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AUTHOR Stewart, David A.
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ABSTRACT

This paper argues that current practices in total communication classrooms have basically assigned the responsibility of communication to hearing-impaired students who must adapt to the variation in communication behaviors displayed by each of their teachers. The paper advocates use of a model communication and language policy designed to implement consistent linguistic input in the instruction of hearing-impaired students in total communication programs. The consistent use of a modified form of Signed English as the primary sign system and the use of American Sign Language as an intervention tool form the basis for establishing consistent linguistic input in the classroom. Following a rationale for adoption of such a policy, an appendix contains the communication and language policy that was developed for the Lansing (Michigan) School District's hearing-impaired programs. Two other appendixes describe the characteristics of modified signed English and provide a brief perspective of pidgin signs. (JDD)

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Abstract

This paper describes a model communication and language policy designed for school districts desiring to implement consistent linguistic input in the instruction of hearing impaired students in total communication programs. The policy is centered on the use of modified Signed English as the primary signs of the classroom and the use of American Sign Language as an intervention tool. The policy is designed to be used by teachers and administrators at the school level and hearing impaired programs at the university level in the preparation of teachers to work in total communication programs. Initially, a rationale for linguistic consistency is given.

A MODEL COMMUNICATION AND LANGUAGE POLICY FOR TOTAL COMMUNICATION PROGRAMS FOR THE HEARING IMPAIRED

David A. Stewart[1]

Introduction

Total communication is the major type of communication system used in classrooms with severely and profoundly hearing impaired students. Yet, the use of total communication in the field is characterized by linguistic inconsistency in the signing behaviors of teachers (Stewart, 1987). The lack of linguistic consistency may well be the single most important factor in the low English proficiency level of hearing impaired students. Teachers, however, are not entirely responsible for their signing behaviors. Teacher education programs have expended little effort to prepare preservice teachers adequately to meet the communication and language demands of their students. Compounding this problem is the lack of concise language and communication policies in most of our nation's total communication programs. The trend is for programs to endorse a specific sign system without defining parameters of the system and the manners in which it should be used. In the absence of formal and practical communication and language policies there has been little accountability demanded of teachers' communication behaviors.

The purpose of this paper is to describe a model communication and language policy that was developed for the Lansing School District's hearing impaired programs (see Appendix A). In this policy, the consistent use of a modified form of Signed English (see Appendix B) as the primary sign system and the use of American Sign Language (ASL) as an intervention tool form the basis for establishing consistent linguistic input in the classroom.

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[1]David Stewart is coordinator of the Total Communication Project (Improving Consistent Linguistic Input Into Total Communication Classrooms) and assistant professor in the Department of Counseling, Educational Psychology and Special Education at Michigan State University.

It is not the intent of this policy to endorse the pedagogical use of modified Signed English over other sign systems that are in use in many parts of the country nor to denounce the instructional use of pidgin signs (see Appendix C). Rather, this model policy is meant to demonstrate the capacity to establish principles for guiding the signing behaviors of teachers with respect to the type of signs used and the instructional roles of two languages in classrooms for the hearing impaired. Some school districts may wish to subscribe to other types of English sign systems (e.g., Signing Exact English, Seeing Essential English, Preferred Signs), use an English sign system as the primary language for some courses and ASL for other courses, or even use ASL as the primary language and an English sign system as an intervention tool. For these districts the present policy serves as an example of how consistency in linguistic input can be formally implemented as a goal for all teachers.

Following is a brief rationale for the use of consistent linguistic input in total communication classrooms.

Rationale

Since the term "total communication" was first coined in the late 60s by Roy Holcomb (Clarke, 1972) it has been defined in various ways. Denton (1972) stated that total communication is the right of a deaf child to learn to use all forms of communication in order to facilitate the development of language. Moores (1987) summarized the practice of total communication as consisting of the use of speechreading, amplification, signs, and fingerspelling to provide linguistic input to hearing impaired students while the students are able to use whatever modality(ies) in which they are best able to express themselves. Stewart (1982) summarized various philosophical and methodological positions on total communication as follows:

> In theory, it reflects an attitude embraced by teachers, parents and children to allow them to use any available means of communication

> to express a thought. Thus, it is a philosophy that urges not how one communicates but that one communicates effectively. In practice, total communication calls for parents and teacher to develop their skills, and those of a child, to utilize various abilities of transmitting and receiving information. (p. 139)

In each of these definitions, there is a lack of specifics as to how various modalities are to be used for instructional and other discourse purposes in the classroom and how language type will affect total communication processes. Predictably, lack of clarity in the implementation of total communication has led to equally unclear and misguided practices in the field.

