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# ENHANCING EDUCATIONAL OPPORTUNITIES FOR HISPANIC STUDENTS WHO ARE DEAF

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*Abstract:* There is a great deal of diversity among those individuals identified as hearing impaired. This diversity stems from the nature of the loss, its degree, cause, whether it occurred before or after speech and language developed, and whether the individual has deaf or hearing parents. More recently, professionals in deaf education have had to recognize the increasing ethnic diversity represented with this population. Specifically, professionals are becoming aware of the unique challenge being faced by Hispanic students who are hearing impaired. The purpose of this article is to review some basic facts about hearing impairment then discuss the effects this disability can have on Hispanic students. Specific suggestions are offered for meeting the needs of these students and their families.

## INTRODUCTION

### Some Facts About People Who are Hearing Impaired

Approximately 15,000,000 people in the United States are hearing impaired, a broad classification that can be broken down into many categories. For example, it includes individuals who are hard-of-hearing and individuals who are deaf. "Hard-of-hearing" describes those individuals who have sufficient hearing to develop speech and language, regardless of whether or not amplification is used. "Deaf" describes individuals whose losses are so severe that they will not learn speech and language through their hearing even if amplification is used. Another way to group individuals who are deaf is according to the time at which their losses occurred. A person is prelingually deaf if the loss occurred before speech and language skills had a chance to develop, typically before the second birthday. A person is postlingually deaf if the loss occurred late in life, after speech and language skills were established. Another way to group individuals who are deaf is by whether they were born to hearing or deaf parents. Approximately 90% of deaf children are born to hearing parents with the remaining 10% being born to deaf parents.

## EDUCATION OF STUDENTS WHO HAVE HEARING IMPAIRMENTS

### The Effect of Parental Hearing Status on School Achievement of Deaf Students

Parental hearing status can have a major influence on the quality and quantity of linguistic experiences available to young children who are deaf. Hearing parents, perhaps already devastated by their child's hearing loss, face the enormous task of learning how to communicate and interact with their child. Most hearing parents choose educational programs for their children which emphasize either an oral approach (speech and speech reading) or a combined approach (speech, speech reading, and sign language). On the other hand, deaf parents are already aware of the ramifications of hearing loss and are more likely to have

an intact language system for communicating and interacting with their child. Typically, that language is American Sign Language (ASL). Like Spanish, French, or any other spoken language, ASL has been recognized as an intact language (Markowicz, 1977; Wilbur, 1979; Woodward, 1982) and is currently the fourth most commonly used language in the United States.

Results of studies indicate that those children whose deaf parents used ASL were more advanced at school entry and maintained this advantage throughout their formal education (Bockmiller, 1981; Markowicz, 1982). They did better when reading and writing English than deaf children whose hearing parents placed them in oral programs or combined programs (Meadow, 1968; Stuckless & Birch, 1966). Such results have led many experts to prefer the use of ASL to other educational philosophies that rely solely on teaching speech and speech reading or even those philosophies that include sign systems other than ASL. Speech and speech reading are inadequate modes for learning English when hearing is impaired. For example, speech reading is difficult because many English sounds cannot be clearly distinguished on the lips (e.g., "me", "be"). In addition, to be even partially successful at speech reading, a person should have experience with redundancies and predictability of language (Barnum, 1984; Moore, 1982). Even though they are visual and may include some ASL signs, other sign systems representing English are based on sounds a deaf child cannot hear (Fant, 1974). No technique has been devised to teach English satisfactorily to the individual who has never heard it spoken (Clements & Prickett, 1986).

### **Rationale for Bilingual Education for Students Who are Deaf**

Investigators have attributed the superior performance of deaf children of deaf parents to consistent exposure to a language system. They concluded that ASL may be a more natural system for developing linguistic, academic, and social skills and have recommended its use in classrooms serving students who are deaf. Professionals in Deaf Education all agree that knowledge of English is beneficial to people who are deaf (Barnum, 1984). However, many authorities are suggesting that mastery of English may be enhanced by using a natural sign language such as ASL during the critical language learning years. Use of a natural language to facilitate acquisition of a second language is a familiar argument to specialists in the area of Bilingual Education. A first language is learned, rather than taught, and the process used to learn it can be transferred to learning a second language in a more systematic way (Barnum, 1984). Thus, deaf students who have mastered ASL may be able to transfer that learning process to the mastery of English. Unfortunately, this belief is not shared by all educators of the deaf. Barnum (1984) and Clements and Prickett (1986) reported that some professionals believe that early exposure to ASL will interfere with the mastery of English and have negative effects on personal and intellectual development. Specialists in the area of Bilingual Education are also thoroughly familiar with this argument.

