Language Policies in Deaf Education

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Introduction

Deaf children in America are not being educated. Misinformed or uninformed educators have kept deaf children from achieving a complete and satisfactory education through the use of inappropriate or inadequate language policies. Deafness has characteristically been treated by doctors and by educators as a handicap, as a disability, as a condition to be treated, and if possible to cure, or at least hide, by the teaching of speech. For the Deaf community, deafness is a way of life, a unique culture, a language community. By denying deaf children the use of American Sign Language, and by failing to teach English literacy skills, educators are denying them a language, a culture, and an education.

The issue of "deaf education" is by no means limited to a discussion of language learning. Language policy is one side of a multi-faceted issue. To enter into any discussion of deaf education requires an acknowledgement of many underlying considerations. Deaf children come from all the many varied populations and types of families that hearing children do. Some may be from families where English is not the native language, some may be from families where different cultural values are practiced. Some may be from broken homes or single parent homes. All of these factors come into play when discussing any developmental issues. They can not be ignored in the education of any child, and in talking about deaf education, they can’t be forgotten in favor of the fact of the child’s deafness.

Also important in any discussion of the education of a child, deaf or hearing, are the family’s wishes and ideas of the child’s best interests. These opinions need to be respected and considered. Educators and researchers need to take into account the needs and desires of the family for their own child’s education. Additionally, parents need to make their ideas known and advocate for their child, as the teachers
and researchers should also do.

Not all hearing losses are the same, and not all children are the same. The children that I am referring to in this paper when I speak of deaf children are those with hearing losses that are considered severe to profound. Children with less severe losses may do well in the programs that I critique. Others may not, and they may be helped by programs that I advocate. It's also possible that some children with severe losses may succeed in the current programs. What's important is that each child is given the education best suited to their individual situation. I don't believe that all deaf children will benefit from the same educational methods, nor do I believe that all hearing children learn best in the same ways.

I have come to this debate with no preconceived notions about deafness, no knowledge of the controversy, no experience in education or medicine, and no real knowledge of ASL. I studied the question of how to educate deaf children as a linguist, and as a person concerned with the welfare of other people, especially young people. From this position I have researched, read, and observed, and I have come to the conclusion that deaf children in America are not being educated satisfactorily, and will not be until they are taught using the only language that they can successfully be taught in, ASL, combined with an effective program to develop English literacy skills—a bilingual program that acknowledges the fact of bilingualism in deaf people's everyday lives. My reasons are based on facts about language and language learning, and about the processes involved in speech and the need for communication and literacy in every person's life.

**History of Language Policies in Deaf Education in America**

The question of language policies in Deaf education has been an issue of conflict in this country for over a century. The first school for the deaf was
established in Hartford, Connecticut in 1817. At that time, the language of instruction was a combination of Signed French and Signed English, brought to the school by the French deaf teacher, Laurent Clerc, combined with the indigenous signs of the American students. Eventually the language lost the restrictions imposed by the methodical signs added to reflect English grammar and came to use an early form of what is today known as American Sign Language. By 1867 there were 26 schools for the deaf and ASL was the language of instruction in all of them. This was the peak of ASL in deaf education. Beginning around 1860, some schools began advocating the “oral method.” At first these schools were for those children who were not completely deaf or who had acquired some speech before losing their hearing. But in 1880, at the Second International Congress on Deaf Education, a group of hearing educators essentially wiped out the ASL schools by advocating a pure oral method for the education of all deaf students, denouncing ASL as unfit, not a true language, and “not sufficient to express the fullness of thought.” By 1907 there were 139 schools for the deaf in the United States and ASL was allowed in none.

From 1900 to about 1960, the oral method was used almost exclusively. This approach used a combination of speech and lipreading to teach students in English. 1968 marks the first year that a school for the deaf implemented Total Communication. This method was supposed to combine speech with fingerspelling, gestures, and one of the manually coded English systems that had been developed in recent years, any and all methods by which communication

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2 Giulio Tarra, President of the Second Congress, quoted in Lane. 114.
3 Lane, 113.
might be realized.

In 1975, deaf education was affected by the passage of PL94-142, the Education for all Handicapped Children Act. The main premise of the law was that all children have ‘free appropriate education’ in ‘the least restrictive environment.’ This idea has since come to be known as mainstreaming, whereby children with handicaps are educated as much as possible in the same classrooms as children without handicaps. The legislation seeks

\[\text{to assure that to the maximum extent appropriate, handicapped children,}\]
\[\text{including children in public or private institutions or other care facilities, are}\]
\[\text{educated with children who are not handicapped, and that special classes,}\]
\[\text{separate schooling, or other removal of handicapped children from the regular}\]
\[\text{school environment occurs only when the nature or severity of the handicap is}\]
\[\text{such that education in regular classes with the use of supplementary aids and}\]
\[\text{services cannot be achieved satisfactorily.}^{5}\]

The Act also dictated that handicapped children’s educational programs be individually tailored in order to create the best learning situation, the most appropriate education, for the child. Since this legislation was passed, many deaf children have been taken out of special oral or manual schools for the deaf and “mainstreamed” into regular classrooms, where they continue to be taught using oral or Total Communication methods.

PL94-142, renamed the Individuals with Disabilities Education Act, is up for reauthorization in 1994. Some groups, such as the Association for Retarded Citizens, United Cerebral Palsy, and the Association for the Severely Handicapped want to rewrite the law so that the policy of mainstreaming is replaced by the policy of inclusion.\(^6\) Inclusion means that all disabled students would be placed in public schools in regular classrooms for the entire day. It would remove any references to


\(^6\) Lexington School for the Deaf, \textit{“Inclusion and Children who are Deaf,”} No. 6, December 1993 (Lexington School for the Deaf, Jackson Heights NY, 1993) 1.
the “continuum of placement alternatives” now present in the law. Advocates of inclusion say that too many disabled children are being discriminated against by not being allowed into regular classrooms. While for some children this may be true, and those children will be helped by the policy of inclusion, all disabled students are not alike and will not benefit from the same educational environment. What inclusion would mean for deaf children is that they would not be able to go to special schools, remain in resource classrooms where they receive special help with language development, or be able to communicate and socialize effectively with other children. The Commission on the Education of Deaf Children acknowledged that when deaf children are placed in regular classrooms, they are put “in precisely the most restrictive environment for those children, given the communicative and social barriers in the local school.” If all disabled students are treated the same, and if alternative options are not available, many children, not just deaf children, could end up being hurt by a mandate for inclusion.

There are now some schools which use a bilingual-bicultural approach to teaching deaf students. These programs teach children ASL as their first language and use written English as a second language in the classroom. Such programs are so new that little is known about their effectiveness. They do show great promise however, by offering deaf children a chance at a complete language system. Of the possibilities available, bilingual programs offer the truly most appropriate, least restrictive education for deaf children, because they use ASL.

