A Bilingual/Esl Approach to the Education of Deaf Children

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During the last few years a variety of authors in a growing number of published articles have advocated either the use of ASL in the language education of deaf children or the adoption of an ESL perspective, or both (Barnum, 1984; Champie, 1984; Marmor and Petitto, 1979; Quigley and Paul, 1984; and Tervoort, 1983). This development has been accompanied by a rapid increase in the volume of presentations and discussions concerning teaching English to the deaf at TESOL (Teachers of English to Speakers of Other Languages) conventions.

It is no accident that these two changes are occurring together. TESOL is an organization primarily concerned with the process of second language learning and teaching, and is thus a natural host for educators and researchers in the field of deafness who recognize that most deaf individuals in this country are exposed to two distinct languages, either of which may become their primary means of communication.

Any community that uses two languages is, by definition, involved with bilingualism. School systems in such communities will vary on how they approach the use of different languages, but one viable alternative is some form of bilingual education program, where each language has a place in the classroom. For deaf children, however, a bilingual approach (i.e., one that uses both ASL and English) is not an option, at least not in the United States. Since total communication programs have become popular, a second language channel in the form of one or other variety of manual English has been welcomed into the classroom in addition to spoken English, but ASL is only tacitly approved as part of the right of a deaf child "to learn to use all forms of communication available to develop language competence" (Denton, 1970, quoted in Quigley and Kretschmer, 1982). However, as Woodward, Allen and Schildroth (in press) have discovered, most teachers in total communication programs are hearing and not fluent in ASL, thus making it unlikely that this language is often used consistently.

Many arguments can be leveled against the use of ASL in educational settings, not the least of which point to the lack of published curricula in ASL, the absence of a written form of the language and the fact that most deaf children have hearing parents unfamiliar with ASL. Arguments in favor of a bilingual/ESL approach are probably just as numerous, however, and some of these are summarized below in justification of the ex-

perimental program that is the main focus of this paper

1. Rationale for a Bilingual/ESL Approach

1.1. Lack of success of alternative approaches

Research on the relative effects of different educational programs for deaf children is somewhat sparse, but in general emphasizes the failure of any program to raise the reading rate of deaf school students above the fourth grade level (Trybus and Karchmer, 1977). Oral programs, which dominated for many years (see Lou, in press, for a thoughtful review of the history of deaf education in this country), have only demonstrated positive results when subjects were selected from one of the few model oral programs in the country (Quigley and Kretschmer, 1982), and when the students:

- have above average IQ;
- have literate and highly motivated parents;
- are in a school where teachers and other staff are totally dedicated to the approach; and/or
- have some residual hearing or audiograms of certain shape.

When researchers initiated studies into the effects of programs using various forms of manual communication, early results generally favored the sign systems over the oral approach (Morazova, 1954, Quigley, 1969, fingerspelling; Moores, 1978, total communication and fingerspelling). There are no data which demonstrate that manual codes help children acquire English competence. Studies have been conducted on signed English (Bornstein, Saulnier and Hamilton, 1980), SEE I (Gilman, Davis and Raffin, 1980), SEE II (Babb, 1979), of which only the Babb study showed improved academic achievement associated with the manual system, and then only when used at both the school and home.

Some research shows evidence for the effects of parental hearing status on the langauge development of deaf children. Meadow (1968), Quigley and Frisina (1961), Stevenson (1964) and Stuckless and Birch (1966) all demonstrated an advantage shared by the fewer than 10 percent of deaf children who have deaf parents. It is not clear that this advantage is explained solely by early exposure to ASL. Corson (1973), for example, suggested that deaf parents are better able to cope with deaf children and therefore provide better educational emotional support. Furthermore, not all deaf parents use ASL. Brasel and Quigley (1977) looked at parental background by obtaining self-report data on their language use, and concluded that use of manual communication in the home provided an advantage over oral communication, and manual English was preferable to ASL. These results should be interpreted with some caution, as self-report data on language use are notoriously unreliable, and no control was evident for socioeconomic status.