Two prime indicators of the confusion in total communication programs are related to the presentation of linguistic input in the classroom. The first one stems from the widely held belief that only English should be used in the instruction of hearing impaired students. Consequently, total communication has mistakenly become synonymous with the simultaneous presentation of English in speech and signs. The signs used are modeled after one of several different types of manually coded English (Bornstein, 1973).

In contrast, ASL, the language of the Deaf community, is rarely perceived as an educational component of total communication (Reagan, 1985; Stewart, 1982, 1987). Although manually coded English (MCE) systems use ASL signs as the foundation of their sign vocabulary, the signing characteristics of ASL are seldom considered to be pertinent to the actual production of a sign in isolation or in conjunction with other signs. By ignoring the articulatory dynamics of ASL, teachers are left with the difficult task of conveying English in signs without the benefits that can be derived through the incorporation of expedient visual-spatial principles from which ASL has evolved. Thus, the adherence to an English philosophical orientation has led to the merits of other signing techniques being overlooked. As a result, it is not unexpected that the English signing behaviors of many teachers are unappealing and lack the vitality of ASL signing.

The second indication of the confusion existing in total communication programs is the actual nature of teachers' signing behaviors. Research shows that there is little correspondence between the intent of total communication programs to use MCE systems as a basis for linguistic input (Pahz & Pahz, 1978) and the signing behaviors of teachers. Studies have consistently concluded that teachers' signing does not adequately represent grammatically correct English (Bernstein, Maxwell, & Matthews, 1985; Kluwin, 1981; Marmor & Pettito, 1979; Reich & Bick, 1977; Stewart, Akamatsu, & Bonkowski, 1987). Instead, their signing more closely resembled a form of pidgin sign (cf., Woodward, 1973). Indeed, pidgin sign is generally acknowledged to be the most prevalent form of signing used in classrooms. Despite its prevalence, little is known about its pedagogical value and its effect on the English (and ASL) language development of hearing impaired students.

Furthermore, there is a large discrepancy in the type of pidgin sign that teachers use. The use of pidgin in total communication programs is rarely, if ever, determined by specific communication policies. Factors influencing the type of pidgin sign teachers use include knowledge of ASL and MCE signing principles, signs learned through sign language/sign system courses, fluency in signing, language skills of students, age of students, nature of discourse situation, desired extent of representing English or ASL, signing behavior of students, lack of teacher accountability, and pressure from other teachers to conform to a certain sign behavior. Thus, students are exposed to variations in linguistic input because teachers tend to sign differently from one another and each of the teachers may also display a range of signing behavior.

The communication skills of teachers are especially critical when one considers that they are the primary English role models for most hearing impaired students whose main mode of communication is signing. Therefore, the linguistic information students receive in signs from their teachers has an

important role in the development of their language. Yet few educators in total communication programs appear willing to question their use of pidgin sign or to consider the advantages of MCE and ASL.

In describing the communication behavior of teachers little has been said about the nature of their speech. This is justifiable when it is considered that speech is a skill that most teachers already possess by the time they become adults. For those who do not have adequate speech, it is unreasonable to expect them to learn it in order to teach. This should not imply that teachers need not attend to their speech, because appropriate skills in enunciation and rate of speech can facilitate students' speechreading and listening abilities. However, for most teachers in total communication programs, the fact that signing had to be learned during their adults years warrants the extra attention given to it.

Conclusion

Current practices in total communication classrooms have basically succeeded in assigning the responsibility of communication to hearing impaired students who must accommodate to the variation in communication behaviors displayed by each of their teachers. Although there might be some degree of consistency within programs with more than one teacher, the variations in signing between programs are essentially guaranteed by poorly defined communication and language policies. Moreover, teachers are seldom held accountable for their communication behavior in the classroom.