The debate that has raged in America for over a hundred years on the use of the “oral” method or the “manual” approach in deaf education has been viewed as a complex question of educational methodology, as a political issue of language use within a country, as a medical issue of impairment or implants, and as a

Lane, 140.
handicapped issue of discrimination and ignorance. But until recently, little real progress has been made that has truly helped the children that the whole controversy revolves around. Deaf students still fare worse than hearing students, appallingly so.

**Oral Programs**

The oral method is used today in many schools which teach deaf children. This method utilizes any residual hearing the child may have, amplified with hearing aids, along with speechreading, in order to teach the child English, and to teach the child everything else she learns in school using English. In oral programs, children are drilled in listening, speaking, and lipreading. Hearing aid amplification is very important in these programs; often the children are on FM receivers to which the teacher has the corresponding transmitter. This enables the teacher's voice to be amplified directly to each child's ears. These devices are known as "auditory trainers." They are used to "train" the deaf child to hear and speak.

There are several reasons why deaf children are taught to speak English. One is that hearing parents may want their child to be able to communicate with family members and other hearing people. Ninety to ninety-five percent of deaf children are born to hearing parents. Some parents want to keep their child in the "mainstream" hearing culture. Parents may see their deaf child as handicapped and consider speech one way to make her "normal" and to reduce the visibility of the handicap. This is a view that is perpetuated by the medical establishment, and often by the educational establishment. In this view, unless a child can appear to be hearing, i.e. by speaking, the child will be marked. Parents may feel that their child will be stigmatized as "different" or stupid because she can't speak. Sign language is often regarded by those ignorant of its true structure as not being a language but a
primitive method of simple gestures; it is often derided, as are those who use it.

Other people feel that there is no reason to teach deaf children anything but English. The arguments is that they are living in an English speaking country and the language of the majority is what they should be taught and educated in. Other people feel that a deaf child will never learn to read English and be literate without learning spoken English first, as ASL has no written form. Another reason for teaching deaf children English may be that most teachers of the deaf are hearing and do not want to learn another language, ASL, in order to teach these children. This last one is the main reason for English being used in deaf education programs, according to Harlan Lane, who believes the “understandable reluctance of hearing teachers to master a language radically different from their own continues to have the greatest weight in what are misrepresented as pedagogical decisions.” But regardless of the reasons behind the policy, oralism and oralist philosophies were prevalent in deaf education for over half a century, and continue to be used both in public schools and deaf schools.

The biggest critique of oral programs for deaf students is simply that they do not work. To teach a deaf child to speak fluently, and to understand speech is a nearly impossible task. For the child who is prelingually deaf (one who became deaf before she acquired any speech), linguistic input is severely restricted. The deaf child of hearing parents will have little or no linguistic input during her very early years; many children are not diagnosed with hearing losses until the time when they would normally start to talk. Deaf children in this situation are faced with the task of trying to learn to speak and understand a language they have never heard, or at least have never heard clearly. Deaf children may not even have a concept of what language is at that point. Imagine trying to learn a foreign language by

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*Lane, 116.*
watching a videotape of someone speaking that language— with the sound turned off. For profoundly deaf children, this often amounts to how they are taught English.

Hearing aid amplification may work for children with less severe hearing losses, but hearing impairment is not simply a matter of “turning up the volume.” Hearing aids do not function in the same way that eyeglasses do for people with vision problems. A “clear, undistorted, and useful speech signal” involves more than amplification, and presents difficult problems, especially to children with more severe hearing losses. Most sensorineural hearing losses are usually worse for the higher frequencies, those frequencies in which the consonants of English are produced. However the range of frequencies at which both speech and other sounds are heard create problems for hearing aid amplification. “Put simply, the problem is that if you provide a hearing aid with sufficient gain (amplification) to raise sensitivity thresholds by a suitable amount, then there will be some speech sounds and some background noise which will exceed LDL [loudness discomfort level].” Although this problem can sometimes be corrected by a technique known as “peak clipping,” which cuts off all sounds beyond a certain level, this process creates additional distortion in the signal.

Speech and the decoding of it by the human auditory system is a highly complex matter. Frequency (pitch), intensity (loudness), duration, and structural representation must be coded and analyzed, and then features of individual phonemes (the smallest unit of a speech segment) must be recognized. The phonemes are combined into words, then into phrases and sentences, according to

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“Bamford and Saunders, 103.
the rules of the language spoken. To add to the difficult processes involved, the same segments and even whole words can sound different, and have a different acoustic structure, in different contexts or different phrases. The shape of the mouth and the articulators involved in the formation of the phoneme are influenced by the environments of the preceding or following phonemes. Also, different speakers, and influences such as gender and age, will create different patterns in speech that affect properties of the speech signal as well. In addition, listeners use their knowledge of the syntax and semantics of the language, and even the pragmatic content of the discourse to make predictions about what words they may be hearing. All of this means that “it may be very hard to say what properties a phoneme has that are common from one instance to another, yet the normal listener is able to recover these phonemes from the speech stream with ease.” Deaf children have to be specifically taught how to do what comes naturally to hearing people.

In people with hearing losses, different parts of the recognition device may be affected. Frequency perception, and especially perception of changes within frequency (which give cues to place of articulation) may be lost. In addition, the deaf child will not be able to make predictions based on context and general knowledge of the language in order to augment the phonetic information received, due to the limited and restricted input received in the early years. Because of this, learning a spoken language for the deaf child is extremely difficult. As a result, “for many students, the language of the community becomes neither their first language in the sense that they may never achieve native-like grammatical competence in the language, nor... a second language, in the sense that they may not be exposed in

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12 Stark, 100.
early life to any other language they can readily acquire.\textsuperscript{11} The impact of not having a language, of not having access to communication or culture is isolating and can be detrimental to cognitive, psychological and emotional development.

\textit{Lipreading}

Many people believe that if a deaf person can't hear, the next best thing is to learn to lipread. While this may prove beneficial to some extent to those individuals who lose their hearing gradually, after oral language has already been acquired and mastered, it is not as helpful to the prelingually deaf child. It is impossible to learn to lipread adequately without prior knowledge of English; it is impossible to learn English solely from lipreading.\textsuperscript{13}

Lipreading is the practice of watching the lips and often the entire face to "read" the words a person is speaking. Unfortunately, there are many sounds in English (and most other languages) that are not made using any distinguishable lip movements. Only about 40\% of the phonemes of English can be discerned through lipreading. Most teachers of lipreading will acknowledge that much of lipreading must come from the context of the conversation. For deaf children, who are unfamiliar with even the idea of language, context is not helpful for figuring out the words spoken. This is because the child has a severely limited vocabulary and knowledge of the pragmatics of discourse. She may not know that a certain word is appropriate for a given context, or even be able to figure out what the context is, depending on her experience with the language. Many deaf children essentially memorize words that they may not understand, or know how or when to use appropriately. Even if they additionally memorize the appropriate situations for

\textsuperscript{13} Virginia Swisher, "The Language Learning Situation of Deaf Students" Tesol Quarterly, vol 23. no2, June 1989. 239.

usage, they are not learning the language in anywhere near the same way a
normally hearing child learns a language. In addition, while knowing the context
may help limit word possibilities, it is still possible that the word choices cannot be
distinguished from lip movements.