1.2. Bilingual education theory.

In spite of the fact that many deaf children arrive at school without a well developed primary language, many of the tenets of bilingual education theory do apply to the special case of deaf children. The Cummins (1981) model of Common Underlying Proficiency (CUP), for example, is particularly appropriate. CUP states that experience with either of two languages can promote the development of proficiency underlying both languages.

Elsewhere Cummins (1979, 1980) argues that in order to keep up in subject matter and maintain normal cognitive development, students need to develop high levels of first language competence.

Furthermore, this competence must be developed in the kind of language needed for school—Cognitive Academic Language Proficiency (CALP)—low levels of which may explain problems some minority children have in school. In other words, Cummins maintains that education in the child's first language develops CALP in any other. The fact that deaf children with deaf parents tend to outperform deaf children of hearing parents may be due largely to the consistent input they receive in their first language. Developing these first language skills at school may enable the CUP principle to come into operation.

Problems with manual English as a primary linguistic system arise when teachers attempt to sign and speak at the same time, as is practiced in total communication programs (Kluwin, 1981; Marmor and Petitto, 1979; Strong and Charlson, 1986). English is presented incompletely and inconsistently in both channels, resulting in input which is probably too degraded to allow successful acquisition of the language. Thus it would seem that, at least in a setting such as a residential school where deaf culture predominates (and ASL is the language of that culture), ASL would be the appropriate primary language in which to develop first language CALP skills, which might later be transferred to English.

1.3. The language of young children in a residential school

In order to establish to what degree ASL is indeed the social language of young children at a residential school, a study was performed (Strong, 1985) that examined the spontaneous language of 19 four- to seven-year-olds. All subjects were profoundly deaf from birth with no other impairments. Eleven had deaf parents, the others were from hearing families. Children were videotaped over the course of one school year, both in the classrooms and in the cafeteria, interacting with peers or with teachers. Subsequent analysis of the recorded language revealed an overwhelming majority of ASL over English elements, in spite of constant exposure to the teachers' English throughout the year. This indicates that the motivation for the children to acquire and use the social language of their peers might be of greater influence than the teachers' model of English.

These results might have been predictable, also, from the evidence, cited above, that the English of teachers using simultaneous communication tends to be incomplete, inconsistent and nonstandard, thereby impeding the learners' progress of acquisition. Additional research by Livingston (1983) and Supalla (personal communication) reveals that children exposed exclusively to some form of manual English tend to adapt their language in ways consistent with ASL, even in the absence of input in that language.

In all, these research studies reflect the readiness of deaf children to acquire ASL, and emphasize the advantages of a natural gestural language over the less flexible artificial systems that have been created to represent English manually.

2. A Bilingual/ESL Program

Justified by the arguments outlined above, the present authors set about the task of implementing an experimental program for teaching language to young deaf children using a bilingual/ESL approach. This required the cooperation of a school administration and a classroom teacher, and the services of a deaf teacher to visit the class and teach the experimental syllabus.

2.1. Goals

The goals of the program were two-fold:

- to develop and expand ASL skills and then use that language as a medium for teaching English; and
- to develop an awareness of ASL and English as equal but separate languages together with an ability to recognize some of the differences between the two languages.

2.2. Syllabus

The syllabus was constructed around a series of stories suited to children ages five to seven years. The stories were adapted where necessary to make them culturally appropriate for an audience of deaf children. The characters do not listen and talk on the phone, they communicate on a TDD; characters do not overhear a conversation, they watch it from a distance; and so on.

In this program, English stories were chosen to teach English, but existing ASL stories might have been just as appropriate, with adaptions where necessary. Each story is the foundation of a separate unit which focuses on a particular aspect of the language. Each unit is designed to be taught over a week or two of daily one-hour lessons, although ideally ASL would be used throughout the day in order to follow the principles of a true bilingual/ESL program.