To improve upon this situation a policy is needed that clearly articulates the parameters that will define teachers' communication behaviors, especially with respect to signing. This policy must challenge the commonly held notion that total communication simply means that teachers (and parents) use whatever form of communication is necessary to communicate with a hearing

impaired child. When translated into practice "whatever form of communication is necessary" becomes "whatever communication skills teachers possess." As a result, there are few incentives for teachers to improve their communication skills and their responsibilities as language role models are rarely questioned. Furthermore, a policy is needed to remove the vagueness inherent in current definitions of total communication which perpetuate differences in the signing behavior of all teachers.

The policy presented in this paper endorses consistency in linguistic input for hearing impaired students. As such, it offers total communication programs a viable means of accounting for teachers' communication behaviors.

References

Bernstein, M., Maxwell, M., & Matthews, K. (1985). Bimodal or bilingual communication. Sign Language Studies, 47, 127-140.

Bornstein, H. (1973). A description of some current sign systems designed to represent English. American Annals of the Deaf, 118, 454-463.

Clarke, B (1972). Total communication. Canadian Teacher of the Deaf, 2, 22-30.

Denton, D. (1972). A rationale for total communication. In T.J. O'Rourke (Ed.), Psycholinguistics and total communication: The state of the art (pp. 53-61). Washington, DC: American Annals of the Deaf.

Kluwin, T. (1981). The grammaticality of manual representations of English in classroom settings. American Annals of the Deaf, 126, 417-421.

Marmor, G., & Pettito, L. (1979). Simultaneous communication in the classroom: How well is English grammar represented? Sign Language Studies, 23, 99-136.

Moores, D. (1987). Educating the deaf: Psychology, principles and practices (3rd ed.). Boston: Houghton Mifflin.

Pahz, ..., & Pahz, C. (1978). Total communication. Springfield, IL: Thomas.

Reagan, T. (1985). The Deaf as a linguistic minority: Educational considerations. Harvard Educational Review, 55, 265-277.

Reich, P., & Bick, M. (1977). How visible is visible English? Sign Language Studies, 14, 59-72.

Stewart, D. (1982). American Sign Language: A forgotten aspect of total communication. ACEHI Journal, 8, 137-148.

Stewart, D. (1987). Linguistic input for the American Sign Language/English bilingual. ACEHI Journal, 13, 58-70.

Stewart, D., Akamatsu, C., & Bonkowski, N. (1987, July). Synergy effects: Sign-driven and speech-driven simultaneous communication. Paper presented at the Fourth International Symposium on Sign Language Research, Lappeenranta, Finland.

Woodward, J. (1973). Some characteristics of Pidgin Sign English. Sign Language Studies, 3, 39-64.

Appendix A

COMMUNICATION AND LANGUAGE POLICY FOR THE LANSING SCHOOL DISTRICT HEARING IMPAIRED PROGRAMS

For hearing impaired students the Lansing School District endorses a total communication method of instruction. In total communication programs a variety of modalities are available for facilitating communication between hearing impaired students and their teachers. The major modalities used are signs, fingerspelling, speech, speechreading, audition, and print. Depending on instructional and other discourse demands, these modalities can be used in combination with each other or in isolation. The guiding principle is to use both signs and speech simultaneously in order to facilitate the reception of language in the visual channel, through signs and speechreading, and in the auditory channel, through speechsounds. The term "signs" also includes the use of fingerspelling and the use of the term "auditory channel" encompasses all types of amplification systems.

Multimodal presentation of language is an important component of the language acquisition processes of hearing impaired students. Like their hearing peers, hearing impaired students acquire language through exposure to it in the environment. They are dependent on the language role models to whom they are exposed. It is crucial that the linguistic information they receive contain correct grammatical features. There must also be a high degree of consistency in the multimodal presentation of language in the environment. Linguistic information presented in signs and speech must be similar. Given exposure to linguistic input, correct and consistent in its presentation of English grammatical features, hearing impaired students will be better able to generate language rules leading to full command of English--a basic goal of all education programs for hearing impaired students.