Every book that I found on the subject of lipreading was explicitly written for
those people who lost their hearing later in life. All stressed the idea of using
context to figure out what was being said; some gave explicit exercises developed for
different situations and the words that might be encountered in those contexts.
Also, most stressed the idea that if you know the context, you don’t have to
understand every word in order to understand the gist of a sentence. Imagine
spending your life merely “getting the gist” of everything that was said to you. This
is more than most deaf children will get from lipreading.

Basic English Phonetics and Lipreading Ability.

The consonants of English can be classified according to where they are
articulated and how they are articulated. The vowels are classified according to the
rounding of the lips, the tenseness of the tongue and lips, and the placement of the
tongue. Consonants may be voiced (with the vocal cords vibrating) or unvoiced
(the vocal cords not vibrating.) In English, all vowels are normally voiced.

The most visible consonants are those formed on the lips. /b/, /m/, and /p/
are bilabials; /f/ and /v/ are labiodentals (articulated using the bottom lip and the
top teeth.) However, while these sounds can be “seen” on the lips, the bilabials can
not be distinguished from one another, nor the labiodentals from each other. This
is because voicing and nasality, the distinguishing features of the phonemes, are not
at all visible. Dental sounds, those most visible after the labials, include the “th”
sounds heard at the beginning of “thin” and “that,” (which are represented in the
phonetic alphabet as /θ/ and /ð/, respectively.) They are formed by the tongue touching both the top and bottom teeth. The only difference between these sounds, is again, voicing, which cannot be seen. Moving further back in the mouth, the alveolar sounds are those articulated with the tip of the tongue touching the roof of the mouth behind the front teeth. These sounds include /t/, /d/, /n/, /s/, /z/, /l/, /r/, /sh/, /ch/, /j/ (the second ‘g’ sound in garage), and /j/ (as in jelly). All of these sounds are much more difficult to see, and none can be distinguished from the others by sight alone. The differences between them are based on voicing, nasality, manner of articulation, and slight differences in place of articulation. /y/ is made further back in the mouth, in the palatal region. It generally cannot be seen at all. The velar sounds, those made when the back of the tongue touches the velum, or the soft far back of the roof of the mouth, cannot be seen at all. These sounds are /k/, /g/, and /ng/.

The vowels are more difficult to describe. There is no distinctive point of articulation for vowels, unlike most consonants. The place of articulation for vowels is a small area of the palate, and the particular place is determined depending on the place of articulation of the preceding and sometimes the following consonants. In phonetic terms, vowels are classified as high, mid, low, front, back, rounded, unrounded, lax or tense. All back vowels include some amount of lip rounding, and for that reason, they are probably the easiest to “see” on the lips. These vowels include the sounds in ‘boot”, “put”, “boat”, “bought”, and “bout”. Tense vowels may be easier than lax vowels to identify because the advanced tongue root used to make these sounds is often accompanied by more tense muscles in the face than when a lax vowel is articulated. Lax vowels are the ones in the words “bit”, “bet”, “bat”, “put”, and “butt”. In addition, some of these
sounds are not rounded and will be harder to distinguish for that reason as well. However, while the vowels may be distinguishable in contrastive pairs, they are most indistinguishable in isolation within a word.

Research on lipreading ability by Quentin Summerfield (1991) shows that some consonants and most vowels can be distinguished by lipreading alone, but only if the conditions are right. These conditions, not surprisingly, include the placement of certain consonants and vowels surrounding the to-be-read sound, as well as familiarity with the speaker and lighting conditions. Needless to say, “in fluent speech, the optimal conditions... are rarely found.”

To truly understand the difficulties of lipreading, try to do it yourself. Have someone mouth the following pairs of sentences to you silently, without emphasizing any of the lip movements, but saying the sentences in as normal a way as possible.

1. Where’s my watch? / Where’s my wallet?
2. Do you have the time? / Do you have ‘a dime?
3. I like to dance. / I lied a lot.
4. What’s your name? / Who just came?
5. I’m going out. / I’m not allowed.

See if you can determine which sentence they said. Try it yourself in a mirror and see if you can distinguish the differences your mouth and face make with each sound. Be careful not to speak with exaggerated movements or to open your mouth any wider than normal. Speak at a normal rate. Then have your partner say any sentence of more than five words. Can you figure out what they said? Try to hold a conversation with your friend saying everything silently. Try it knowing the subject that your friend is talking about, and without knowing what they’re

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18 Summerfield, 119
going to talk about. Some of these exercises may be easier than others. Some are probably nearly impossible. All demonstrate different difficulties of lipreading. Imagine trying to listen to an entire lesson in school in this way, to have conversations with people you don’t know, to follow homework instructions, to communicate with your peers. A study conducted in Great Britain reported that deaf students are no better at lipreading than the average person, and that two-thirds of teachers of the deaf find their own students’ speech to be hard to understand or utterly unintelligible.¹⁷

In Seneca, a Native American Indian language, linguists have discovered that there are no labial consonants, and the “rounded” vowels are formed not by lip rounding, but by the height of the jaw and lips.¹⁸ There appears to be a psycho-acoustic unity of speech sounds, meaning that all speech sounds cannot be seen on the mouth, nor can the place of articulation necessarily be determined according to the usual auditory cues. This creates additional arguments against speech reading by reducing the number of visible speech sounds and hypothesizing the impossibility of determining sound by lip movements.

Achievement in School

In addition to the difficulties of teaching a deaf child to speak and “hear” or lipread, placing such emphasis on oral language is often at the expense of the rest of the child’s education, and their psycho-social development. A survey of mainstreamed hearing impaired high school sophomores found that in comparison to their hearing schoolmates, significant differences were found for the following factors: the hearing impaired students spent less time on their homework, failed to complete their homework more often, had lower educational

¹⁷Lane, 129.
aspirations, and were less goal oriented with respect to their future careers. The authors tentatively attribute these differences to the absence of positive adult hearing impaired role models in the students' lives. Other possible factors may include low expectations of teachers and parents for hearing impaired students, the decreased comprehension and socioeconomic stability experienced by the hearing-impaired students, and the method of communication employed by the school program. Unfortunately, these factors were not included in the study and so speculation as to their effects cannot be made.