In the first part (see Appendix) the story is told in ASL only (either live or on tape), for the aim is to legitimize ASL as a classroom language and at the same time to improve the children's skills. All activities are conducted in ASL. In the second part, each story is presented (on videotape) in two versions, one ASL, the other manually coded English. Again, all teaching is done in ASL, but the focus is on linguistic structures and functions (such as saying "no," describing, or asking questions) that are performed very differently in the two languages.

The overall pedagogical approach involves an emphasis on using language in real situations—in this case for the purpose of telling or acting a story—together with an overt attempt to stimulate the children's metalinguistic awareness by explicitly attending to structural forms which illustrate the differences between ASL and English. A wide range of different kinds of activities are required to achieve this interplay between form and function.

2.3. Activities

A typical unit from Part 2 of the syllabus is taught as follows. On the first day the teacher introduces the new story using any props that might be helpful, such as stuffed animals, and then plays the videotape of the two versions of the story. After both versions of the story have been presented, the teacher initiates a discussion on how they differ from one another. Either following from the children's observations or by introducing it her/himself, the teacher directs the class to focus on the particular grammatical/functional aspect that is the object of the unit. The next day the children are shown the written version of the story and the accompanying pictures before they role-play it themselves, with different children taking turns to act out the parts. If the topic is questioning, the teacher watches for examples in their acting and prompts them where necessary. On the third and fourth days, children take turns at retelling the story to the rest of the class using any kind of language they wish, again with the teacher acting as prompt, highlighting examples of the focused grammatical topic. Afterwards the chil-

dren draw pictures of some event in the story.

Day five has the children involved in activities directly related to the language topic. Thus they may play a game where the teacher signs a question and the children identify it as either English or ASL by holding up flash cards. Alternatively they may have to choose a friend to ask a question about the story, and the friend provides the answer. Learning activities such as these may take three or four sessions, depending on the topic and length of the story. It is important to involve the children in activities that require real communication as far as possible, and to make it fun.

2.4. Evaluation

Children are evaluated by the teacher in a number of ways. They may retell the story one-on-one, the teacher may sign something in ASL and have the child give the English version, the child may be asked to identify examples as either English or ASL, the teacher may ask direct questions about the events in the story, and so on.

The subjects in this program were evaluated, for research purposes, using a repetition and a recognition task. In the repetition task the children watched a series of sentences signed on tape, some in ASL and others in manual English, and they were required to repeat each one during the pause (Gold and Woodward, 1986). The recognition task required the child to identify sentences signed by a bilingual native signer as either English or ASL. Both of these activities could be adapted for use by a classroom teacher, both for diagnostic and evaluative purposes.

3. Summary

The syllabus described briefly in this paper represents an experimental attempt to apply some of the principles of a bilingual/ESL approach to the language education of young deaf children at an elementary residential school. It is bilingual in that both ASL and English are given equal importance, with ASL taken to be the children's primary language and English their second language.

Common models of bilingual classrooms to be found in schools for hearing speakers of other languages are not directly applicable for deaf children, mainly because most deaf children do not have a well developed first language learned in the home. Nevertheless, a modified program that takes into account not only an alternative mode of communication (signing) but also an alternative language (ASL) has promise for promoting not only linguistic competence but also enhanced self-esteem.

References

Babb, R. A study of the academic and language acquisition levels of deaf children of hearing parents in an educational environment using Signed Exact English as the primary mode of communication. Unpublished doctoral dissertation, University of Illinois, 1979.

Barnum, M. In support of bilingual/bicultural education for deaf children. *American Annals of the Deaf, 129* (1984), 404-408.

Bornstein, H., Salunier, K., and Hamilton, L. Signed English: From birth through adulthood. *American Annals of the Deaf, 125* (1980), 467-481.

Brasel, K., and Quigley, S. The influence of certain language and communica-

tion environments in early childhood on the development of language in deaf individuals. *Journal of Speech and Hearing Research, 20* (1977), 95-107.