## **HISPANICS WHO ARE DEAF**

### **The Changing Population**

Another example of the heterogeneous nature of the population of hearing impaired individuals is their diverse cultural background. For example, Luetke-Stahlman and Weiner, (1982) reported that Hispanics accounted for 9.4% of the total hearing impaired population. More recently, the 1988-89 Annual Survey of Hearing Impaired Children and Youth reported that 12.9% of the hearing impaired school population between the ages of 7 and 19 years is Hispanic (Center for Assessment and Demographic Studies, 1988-89). The increase in number of deaf individuals who are Hispanic reflects general population trends. In 1982, Bouvier and Davis reported that 7% of the population was Hispanic and projected that this number will

increase to 24% by 2080. Fradd, Figueroa, and Correa (1989) recognized that Hispanics are not the only or most needy group; however, they pointed out that the needs of Hispanics may require immediate attention because they represent the largest and most rapidly increasing language minority group. Experts in deaf education have also recognized that deaf students who are Hispanic have unique needs that require special considerations.

The data currently available to document the performance of Hispanic students who are deaf, although limited, paint a dismal picture. Allen (1986) reported that these students have reading comprehension and mathematics computation levels below those levels attained by their Anglo counterparts. Their speech is more likely to be classified as less intelligible (Wolk & Schildroth, 1989). Currently, no information is available regarding vocational success; however, Rodriguez and Santiviago (1991) pointed out that most Hispanics experience difficulties in the labor force. It is very likely that deafness will impose additional hardships in the search for suitable employment. Johns (1989) suggested that Hispanic individuals who are deaf are almost certain to earn less money over the course of their careers than Anglo individuals with similar abilities.

### **Assisting Hispanic Students Who are Deaf**

It is expected that Hispanic children who are deaf will in fact be *trilingual* and *tricultural* (Christensen, 1986; MacNeil, 1990). Students from Hispanic backgrounds who also have a heritage as deaf individuals pose unique challenges to professionals in deaf education. Consideration must be given to several factors if Hispanic students who are deaf will mainstream successfully into an Anglo, hearing society.

#### *Reduce the Risk of Hearing Impairments*

Rodriguez and Santiviago (1991) reported that 27% of Hispanic individuals were below the poverty level in 1989. The proportion of Hispanic individuals under the age of 18 years who were under the poverty level was even higher - at 38%. Lower socioeconomic status is associated with poor health and limited access to medical services. Inadequate medical care and poor nutrition during pregnancy place children at risk for hearing impairments from factors such as exposure to the rubella virus, prematurity, low birth rate, and infections. Steps must be taken to ensure that Hispanic families have access to services that promote and maintain healthy lifestyles.

#### *Provide Early Intervention*

Early intervention is critical in the event that a Hispanic child is diagnosed as hearing impaired (Christensen, 1986; MacNeil, 1990). Early intervention can include the selection of appropriate amplification, parent training, and speech and language therapy.

#### *Be Aware of the Diversity Within This Population*

As emphasized earlier, individuals who are hearing are from an extremely heterogeneous population. At a very minimum, they can vary by the degree of loss, the age at which the loss occurred, the range of speech and language skills, and whether or not any family members are deaf. Similarly, individuals who are Hispanic represent diverse groups including Puerto Ricans, Mexican Americans, Dominicans, Colombians, Cubans, and Central Americans. Professionals in deaf education should be aware of these many factors and how they can influence the school performance of Hispanic individuals who are deaf.