The educational value of simultaneously conveying instructions in a number of different modalities stems from (a) evidence that, for most severely and profoundly hearing impaired students, reception of information in the visual channel is more efficient than in the auditory channel and (b) research that shows comprehension of information presented multimodally is greater than when the same information presented unimodally. Hence, it is imperative that teachers ensure that students are able to receive and assimilate their instructions. In any classroom this is made difficult by the personal attributes of each student. Type and degree of hearing loss, age at onset, command of language, parental support, and preference for a particular communication modality are some of the ways in which hearing impaired students may differ from one another. In total communication programs teachers are able to be pragmatic about their use of speech, audition, and signs that give them the flexibility needed to meet the communication demands of their students. In this respect, communication becomes an educational and social tool rather than the goal of education itself--a situation that parallels the roles of language and communication in education of the hearing impaired with those roles associated with general education.

In the Lansing School District total communication is implemented through a unique blend of languages and modalities. English is the primary language of the classroom and is conveyed through the use of speech and a modified version of Signed English. Total communication is often referred to as being student-centered in that the communication and language abilities of the students supposedly determine the communication behavior of the teachers. In our hearing impaired programs the communication skills of the students are considered along with the need to expose the students to consistent input in English. Teachers accommodate the various levels of their students' language proficiency by adjusting their own levels of syntactic and semantic complexity.

In addition to English, it is recognized that for many hearing impaired individuals American Sign Language (ASL) can make a significant contribution to their educational and social development. The strength of ASL lies in the fact that it has evolved to meet the demands of a visual-spatial communication medium. It is both efficient and desirable for example, for its capacity to convey abstract concepts, depict the complexity of real-world issues, and portray the emotions of a speaker. In these respects and others it is advantageous to include ASL as part of a teacher's repertoire of linguistic and signing skills.

In the Lansing School District ASL is used as an intervention tool. ASL skills allow teachers to be more receptive and understanding of the discourse of their students. When consideration is given to the content and pragmatics of the material being taught, ASL can be used to facilitate the acquisition of English. As a case in point, the meaning of particular English structures can often be easily described in ASL which cuts back considerably on the level of frustration children experience while acquiring a language. By intervention, it should be clear that, once the objective for switching from English to ASL has been met, the teachers will then switch back to English. By using ASL as a means of intervening and assisting communication processes, schools signal to hearing impaired individuals and others that integration is a mutual responsibility of all parties involved.

Through the strategic use of Signed English, ASL, speech, and other speech-related skills, our hearing impaired programs foster favorable environments for the learning of all forms of communication. The acquisition of each mode and language of communication is motivated by the role it plays in bridging the communication gap between hearing impaired individuals and others. Therefore, the benefits of language and communication are perceived as being

educationally and socially derived and not educationally prescribed aspects of human behavior.

Although our hearing impaired programs subscribe to the educational use of signs as suggested by the Signed English system, this should not imply an endorsement of the signs recommended in the Comprehensive Signed English Dictionary (Bornstein, Saulnier, & Hamilton, 1983). Rather, the philosophy of our program promotes the use of signs derived primarily from the American Sign Language Dictionary (Sternberg, 1981) as well as the use of, when feasible, a few community-based signs in the classroom. Indeed, the signs used in the City of Lansing and surrounding county areas will take priority over the signs that are found in any sign language or sign system dictionary when it is determined that the local sign more accurately reflects the communication needs of the classroom. In this way, respect is given to the regional variations of signs which makes the signing of our hearing impaired students compatible with adult signers in the community. However, it is not anticipated that local signs will constitute anything more than a fraction of the total sign vocabulary of the teachers. Because there is no one sign dictionary that encompasses all of the necessary signs for a classroom, a series of commercially produced dictionaries (see Appendix I: Resources) will be used as references when the teachers make the final decision/choice of signs.

Teachers are expected to use their total communication skills whenever they are in the presence of a hearing impaired student. This includes conversations with hearing persons in the classroom or in other parts of the building. The purpose of this practice is to increase students' exposure to language in a variety of situations.

Finally, it is difficult to force students to use a particular sign system or sign language when a diverse range of personal attributes relating to language skills and signing skills will influence their signing behaviors. It

is believed that consistent exposure to the systematic use of modified Signed English and ASL should impact on the signing behavior of the students. The primary goal is to ensure that the students are capable of using English in appropriate situations and yet still retain competence in the use of ASL for specific community and peer related communications. This goal applies to students at all grade levels.