In another critique of the educational environment of deaf and hearing impaired students, it was noted that one factor that contributes to the filtering out of linguistic input to the deaf child is likely to be "damage to motivation caused by constant frustration in learning." For a child who cannot hear and is forced to spend large amounts of time concentrating on language input that is not clear or not available, as well as the stigma that may accompany the child's inability to use English, the motivation to continue and to pay attention to what speech signals are available can be decreased and success in school affected. Another researcher notes, "If the cost of trying to say something is confusion and a probable failure to 'get it right' it seems perfectly understandable that children should want to keep a low conversational profile." Not being motivated to speak is sure to result in a decreased attempt at speech and thus less comprehensible speech, proliferating the cycle of inability and lack of motivation.

One of the most often cited educational failures of deaf students is their difficulty in reading English. Some of the figures that I have read include:

20 Swisher, 246.
The average 16-year-old deaf student reads as poorly as the average hearing 8-year-old.\textsuperscript{22}

Only 4\% of deaf students can read complex subject matter at the end of their schooling.\textsuperscript{21}

75\% of deaf school graduates do not have the ability necessary to read a newspaper.\textsuperscript{24}

Half of deaf high school graduates read at the level of hearing fourth graders.\textsuperscript{25}

The development of literacy is crucial to the success of children in school, and in life. Texts and newspapers, tax forms, job applications, captions on television and teletype phones; all are vital for education, information, independence and more, and all use written English— the deaf child must be able to read English. Currently, most cannot. In addition, deaf students have trouble writing English. Certain syntactic structures of English are difficult for them to grasp. The result is frequent grammatical errors, such as the misuse of function words (determiners, prepositions, conjunctions), incorrect subcategorizations, and anomalies in constituent structure. Furthermore, some researchers have attributed these errors to the way in which deaf students are taught English. (Wilbur, 1977; Bochner and Albertini, 1988) Both written and oral language are usually taught sentence by sentence or even word by word, with little or no emphasis on discourse or the learning of syntactic structures in context.

Role of Educators

\textsuperscript{22} Lane, 130.
\textsuperscript{23} Lane, 131.
\textsuperscript{24} Lane, 131.
Clearly, educators are not succeeding in teaching English to deaf students, and it is questionable whether they are teaching them anything else. In most schools, "Education is not the preoccupation of the classrooms for deaf children; English is."26 If the emphasis in the classroom is English, what happens to those subjects which typically constitute an education? If English isn’t understood, what happens when the rest of the education of the deaf student is conducted in English? In 1988 a Congressional Commission on the Education of the Deaf reported that “the present status of education for persons who are deaf in the United States is unsatisfactory. Unacceptably so.”27 However, the Department of Education has yet to implement any of the suggestions of this Commission, and deaf children continue to be hurt by well-meaning but misdirected and misinformed educators.

One such educator, J.K. Reeves, worked in schools for the deaf in England for over twenty years before he wrote a paper entitled, “Scope for Oralism,” in which his oral English bias and misinformation can clearly be seen to have hurt the deaf students at the school where he was headmaster.28 Reeves begins his paper by stating that “the method of communication to be used in the classroom is not a broad educational matter but rather a peripheral affair which is of secondary or even tertiary importance to major issues” such as the provision of good teaching, improved training of teachers and an adequate supply of good teachers. While the other factors he notes are indeed crucial, Reeves has overlooked the problem of which language and which method of communication to train the teachers in, and whether all methods of communication provide an equally adequate education to the child involved.

It is clear where Reeves stands in the “oral/manual debate” even though he

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26 Lane, 134.
27 Lane, 132.
contradicts himself. At the same time that he dismisses Sign Languages as “grotesque,” “ungrammatical” and “not suitable for language learning” or “educational purposes,” (all of which are grossly incorrect assumptions), Reeves acknowledges that “of course manualism was practiced widely in out-of-school time” and “was a ready means for rapid communication.” Apparently Reeves believes that such ready and rapid communication is unimportant to a child’s development and education.

In addition, Reeves displays a condescending air regarding the severely deaf students at his school, stating “they functioned as well as they were able in any kind of educational environment,” implying that their difficulties were not a matter of the educational environment, but of their hearing loss. It’s hard to understand why Reeves promotes the oralist method when he admits that even with better staffing, more equipment and individual help than other programs of the same type, the students at his school achieved poorly in “speech, language development, and general educational attainments.” His general conclusion is that lacking formal communication skills was not a major drawback however, as the students had “a good oral attitude with the expectancy to have to cope in a speaking environment, a pleasant and stable personality with a willingness to adapt to circumstances as required, and above all, an eagerness to please and be pleasant.” He condescends to deaf people again when he tries to explain away criticism from deaf adults educated through the oral method by asking, “Can it be that they do not fully appreciate the nature of deafness? It is both a handicap and a disability. These young people seem to be attributing the fundamental disabilities of deafness to oralism instead of appreciating the degree to which oralism has helped them overcome the extent of their handicaps.”

While certainly this is an extreme case of audist/oralist hypocrisy and
prejudice, the results of educational and communication achievement for the children at Reeves’ school are sadly consistent with those found for oral programs in the United States. In addition, his position of authority as headmaster of a deaf school would be taken by most parents to be an indicator of his ability to judge the progress and future hope for their child. However, his attitudes are prejudicial, misinformed, and potentially harmful to the many deaf students he was supposed to be serving.

Total Communication Programs

In the 1960’s more attention began to be paid to ASL by linguists such as William Stokoe, who in 1960 published *Sign Language Structure*, the first book identifying Sign as a true language with a syntax, semantics, phonology, and morphology of its own. Coupled with the general Civil Rights movement of the sixties, which included handicapped groups advocating for rights, more attention was focused on the deaf community and manual language. In 1968 the first “Total Communication” program was begun in a school for the deaf. Total Communication was heralded by some in the Deaf community for its acknowledgement of the benefits of using manual communication with deaf children. Total Communication is an educational approach for deaf students which combines sign language with fingerspelling, speech, speechreading, and auditory training for communication between the teacher and students. In some schools, Total Communication programs are also known as sign supported speech, emphasizing the commitment to using spoken language, with sign as an additional form of communication.

The sign language used in most programs is one of the many auxiliary

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*Lou, 81.*
systems of manually coded English developed exclusively to be used for teaching
deaf students to read and write English. It is not American Sign language, although
most of these systems use a certain number of ASL signs. The ASL signs are
combined with some invented signs, some signs for English inflectional
morphology (affixes such as tense markers, plural markers, adverb and adjective
suffixes), and for pronouns, prepositions, and conjunctions. All signs are presented
in English word order. These systems were developed to be used simultaneously
with speech. There are several of these systems; Seeing Essential English (SEE I),
Signing Exact English (SEE II), Linguistics of Visual English (LOVE), and Signed
English. The two most commonly used in Total Communication programs are
Signed English and SEE II.