### *Identify the Primary Instructional Language*

Proponents of bilingual education advocate that bilingual children should be educated in their first language and then transitioned into English. This is a fairly straightforward approach when teaching normally hearing children, but much more complicated when dealing with Hispanic children who are deaf because of the need to determine a first language upon which to build English skills. Spanish may not be the first language for a deaf child of normally hearing Hispanic parents (Luetke-Stahlman & Weiner, 1982). In fact, Hispanic children who are deaf may have limited exposure to several languages. Immediate family members are probably using Spanish and may have developed their own "informal language" of communication for the home (MacNeil, 1990). A child who received special services in his or her native country prior to emigration may have some knowledge of Spanish sign language. School officials in the United States are using English and perhaps any one of several forms of sign language, including ASL. Luetke-Stahlman and Weiner (1982) were among the first to question which of these options is in fact the first language, or the language of instruction, for Hispanic children who are deaf. The primary instructional language is a key factor for the education of the Hispanic child who is deaf and it must be determined jointly by the parents, school officials, and community (Erickson, 1984). Luetke-Stahlman and Weiner (1982) recommended that Hispanic children who are deaf be given the opportunity to demonstrate which language is most beneficial to them in acquiring school-related skills. They used four different formats to present nouns, verbs, and adjectives to three Hispanic students who were deaf. The formats included English alone, English and sign language, Spanish alone, and Spanish and sign language. The results varied for each child, suggesting that neither cultural heritage nor etiological classification were prime factors in the identification of a primary instructional language. They urged consideration of the following four variables:

1. the language of the caretaker;
2. the amount of exposure to spoken and signed language;
3. the amount of usable residual hearing, and
4. the language empirically documented as most effective for the child.

### *Work With Parents*

The benefits of an educational program are maximized when family members are actively involved; however, the quality and quantity of involvement may be undermined when the parents' language is different from the language used for instruction purposes. Professionals working with Hispanic students who are deaf must develop programs that increase parental knowledge and participation. Christensen (1986) described a trilingual (Spanish, English, and Sign Language) approach to teach sign language to monolingual Spanish-speaking parents of deaf children. A series of videotapes were prepared for broadcast across a local cable channel. Information included in the tapes was presented first in Spanish and second in English, with signing accompanying all spoken information. She reported that regular viewing of the program helped Spanish-speaking parents acquire and use basic signs that their children were learning in the classrooms. At the end of the two-year project, 95.5% of the families reported that they felt the quality of communication with their deaf child had improved greatly. They also reported more positive attitudes toward their child's deafness and educational program, perhaps because frustration was reduced during communication. Incidental exposure to English also increased their ability to understand spoken English. Christensen (1986) reported that the age of the respondents, years of education, and years of residence in the United States did not predict the level of success in signing; however, parents of young children did better than parents whose children were in high school.

In addition to parent training, Hispanic parents of children who are deaf can be encouraged to form a

support group to advocate for their children, practice newly acquired skills, and disseminate information (Christensen, 1986). School officials should be made aware of these groups and should encourage and welcome parent involvement (MacNeil, 1990).

### **Conduct Fair and Appropriate Assessment**

Adequate and accurate assessment of students who are deaf has always posed a major challenge. PL 94-142 mandated that all testing be conducted by trained personnel in the child's native language. Unfortunately, few professionals in public schools are trained in the area of deafness and even fewer are prepared to meet the needs of Hispanic students who are deaf. Assessment that is conducted without a complete understanding of a child's culture and language may fail to elicit a performance level that accurately reflects the student's underlying competence. MacNeil (1990) speculated that the Hispanic child who is deaf and his or her family may have developed an informal language for use at home. Professionals in Deaf Education should ensure that parental involvement is solicited, through an interpreter if necessary, to assist in assessing a student's strengths and potential.

Use of nonverbal tests is one option, however, they may be culturally biased. Other options include providing an interpreter or translating into the student's native language (MacNeil, 1990). Cultural bias is still a problem and interpretation or translation of a test may violate standardization procedures and render any results useless. Gragg (1992) recommended that the performance of Hispanic students who are deaf be measured using a variety of formative and summative measures including writing samples, work samples, artistic representations, and classroom observations.

### **Recruit Ethnically Diverse Professionals**

Efforts must be made to recruit personnel who represent cultural diversity. Gragg (1992) and MacNeil (1990) encouraged active recruitment of deaf educators from among ethnically diverse high school students and regular education teachers. MacNeil (1990) specifically called for public school officials and local, state, and federal authorities to offer incentives to encourage ethnically diverse individuals to consider careers in deaf education as either professionals or paraprofessionals.