References

Bornstein, H., Saulnier, K., & Hamilton, L. (1983). The comprehensive Signed English dictionary. Washington, DC: Gallaudet College Press.

Sternberg, M. (1981). American Sign Language dictionary. New York: Harper & Row.

Appendix B

CHARACTERISTICS OF MODIFIED SIGNED ENGLISH

Signed English (Bornstein, Saulnier, & Hamilton, 1983) is one of several manually coded English systems used in total communication programs in the United States and Canada. Each of these systems provides a visual-spatial representation of English. In its original form Signed English borrows signs from ASL, creates new ones, and uses signs along with fingerspelling in grammatically correct English word order. For each spoken English word there is a corresponding sign or a sign marker so that there is representation of English lexicon and grammar.

Signed English was modified for our programs in order to enhance the ease with which it is expressed and received. Modification was necessary because the development of Signed English, like all other manually coded English systems, was guided primarily by the goal of conveying English grammatical features. Little attention was given to the articulatory dynamics or the mechanics of a visual-spatial representation of language symbols. While viewing Signed English as an alternative form of English, its value as a communication tool was neglected. To compensate for this omission, the Lansing School District favors a form of Signed English that has been modified by incorporating a number of ASL signing characteristics. Examples of some of characteristics are:

a. verb directionality: I MET HIM. SHE LENT ME $5.00.

b. inflection of signs to distinguish between noun and verb pairs: CHAIR/SIT; AIRPLANE/FLY; KEY/LOCK; INSTRUCT/INSTRUCTION

c. duplication to indicate plurality: SHEEP, MICE, DEER

d. incorporation of numbers in pronouns: TWO OF US, FOUR OF THEM

e. incorporation of numbers in time: TWO WEEKS FROM NOW, THREE YEARS AGO, TWO DAYS AGO

f. location of persons and things in the signing space

g. locatives: THE BOY WAS LYING UNDER THE TABLE.

h. negative incorporation: DON'T KNOW, DON'T WANT, DON'T LIKE

i. eye gazing, facial expressions, and other body movements.

Signed English contains 14 basic sign markers used to indicate plurals, third person singular, past tense, and other inflections. All of these sign markers were retained except the one for past tense which was replaced by the sign for BEFORE. Because of the limited number of affixes in Signed English, others were borrowed from the manually coded English system, Signing Exact English (Gustason, Pfetzing, & Zawolkow 1980). Examples of these affixes, or sign markers as they are commonly referred to, are as follows:

a. "MENT" - establishment, retirement

b. "NESS" - goodness, deafness

c. "TION" "SION" - creation, decision

d. "PRE" - preschool, pre-1970s

e. "ISH" - childish (not foolish)

f. "FUL" - thankful (not careful)

g. "RE" - rewrite, reorganize

h. "ABLE" - workable, trainable

Finally, because of the limited lexicon of signs and the extensive vocabulary required for reading and learning subject matters at all grade levels, teachers are encouraged to make extensive use of fingerspelling. Fingerspelling can also be used to indicate affixes. A common practice among many teachers of the hearing impaired is to create signs to avoid the redundancy of fingerspelling often-used words that do not have a signed equivalent. This practice is discouraged in our hearing impaired program as it is felt that this

task is better accomplished by signers who have the necessary expertise and experience to ensure that the created signs conform to basic signing and linguistic principles. Another common practice in total communication programs is to initialize signs. In our program, initialization of signs is only encouraged where it contributes to an understanding of the English meaning of a sign. Thus, words such as REHEARSE, COMMUNICATE, DIRECT, TRY, and FINANCE are initialized, but other words such as RED, READ, TABLE, FRUSTRATE, and BOTTLE are not.

The foregoing description of the characteristics of o' - modified Signed English was not meant to be comprehensive. However, it does indicate the extent of the modifications made. Interested individuals should consult with Lansing's administrator of hearing impaired programs for further information:

M.R. Delbridge
Special Education Administration
Lansing School District
Hill A/V Center
5815 Wise Rd.
Lansing, MI 48911

References

Bornstein, H., Saulnier, K., & Hamilton, L. (1983). The comprehensive Signed English dictionary. Washington, DC: Gallaudet College Press.