In the creation of these systems, the choice of whether to use an ASL sign or
whether to invent one was based on the three characteristics of the word in English:
its spelling, pronunciation, and meaning. If two of the three factors were the same,
then the same sign was used for both words, even if different signs exist in ASL.
This created sign homonyms in the systems, such as right meaning correct and
right meaning privilege, which have different signs in ASL but are the same in SEE
II. "This has been criticized as being unwarranted and unnecessary, given the
existence of separate signs in ASL and the difficulty that may occur for the student
who must understand the sign, "although it is expedient for the inventors of a
system."" It is also helpful to the teachers, who need only learn new vocabulary,
rather than an entire language. This overlooks that it is supposed to be helping deaf
children.

In addition, the added inflectional signs mean that a single word in English
may be represented with more than one sign in the artificial systems. Since this

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38 Bochner and Albertini, 9.
39 Bochner and Albertini, 9.
system was developed to be used simultaneously with speech however, this fact makes the objective of simultaneous communication nearly impossible, and it is mainly for this reason that the goal of Total Communication fails. Teachers and parents who use this system do not succeed in giving to the child either a complete spoken signal or a complete signed input, due to the difficulty of doing both at once. First, it has been questioned whether a child can attend to both lip movements and hand movements at the same time. Also, for the signer/speaker to use two modalities at once means that the user must either reduce the rate of speech or leave out some of the signs. Since the people using the system are fluent speakers they usually end up dropping signs. Research on both parents and teachers using manually coded English systems has shown that the signs that get lost are usually those signs that represent English function words (articles and prepositions) and affixes. Ironically, these are the very features of English that auxiliary systems were designed to capture. Also, nothing in the signing of the word tells the child seeing the message that the inflections are attached and subordinate to the main sign, because all signs are stressed equally. One researcher laments, “Thus the model of English presented to the children is at best incomplete and at worst grossly ungrammatical.” Other researchers have found that some teachers in supposed Total Communication classrooms use primarily speech but “shout” an occasional sign, such as the subject of the sentence and the uninflected verb. Others may not even do that. A child in such a class receives almost no linguistic input, since the

33 Swisher, 244.
35 Lane, 134.
majority is in oral English and manual language input is inconsistent and often incoherent.

Further complicating the issue is that in some Total Communication classrooms there may be more than one teacher, both of whom use different systems for communicating with the children. In one study specifically, where there was a deaf teacher in the classroom, it was found that the communication styles and strategies of the hearing and deaf teachers differed drastically. The hearing teacher was found to mistranslate English words into signs, sign sentences that were incomprehensible because of inaccurate and incongruous signing, and assumed that the children would learn English just by being exposed to the signed model presented. The deaf teacher, in contrast, rarely mistranslated words, used contrastive examples to show the differences between the signed English and ASL, and overall provided a “more consistent and accurate model for learning English.”

Unfortunately, only 13.6% of teachers of the deaf have a hearing loss, and half of those that do are at the high school level; in preschool, when language learning is most crucial, only 5% of the teachers are hearing impaired.

Students in Total Communication classes are often at different language levels, with some having been through oral programs and having various degree of oral or lipreading ability; a few may have knowledge of ASL, and others may not have any language abilities at all. Students in Total Communication classes who already have a familiarity with ASL may become confused, since the sign systems, though similar in certain respects, have a different morphology and syntax from ASL. And since the sign systems and English are supposed to be used

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37 Erting, 193-4.
38 Erting, 193.
simultaneously but aren’t, the children become confused about which language is which. This problem is due to the fact that “since deaf children are instructed in English (whether successfully or not) from the time they are very young, they may associate signs in a one-to-one way with English words and, lacking instruction in the difference between ASL and English, may have very little understanding of the fact that they may spontaneously be using different linguistic systems in different contexts.”

The Structure of American Sign Language

By adding invented signs for pronouns, and for English inflectional morphemes, and by confining signs to English syntax, manually coded English systems ignore or destroy much of ASL’s true nature, its singular capacity for expressing thoughts and ideas, concepts, in a way that is not possible in spoken languages. The structure of ASL has been studied increasingly over the last twenty-five to thirty years, beginning with William Stokoe’s assertion in 1960 that ASL was a true language, not just a crude but useful series of gestures. Now linguists know that ASL is as much a natural human language as any other, the main difference being that it is manual and visual rather than oral and auditory. ASL has a phonology, morphology, syntax and semantics entirely separate from English or any other spoken language. ASL differs from a spoken language in the use of space to denote spatial locations, arrangements, and manner, direction and rate of movement. ASL signs are formed in a limited space around the signers body, as shown in figure 1.

Phonology in ASL has also been called cherology because it is a language based on signs, not sounds. ASL signs are made up of specific cheremes, just as

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Swisher, 248-9
English words are made up of phonemes. The basic cheremes in ASL involve hand configuration, place of articulation, and movement. These are the formational parameters of ASL phonology, combined to create different signs. Other things such as the direction of the movement and whether the sign uses one or two hands are also important but these three features have been defined as the most important components of a sign, similar to place of articulation, manner of articulation, and other phonological characteristics of spoken languages. In this way, ASL has minimal pairs in the same way that English and other spoken languages do. Figure 2 gives some examples of these minimal pairs.

An interesting feature of ASL morphology is its inflection system. Both verbs and nouns can be inflected for a variety of meanings, making each word carry considerably more information than single words in English. These inflections take advantage of the three-dimensional capacity of a signed language. For instance, in ASL a word can be inflected for several different aspects, including predispositional
Figure 2. Minimal Pairs illustrating major formal parameters of ASL. (From Poizner, Klima and Bellugi, 1987. 4.)

a) Signs differing only in hand configuration.

b) Signs differing only in place of articulation.

c) Signs differing only in movement.

(“characteristically”), susceptative (“easily”), continuative (“for a long time”), frequentative (“frequently”), incessant (“kept on”), intensive (“very”), approximative (“sort of”), resultative (“became”), iterative (“again and again”), and protractive (“uninterruptedly”). Each of these inflections is added not by additional signs but by the way the signs are created, by different movements, shapes or repetitions. Some of these aspects can be combined. For instance, in ASL one sign may mean “frequently susceptible to illness” by combining both

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frequentative and susceptative aspects onto the sign for “sick,” as shown below.

Figure 3. Aspectual modulations on SICK. a) Uninflected SICK b) Susceptative and Frequentative aspects (Klima and Bellugi, 248 and 263.)

Other ways that verbs can be inflected can indicate different kinds of meaning changes. Within a verb, deixis, reciprocity, number, and distribution can be indicated by the way a sign is formed. For instance, to sign “I hit her,” and “She hit me,” the only thing that needs to change is the direction of the verb as it is signed. This is because in ASL the arguments of the verb are signed in distinct locations, and those locations serve as pronouns for the rest of the discourse. The arguments can be referred to by pointing or by eye movements in subsequent mentions in the conversation. Verbs can “act” at a location to signify the action on the person or thing denoted by the location. In this way, “We hit each other,” “I hit them,” and “I hit each of them,” can be stated just by signing the verb in a different direction.

