 205-221.

[8]. Moores, D. F. (2001). *Educating the deaf: Psychology, principles, and practices,* 5th ed. Boston: Houghton-Mifflin.

[9]. Padden, C. A., & Ramsey, C. L.. (1993). Deaf culture and literacy. *American Annals of the Deaf, 138* (2), 96-99.

[10]. Rottenberg, C. J. (2001). A deaf child learns to read. *American Annals of the Deaf, 146*(3), 270-275.

[11]. Rottenberg, C. J., & Searfoss, L. W. (1992). Becoming literate in a preschool class: Literacy development of hearing-impaired children. *Journal of Reading Behavior, 24* (4), 463-479.

[12]. Rottenberg, C. J., & Searfoss, L. W. (1993). How hard-of-hearing and deaf children learn their names. *American Annals of the Deaf , 138* (4), 358-361.

[13]. Ruiz, N. T. (1995). A young deaf child learns to write: Implications for literacy development. *The Reading Teacher, 49* (3), 206-217.

[14]. Williams, C. L. (1994). The language and literacy worlds of three profoundly deaf preschool children. *Reading Research Quarterly, 29* (2), 125-155.

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