Gustason, G., Pfetzing, D., & Zawolkow, E. (1980). Signing Exact English. Rossmoor, CA: Modern Signs Press.

Appendix C

A BRIEF PERSPECTIVE ON PIDGIN SIGNS

The primary means by which hearing impaired and hearing signers communicate with each other is with pidgin sign or Pidgin Sign English. Pidgin sign has been described as being a mixture of English and American Sign Language (Woodward, 1973) or a compromise between English and ASL (Hoemann, 1986). In other words, "pidgin sign does not adhere either to the structures of ASL or to English but puts signs in English word order along with the deletion and alteration of various grammatical features" (Stewart, 1987, p. 60). Pidgin sign is the most widely used sign system in total communication programs across the country. Whether the methodological orientation of a program calls for the use of Signed English, Signing Exact English, Seeing Essential English, Preferred Signs, or other manually coded English systems, teachers tend to use pidgin signs.

Possible reasons for the widespread use of pidgin sign are as follows (a) pidgin sign is the most commonly taught sign system in preparation programs for teachers of the hearing impaired (Maxwell, 1985); (b) when manually coded English or ASL are taught at the university level, there are rarely enough courses offered (two to three courses is the average) to ensure fluency in these types of signing--thus, with the lack of adequate instruction teachers use pidgin sign (Akamatsu & Stewart, 1987); (c) there is a range of signing behavior that can be described as pidgin signing--therefore, teachers have much freedom in their choice of signs and sentence structures; (d) in the absence of training, teachers find it easier to simultaneously use speech and pidgin sign; (e) hearing impaired students do tend to understand pidgin sign; (f) pidgin sign is an effective communication medium for interpreting (Hoemann, 1986); and (g) most total communication programs do not have a language and communication

policy--consequently teachers are rarely held accountable for the type of signs they use in the classroom. In essence, it could be said that lack of guidelines and adequate instruction in the use of Signed English and ASL have led teachers to use pidgin sign as their major sign system.

However, the use of pidgin sign in the classroom must be seriously questioned. Research has shown that deaf adults tend to write the way they use pidgin sign (Jones, 1979). All children learn language via the environmental input of a particular language. Thus, if pidgin sign is the primary language of instruction in a classroom then it must be assumed that it will have some impact on the children's acquisition of language. It may well be that pidgin sign is an "intermediary linguistic code between the more formal languages of English and ASL" (Stewart, 1987, p. 66). Nevertheless, if pidgin sign is an intermediary linguistic code, research and pedagogical concerns have not elaborated on the specific role pidgin sign should have in the language development of hearing impaired children.

On the other hand, the use of Signed English and other forms of manually coded English have been shown to impact positively on the English language development of hearing impaired children (e.g., Bornstein & Saulnier, 1981; Brasel & Quigley, 1977; Crandall, 1978; Raffin, Davis, & Gilman, 1978). Likewise, evidence from deaf children of deaf parents who learn ASL at an early age revealed the benefits of exposing hearing impaired children to ASL as part of their education.

Thus, given the uncertainty of the benefits of using pidgin sign in the classroom, a case for its use in total communication programs cannot as yet be made. In fact, our knowledge of language acquisition principles suggests that using it in the classroom may actually impede language development. Further, the diverse signing behavior of teachers should not dictate an equally uncertain language and communication policy.

References

Akamatsu, C.T., & Stewart, D. (1987). A survey of sign language instruction in teacher training programs in education of the hearing impaired (Program Evaluation Series No. 22). East Lansing: Michigan State University, College of Education, Research and Evaluation in Teacher Education.

Bornstein, H., & Saulnier, K. (1981). Signed English: A brief follow-up to the first evaluation. American Annals of the Deaf, 126, 69-72.

Brasel, K., & Quigley, S. (1977). The influence of certain language and communication environments in early childhood on the development of language in deaf individuals. Journal of Speech and Hearing Research, 20, 95-107.

Crandall, K. (1978). Inflection morphemes in the manual English of young hearing impaired children and their mothers. Journal of Speech and Hearing Research, 21, 372-386.

Hoemann, H. (1986). Introduction to American Sign Language. Bowling Green, OH: Bowling Green Press.