Classifiers for persons, vehicles, and inanimate objects are present in ASL, as well as classifiers for sizes and shapes, including cylindrical objects, flat rectangular objects, small spheres, and cubes. These would generally be denoted by hand shapes. All of this added information in the form of classifiers and inflections means that a sentence in ASL takes about half as many words as the equivalent sentence in English. Because the signs take longer to make however, the overall

\[ \text{Klima and Bellugi, 263.} \]
time for the sentence is about the same in both languages.

A syntactic feature of ASL includes its generally free word order. This does not mean that it is ungrammatical, as was once believed. There are many languages in the world with freer word order than English, which is confined to subject-verb-object order for most constructions. Another difference between ASL and English which was originally taken to be proof of the agrammaticality of ASL is the idea of tense and how it is conveyed in ASL. In ASL, tense is denoted not within a verb; the sign which would be translated "walk" and the sign which would be translated "walked" are the same. ASL denotes time in a different way. Researchers refer to the ASL time line. (See figure 4.) Time is signaled at the beginning of a conversation and all discourse following is assumed to be in the tense appropriate to that time until a change is indicated.

Figure 4. ASL time line with points of reference for past, present and future. (Klima and Bellugi, 82.)

It's important when translating from ASL that the distinct meanings incorporated into the movement of each sign are translated as well, for ASL has
much information that is carried by facial expression, by motion, by classifiers denoting characteristics and spatial relations. ASL, as a manual/visual language has possibilities for expression that are simply not possible in spoken languages in quite the same way.

Achievement Levels in Total Communication Programs

Ultimately, programs using auxiliary sign systems fail to provide adequate communication to the majority of students. One critic explains,

The goal of Total Communication is to take the best of both oral and manual approaches and tailor them as far as possible to the communication needs of individual students. However, as put into practice by schools, a 'total' approach has too often been wrongly equated with simultaneous communication. Too many programs have ended up using both oral and manual methods inadequately. That is, listening and speech skills are not taught sufficiently, while the information conveyed by the manual and nonvocal components of most teachers' communication is linguistically incomplete and nonsystematic.

It should be clear that the downfall of the Total Communication system is that as with oral programs, they generally fail at the goal of teaching deaf children English, with the added failure that the students do not become fluent in any signed language. Despite programs that focus heavily on the acquisition of English, deaf children taught using manually coded English do not become fluent in English, they attain neither native nor near native abilities, nor have significant differences in better English and reading been documented for deaf children educated in Total Communication programs.

Proposed Changes for Oral and Total Communication Programs

The reality of education for deaf students is that it's not going to change

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42 Lou, 94.
43 Rudser, 103-105.
quickly. Some hearing parents are going to continue to want their deaf children to be taught only to speak and lipread, and some educators are going to continue to use Total Communication, and manually coded English to teach deaf children. Although there are flaws in these methods, some of which I feel can never be overcome, there are ways that these programs can be adapted to be as good as they can, to serve children better. These are some suggestions for currently operating oral and Total Communication programs.

Oral Programs

In oral programs I feel that much improvement can be made on the level of teacher training. Many teachers of the deaf have no particularly strong training that qualifies them for the task of teaching these students. Some have a general course for teaching all handicapped or special education students. Others have taken in-service courses on the education of the deaf. Teaching deaf students requires more knowledge of language and language learning than this preparation provides. First of all, teachers should have a good understanding of the phonetics of the English language. This will be especially useful in attempts to teach the children to lipread and to provide a clear signal for the children. It will also help in teaching the child to speak more clearly. Although deaf children generally get instruction from a speech therapist, more help from the classroom teacher would undoubtedly be useful to the students.

Teachers also need to be aware of the nature of deafness. They should be sensitive to the noise level in the classroom which can impede the signal from hearing aids such as to render them almost useless. Curriculum materials should be sensitive to the realities of a life as a deaf person. Talking about TTYs instead of telephones, incorporating visual stimuli as much as possible and not including
materials that focus on hearing would present a more positive and relevant learning environment for the deaf child.

Teachers also need to be aware of the isolation and loneliness that can result from the delay of communication. Efforts should be made to encourage the children to relate to each other and to other children at the school. Any attempts at communication, including gestures and Sign should be encouraged. Teachers should have some knowledge of ASL, at least for basic words. Improved communication in any way ought to be encouraged. There is no proof that using signs interferes with a child's spoken language learning.

Literacy development needs to be focused on and methods improved. The field needs more research focusing on how deaf children who do learn to read do it, and teachers need to expose deaf children to written English as early as possible. Children need to be taught language within a discourse, not just word for word or sentence by sentence. Wilbur has asserted that, "as long as the modifications in syntax that arise from pragmatic context are ignored in language programs, deaf students' facility with English will continue to be stilted and stereotyped." Language abilities at the level of spoken words do not reflect the ability to write or read. More attention to this area is crucial.

Teachers and parents of deaf children need to have higher expectations for the academic, social, and emotional development and success of the students. Higher expectations lead to higher achievement levels. Settling for a fourth or fifth grade reading level for a sixteen- or eighteen-year-old student is unacceptable.

**Total Communication Programs**

In addition to the recommendations for the Oral Programs, there are

suggestions which are particular to Total Communication programs. First of all, teachers need to be sure to use one consistent manual system. If there is more than one teacher in a classroom, they should both use the same form of signed language. Knowledge of ASL and the ability to point out differences between ASL and whatever MCE system is used in the classroom will help those children who know ASL to be clear about the differences between ASL and English.

Getting spoken language can be beneficial to a child, but only if she understands it. Similarly, getting manual language can be beneficial, but only if it is understood by the child. Teachers must use the manual language consistently. There’s no point to a Total Communication classroom if it’s essentially oral. Every word that the teacher says needs to be represented in sign, not just the subject and verb of the sentence, or the topic of the lesson. If the point of an auxiliary system is to teach the child English, then English components of the signing system must be signed as well.

Further, teachers should not assume that because a child is getting information manually that she will be able to learn that language automatically by being exposed to it. Children need to be taught a language system— because MCE systems are not natural languages, they will not be acquired with the ease that ASL or other natural languages are.