### **Expand Professional Preparation at Preservice and In-Service Levels**

Schlesinger and Meadow (1972) argued that ours is an extremely ethnocentric culture. MacNeil (1990) stated that the major focus of educational programs serving students who are deaf is based on the Anglo-Saxon culture, at the expense of other cultural experiences. Delgado (1981) maintained that educators believe deafness precludes minority group membership and accordingly assign secondary importance to any other minority or cultural values. Teachers of the deaf and those in decision-making positions have traditionally had monolingual attitudes and have judged all student communication in terms of one language - English. Relatively few teacher preparation programs mandate coursework in ASL (Baker & Cokely, 1980); it can be assumed that even fewer offer coursework related to the linguistic and cultural needs of minority students who are deaf. Such attitudes must be changed if Hispanic students who are deaf are to learn how to function in Hispanic, deaf, and hearing cultures.

Coursework required within professional preparation programs can be expanded to include information about achievements of individuals from minority cultures. In-service and continuing education programs should address the cultural characteristics of Hispanics and describe the implications for the daily decisions made by school personnel (Rodriguez & Santiviago, 1991). Increased sensitivity among professionals can

raise teacher expectations for Hispanics students who are deaf and lead to the creation of a more positive learning environment (Gragg, 1992).

### **Modify Curriculum and Instruction**

Current curricula may focus exclusively on western, Anglo culture at the expense of contributions from other cultures. Gragg (1992) and MacNeil (1990) suggested several curricular and instructional adaptations that can increase students' positive feelings about themselves, their language, and their cultures, both deaf and Hispanic. Educators must examine curricula to make sure they include minority achievements and points of views. MacNeil (1990) specifically suggested that curriculum address "unique histories, special celebrations, and key individuals" (p. 80). Curricula should also address increased vocational education and incorporate business partnership and on-the-job training.

Teachers can increase their expectations that Hispanic students who are deaf will perform well in school, community, and vocational environments. Instruction should be characterized by the use of clear models, low error rates for newly presented information, and sufficient guided practice. Specific areas of instruction should include test-taking skills; and living skills such as preventing substance abuse, personal problem solving, and sex education. Gragg (1992) stated that students will also benefit by use of instructional models such as cooperative learning and peer tutoring. These models allow students with different abilities and strengths to work together to help each other learn new information and develop new skills. Educators should also encourage Hispanic students to take advantage of leadership opportunities by becoming members of the yearbook staff, clubs, and advisory groups. Finally, educators can encourage role models from various ethnic groups to become involved in the educational program offered to Hispanic students who are deaf.

### **Designate Specialists**

Rodriguez and Santiviago (1991) recommended that school officials recruit professionals who are Hispanic to serve as cultural interpreters between the school and Hispanic parents and students. The Lexington School for the Deaf and Western Pennsylvania School for the Deaf have created special teams of bilingual, bicultural teachers and paraprofessionals who can interpret for parents, provide them with information about some American norms, teach signing bilingually, and act as advocates.

Gragg (1992) suggested assigning one professional staff member to serve as coordinator for minority achievement initiatives. This individual would initiate and supervise appropriate school activities, and provide resources and consultation to support the program.

### **Continue to Document**

The quality of education programs available to Hispanic students who are deaf will be greatly enhanced if all efforts are clearly described, rigorously evaluated, and widely disseminated in the professional literature. For example, testing and instructional modifications should be monitored and evaluated systematically to determine their impact on the academic placement and achievement of Hispanic students who are deaf (Gragg, 1992; Rodriguez & Santiviago, 1991). Other relevant issues need to be explored. For example, reports from Luetke-Stahlman and Weiner (1982) and Christensen (1986) mentioned that Spanish was combined with an English-based signing system. This combination is unusual and should be investigated further. Also notably absent from the professional literature is any discussion regarding Hispanic children who are deaf but who come to this country with expertise in a Spanish sign system. Similarly, very little is

known about Hispanic children who are deaf and whose parents are also deaf.

## SUMMARY

Census data indicate that the number of Hispanic individuals in the United States has increased greatly and will continue to do so far into the future. With the rise in this population, it is expected that the number of Hispanic children and youth who are hearing impaired will also increase. Their needs will continue to pose unique challenges to professionals in the area of deaf education. These professionals have access to two rather substantial bodies of literature. Data from Bilingual Education efforts among the general population (who use Spanish and English) and the deaf population (who use ASL and English) should be reviewed and used to develop appropriate intervention programs. In addition, the outcomes of these intervention programs should be disseminated so that results can be replicated and refined. Carefully designed programs that involve students, their families, and the Hispanic community are essential if Hispanic students who are deaf are to assume their roles as educated and productive members of society.

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