Jones, P. (1979). Negative interference of signed language in written English. Sign Language Studies, 24, 273-279.

Maxwell, M. (1985). Sign language instruction and teacher preparation. Sign Language Studies, 47, 173-179.

Raffin, M., Davis, J., & Gilman, L. (1978). Comprehension of inflectional morphemes by deaf children exposed to a visual English sign system. Journal of Speech and Hearing Research, 21, 387-400.

Stewart, D. (1987). Linguistic input for the ASL/English bilingual. ACEHI Journal, 13, 58-70.

Woodward, J. (1973). Some characteristics of Pidgin Sign English. Sign Language Studies, 3, 39-46.

Appendix D

RESOURCES

A. Sign Language/Sign Systems

i. Primary source

Sternberg, M. (1981). American Sign Language dictionary. New York: Harper & Row.

ii. Additional sources

Anthony, D. (Ed.). (1971). Seeing Essential English/manual. Anaheim, CA: Anaheim Union High School District.

Bornstein, H., Saulnier, K., & Hamilton, L. (1983). The comprehensive Signed English dictionary. Washington, DC: Gallaudet College Press.

Bornstein, H., & Saulnier, K. (1984). The Signed English starter. Washington, DC: Gallaudet College Press.

Doughten, S., Minkin, M., & Rosen L. (1978). Signs for sexuality. Seattle, WA: Planned Parenthood.

Gustason, G., Pfetzing, D., & Zawolkow, E. (1980). Signing Exact English. Rossmoor, CA: Modern Signs Press.

Humphries, T., Padden, C., & O'Rourke, T. (1980). A basic course in American Sign Language. Silver Spring, MD: T.J. Publishers.

Jamison, S. (1983). Signs for computing terminology. Silver Spring, MD: National Association of the Deaf.

Riekehof, L. (1980). The joy of signing. Springfield, MO: Gospel Publishing House.

Shroyer, E. (1982). Signs of the times. Washington, DC: Gallaudet University Press.

Stokoe, W., Casterline, D., & Croneberg, C. (1976). A dictionary of American Sign Language on linguistic principles. Silver Spring, MD: Linstok Press.

Woodward, J. (1980). Signs of drug use. Silver Spring, MD: T.J. Publishers.

B. Readings

Akamatsu, C.T., & Stewart, D. (1987). A survey of sign language instruction in teacher training programs in education of the hearing impaired (Program Evaluation Series No. 22). East Lansing: Michigan State University, College of Education, Research and Evaluation in Teacher Education.

Bornstein, H., & Saulnier, K. (1981). Signed English: A brief follow-up to the first evaluation. American Annals of the Deaf, 126, 69-72.

Brasel, K., & Quigley, S. (1977). The influence of certain language and communication environments in early childhood on the development of language in deaf individuals. Journal of Speech and Hearing Research, 20, 95-107.

Crandall, K. (1978). Inflectional morphemes in the manual English of young hearing impaired children and their mothers. Journal of Speech and Hearing Research, 21, 372-386.

Freeman, R., Carbin, C., & Boese, R. (1981). Can't your child hear?: A guide for those who care about deaf children. Baltimore: University Park Press.

Gilman, L., Davis, J., & Raffin, M. (1980). Use of common morphemes by hearing impaired children exposed to a system of manual English. Journal of Auditory Research, 20, 57-69.

Hoemann, H. (1986). Introduction to American Sign Language. Bowling Green, OH: Bowling Green Press.

Jones, P. (1979). Negative interference of signed language in written English. Sign Language Studies, 24, 273-279.

Maxwell, M. (1985). Sign language instruction and teacher preparation. Sign Language Studies, 47, 173-179.

Moores, D. (1987). Educating the deaf: Psychology, principles, and practices. Boston: Houghton Mifflin.

Raffin, M., Davis, J., & Gilman, L. (1978). Comprehension of inflectional morphemes by deaf children exposed to a visual English sign system. Journal of Speech and Hearing Research, 21, 387-400.

Stewart, D. (1987). Linguistic input for the ASL/English bilingual. ACEHI Journal, 13, 58-70.

Woodward, J. (1973). Some characteristics of Pidgin Sign English. Sign Language Studies, 3, 39-46.