Bilingual-Bicultural Programs

Deaf children need more than what most programs currently offer, even if improved. They need a complete language system, one they can use and understand readily. They also need to develop skills in English so that they can read and write. The solution to providing deaf children both with access to a complete language that is easily acquired by them as well as giving them a strong
basis in English, and with it the development of literacy, can only be in the
development of a bilingual program. Wilbur and Charrow noted as early as 1975
that, "Once ASL is established as a means of communication, teachers can then use
it as a medium of instruction for all subjects, including English— which can be
taught along with speech, speech reading and reading." More recently, Rudser
noted that by ignoring ASL, educators prevent children "from being educated in the
language they can most reasonably be expected to master. Hence the children are
denied the strong linguistic base that could be their greatest support in learning
English as a second language." He advocated "planned bilingual education with
the language of their community as the first language and the language of the
majority community second [as] a reasonable approach to the problems facing deaf
education today." As a reaction to the poor achievement of deaf students, and on the advice of
linguists and educators, a new method of educating deaf children has begun in a
few schools. The most recent development in deaf education involves a program
of bilingual-bicultural education. The bi-bi method uses ASL as the child's first
language, and teaches English as a second language. Teachers practice "voice off,"
with ASL as the sole method of communication in the classroom. Once children
have a firm basis in ASL, they are taught English. Much of the rationale for
teaching deaf children in bilingual programs comes from evidence from bilingual
programs for hearing speakers of other languages.

Teaching deaf children English as though it were a second language makes
sense in light of the linguistic situation deaf children are in. It also avoids
comparing deaf children to hearing children and finding them to be handicapped

4 Wilbur and Charrow, 356.
4* Rudser, 105.
4* Rudser 106.
and in need of English as a “cure.” Rather than forcing children to be like hearing children, and emphasizing their handicap, this method acknowledges that their difference stems from a different modality—a focus on manual, rather than oral language. Deaf children can be compared to other non-native speakers of English in that English is not learned as a first language. Deaf children have to learn English in school because they cannot receive a model of an oral language at home, and without such a model, cannot even learn written English natively.

Deaf children are able to learn ASL spontaneously, as a native language, if provided with a model at a young age. For this reason, ASL is the first, native language of deaf children of deaf parents, as well as deaf children of hearing parents who learn it young. There are other similarities between deaf children and other non-native speakers of English. Deaf errors in English grammar are more like the errors of second learners of English than native speakers. These “deafisms” are rule governed errors caused by the incorrect hypotheses about the language which cannot be corrected because of the limited exposure to English that deaf children receive. In addition, speakers of ASL form a language community and culture in the same way that speakers of other languages do. Central to bi-bi education is the notion of Deaf culture, and the realization that language is embedded in culture—for Deaf students, the culture of ASL speakers is taught and legitimized. Having deaf role models and knowledge of the Deaf community can give to the young deaf person the realization that higher goals may be met, and empower the student with pride in a difference rather than shame in a handicap.

Deaf Culture

There is a Deaf community in America, a Deaf culture, that may be little

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4 Wilbur and Charrow, 356.
known to those outside of it. This community is brought together by common interests, a shared background, and a language. The Deaf community crosses boundaries that other cultures may not, boundaries of race, ethnicity, religion, that add to the cultures rather than dividing it. Being a member of Deaf culture is not equivalent to being without hearing, for one might be deaf, but not Deaf. People who have lost their hearing at an older age are usually not a part of the Deaf community, thought some might be. People who have been brought up to speak and lipread and who do not use ASL are not part of the Deaf community. People who learn ASL, who consider it a unique language that they want other people to learn, who want deaf children to be educated using ASL, who enjoy the rich social network of other Deaf people, are a part of the Deaf community.

This is not to say that all people who consider themselves Deaf are the same, and I cannot hope to give an adequate picture of what it means to be Deaf, or to be a part of Deaf culture. I can however, give an overview of some of the characteristics of the Deaf community in the United States today and discuss how that community views itself and its language, as recorded by Deaf people in books such as *Deaf in America*, by Carol Padden and Tom Humphries and by researchers in ASL and Deaf culture, in books like *The Other Side of Silence*, *At Home Among Strangers*, and *The Signs of Language*.

Deaf communities have often formed as a result of the bonds created at residential schools for the deaf, or in areas where there are colleges where many deaf students attend. Because over 90% of deaf children are born to hearing parents, this will often be the first time that deaf children are able to interact with other deaf children or to see deaf adults. For some, it is their first contact with ASL.

An important distinction between the Deaf view of deafness and the hearing view of deafness is that Deaf people do not consider themselves to be disabled in
any way. Padden and Humphries explain,

"Disabled" is a label that historically has not belonged to Deaf people. It suggests political self-representations and goals unfamiliar to this group. When Deaf people discuss their deafness, they use terms related to their language, their past, and their community. Their enduring concerns have been the preservation of their language, policies for educating deaf children, and maintenance of their social and political organizations. The modern language of "access" and "civil rights," as unfamiliar as it is to Deaf people, has been used by Deaf leaders because the public understands these concerns more readily than ones specific to the Deaf community.

Another way that we can see the differences between deaf and hearing views of deafness is to look at some of the terms for deaf people that are used by those in the Deaf community. DEAF is used to denote someone in the Deaf community. A deaf person who is ORAL, someone who lipreads and speaks rather than using ASL, is considered to have made bad decisions in life, to be aligned with the Hearing opposition, and possibly to be in need of "rescue" from the forces of the hearing world. One who is HARD-OF-HEARING possesses traits that are characteristic of hearing people, and someone who is THINK-HEARING is one who "embrace[s] uncritically the ideology of others." Each of these terms shows that the focus for Deaf people is one's alliance to the ideals of Deaf culture, and that deviation from these ideals is considered to be "hearing" regardless of one's capacity to hear.

Deaf culture also has its own poetry, its own theater, and its own humor. ASL poetry is characterized by an awareness of the structural properties of the language, including handshape and movement as well as by attempts to maintain a balance between the hands. The flow of movement is carefully structured in poetic

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51 Padden and Humphries, 53.
"art sign." The National Theater of the Deaf was formed in 1967 and the company continues to travel around the United States performing both translated and original theater in Sign. When the company first formed, most of the productions were in Signed English, but more emphasis on ASL has grown in recent years. Many deaf actors and playwrights are trained by the NTD. The cast of "Children of a Lesser God", the Tony award-winning Broadway hit, included several deaf actors who had been members of NTD. Deaf humor contains many jokes comparing the Deaf community to Hearing culture. Another source of humor for the deaf community is the creation of nicknames or invented signs based on the sounds of English words, but formed using ASL properties. Plays on signs and puns are just as popular in ASL as they are in English.

Differences between Deaf education and other bilingual education programs

Although bilingual programs for other spoken languages are used as a background for deaf bilingual programs, there are distinct differences between the situations. Traditional views of bilingual education in America generally see bilingualism as a negative trait, specifically for people who have English as the second language. English as a first language and some other language as a second language is accorded much higher status in most of America. For this reason, most bilingual education has been transitional, with the goal being for the child to eventually receive all instruction in English. This is not possible in the case of deaf students. Bilingual education can not be transitional, it must be continual, as bilingualism is ongoing in the lives of most deaf adults. Because deaf people can not

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52 Klima and Bellugi, 340-344.
53 Neisser, 256.
54 Neisser, 251-2.
55 Klima and Bellugi, 320.
rely on English for face to face language, but cannot rely on ASL for written communication, they must have two languages in order to function in life. An additional problem for bilingual-bicultural education is that 90-95% of deaf children will not receive instruction in ASL at home because their parents are hearing and do not use ASL. Nor are their parents members of the deaf community. Teaching the child about deaf culture and ASL becomes largely the responsibility of the school.

Developing More Effective Bilingual-Bicultural Programs

Although bi-bi programs offer what I feel is the best language situation to deaf children presently, there are still areas which need improvement. Some areas have not been researched enough or are simply still in the stages of being developed. While using ASL as the language of instruction is crucial, literacy skills in English are equally important. This is one area in which bi-bi programs must become more effective.

Recent work by Claire Ramsey and Carol Padden suggests that using ASL to map onto English texts, using ASL to point out the differences between the two languages, but allowing the languages to interact, are all useful in teaching written English skills to deaf students. Refashioning rhetorical devices in ASL to make details about printed English more explicit is one useful method they have observed being used by a native deaf signing teacher in a bilingual program.

Teachers also need to be able to interpret English texts for ASL speakers—because ASL is a polysynthetic language, a one-to one mapping is not possible. Yet the teachers need to be able to show the children the differences in the languages as well as teach them. Using ASL to do text analyses of English texts is one way to integrate

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the languages."

Reading ability by Deaf students has been found to be related to the phonological component of English, even though Deaf students can’t hear. Knowledge of the lipreading and practice speaking, supplemented with residual hearing can help in reading. It is for this reason that speech training should be included in the education of deaf students, not because they should be taught to speak, but because knowing something about the phonology of English may aid in reading English.

A teacher cannot be the only model of ASL or English in the classroom. Some educators and researchers suggest increasing interaction among the students in classrooms for deaf students. The students can serve as models to their peers. In the days when ASL was not allowed in residential schools, deaf children of deaf parents taught ASL to deaf children who had never been exposed to it before. If children could acquire ASL with no adult model, they can certainly be helped in their acquisition by other children in their classroom.

However, teachers themselves must be fluent in ASL. This may be one of the most important requirements for a teacher of the deaf. Teachers need to be able to produce and understand ASL that is used by children, not just standard ASL.

Teachers of other languages in bilingual programs are expected to be fluent in two languages, and the expectations for deaf programs should not be any lower. A problem with manual English and sign supported speech is that the teachers are not required to be fluent in the child’s language, but are given a system to make

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communication easier for them, not for the deaf child. This is unacceptable. As Rudser argues, "deaf children have the right to be educated by instructors who are skilled signers communicating in a language in which they are fluent. . . until this happens, until deaf children really have free and accessible communication in the classroom. . . teachers of the deaf cannot be said to truly serve the community for whom their profession exists."^{60}

Conclusions and Implications

Decrying the harmful attitude of society toward the handicapped prior to the passage of the Individuals with Disabilities Education Act, the authors of *PL94-142: An Act of Congress* write,

> A basic assumption underlined the perception society had of the handicapped— that they had problems in society because of their handicap, not because they lacked the education necessary for them to compete in society and enjoy a full life. Programs were aimed at correcting the handicap, altering the individual so that he or she could adapt. They were not aimed at upgrading the life of the handicapped, despite their handicap, or at changing the attitudes of the non-handicapped society toward the handicapped."

This attitude, is however, precisely the one espoused by those who used Pl.94-142 to place deaf children in the public schools, to shut down residential schools for the deaf, and to continue to teach deaf children using English, a language in a modality, oral and auditory, that they will never be able to use fluently, and to deny them the right to use a language which is naturally suited to them, American Sign Language. Harlan Lane, writing of the interest in cochlear implants among educators, bitterly states that "the profession of deaf education apparently believes that the best hope for deaf education is to provide it miraculously with hearing children."^{62}

[^60]: Rudser, 106.
[^61]: *PL94-142: An Act of Congress*, 13-4
[^62]: Lane, 176.
Deaf children are not hearing children. One deaf educator has noted that "deaf children cannot choose to be hearing people; they cannot shed their identity." They cannot be educated using the same language as hearing children. As long as they are, they will not be educated. Deaf children are also not the same as other handicapped children. They are bound by their language into a community, a culture of Deafness. While they may have a disability because the majority is hearing and uses speech to communicate, they have distinct linguistic and thus educational needs which cannot be legislated in the same way that other disabled children's needs are. Yet at the same time, theirs is not a typical bilingual situation. What then, are the most important needs of the deaf child, in regard to her education and how can they be met?

First, she must have a natural language as a first, early acquired language. The only option for the profoundly prelingually deafened child is American Sign Language. She must be educated using this language. But because this language has no written form, the child must also be taught to read and write English. In detailing the problems of deaf education, Sherman Wilcox explained, "one way that power has been withheld from Deaf students is the systematic confounding of their linguistic situation. As a result the development of literacy is both a problem and a solution." Literacy in English and fluency in ASL will necessitate a bilingual method of education, with teachers fluent both in ASL and written English. Further, this child's language is embedded in a culture, the culture of the Deaf community. The child should learn about this culture and have role models from this culture in her life, in her educational environment.

In order to teach deaf children, researchers need to look to those deaf children
who already have been educated. What worked and what didn’t? There are
successful deaf readers and writers. How did those deaf children who are now
fluent in both written English and ASL become skilled? Researchers and educators
need to work together to put theory into practice, to be aware of the realities of each
field. Educators need to respond to the individual needs of their students. Parents
need to express their opinions about how their children should be educated, and
educators and researchers have a responsibility to inform parents about the options
available, as well as respect the choices the parents make. All of these are ways in
which the education of deaf children can be improved.

Finally, deaf children need more deaf teachers to teach them, and more deaf
adults need to be consulted by deaf and hearing researchers. Lane asserts, “Where
a minority has a strong say in the conduct of the education of minority children,
where its adults are role models, where their language is used and hence children
are educated in their primary, most fluent language, education is more successful,
career aspirations are higher, the profession of teaching is opened to the minority,
minority language and culture tend to be legitimized, children grow up adapted
to— and proud of— their minority identity.”

Bilingual-bicultural deaf education offers a full education, fluency in a native
language, literacy in English, and pride in Deaf culture. Ideals can only be met with
persistence and determination, however, and awareness of pertinent issues.
Deafness must be viewed not as a medical condition requiring a cure, but as a
unique linguistic situation, and ASL must be accepted as a viable language of
instruction and utilized to promote English literacy instead of being ignored or
adapted to serve educators’ needs rather than children’s needs. Only then will deaf
children be on their way to receiving the education they have a right to.

43 Lane, 106.
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