Champie, J. Is total communication enough? The hidden curriculum. *American Annals of the Deaf, 129* (1984), 317-318.

Cokely, D. When is a pidgin not a pidgin? An alternate analysis of the ASL-English contact situation. *Sign Language Studies, 38* (1983), 1-24.

Corson, H. Comparing deaf children of oral deaf parents and deaf parents using manual communication with deaf children of hearing parents on academic, social and communication functioning. Doctoral dissertation, University of Cincinnati, Ohio, 1973.

Cummins, J. Educational implications of mother tongue maintenance in minority language groups. *Canadian Modern Language Review, 34* (1978), 395-416.

Cummins, J. The cross-lingual dimensions of language proficiency: Implications for bilingual education and the optimal age issue. *TESOL Quarterly, 14* (1980), (2), 175-187.

Cummins, J. The role of primary language development in promoting educational success for language minority students. In *Schooling and Language Minority Students: A Theoretical Framework.* Los Angeles: Evaluation, Dissemination and Assessment Center, California State University, 1981.

Denton, D. Remarks in support of a system of total communication for deaf children. In *Communication Symposium*, Maryland School for the Deaf, Frederick, 1970.

DiFrancesca, S. Academic achievement test results of a national testing program for hearing impaired students: United States, Spring, 1971, Series D, No. 9, Washington, D.C.: Office of Demographic Studies, Gallaudet College, 1972.

Erting, C. Language policy and deaf ethnicity. *Sign Language Studies, 19* (1978), 139-152.

Furth, H. *Thinking Without Language: Psychological Implications of Deafness.* New York: Free Press, 1966.

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

Gold, R. and Woodward, J. Deaf children's response strategies to signed repetition tasks. Paper presented at the 20th annual TESOL convention. Anaheim, CA, 1986.

Kannapell, B. Bilingualism: A new direction in the education of the deaf. *The Deaf American*, (1974), 9-15.

Klima, E. and Bellugi, U. *The Signs of Language.* Cambridge, MA: Harvard University Press, 1979.

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

Livingston, S. Levels of development in the language of deaf children: ASL Grammatical Processes, signed English structures, and semantic features. *Sign Language Studies*, 40 (1983), 193-286.

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

Meadow, K. Early manual communica-

tion in relation to the deaf child's intellectual, social, and communicative functioning. *American Annals of the Deaf*, 113 (1968), 29-41.

Moores, D. *Educating the Deaf: Psychology, Principles and Practice*. Boston: Houghton Mifflin, 1978.

Morazova, N. *Development of the Theory of Preschool Education of the Deaf and Dumb*. Moscow: Institute of Defectology, 1954.

Quigley, S. The influence of fingerspelling on the development of language, communication and educational achievement in deaf children. Urbana, IL: Institute for Research on Exceptional Children, 1961.

Quigley, S., and Frisina, R. *Institutionalization and Psychoeducational Development of Deaf Children*. CEC Research Monograph, Washington, D.C.: Council on Exceptional Children, 1961.

Quigley, S.P., and Paul, P.V. *Language and Deafness*. San Diego, CA: College Hill Press, 1984.

Stevenson, E. A study of the educational achievement of deaf children of deaf parents. *California News, 80* (1964), 143.

Strong, M. A study of sign language among young deaf children. Paper presented at the 19th annual TESOL Convention, New York, NY, 1985.

Strong, M. and Charlson, E. Simultaneous communication: How teachers approach an impossible task. To appear in *American Annals of the Deaf*, 1986.

Stuckless, R. and Birch, J. The influence of early manual communication on the linguistic development of deaf children. *American Annals of the Deaf, 106* (1966), 436-480.

Swisher, M.V. Signed input of hearing mothers to deaf children. *Language Learning, 34* (1984), 2, 69-85.

Tervoort, B. The status of sign language in education in Europe and the prospects for the future. In J. Kyle and B. Woll, eds.: *Language in Sign*. London: Croom Helm, 1983.

Wrightstone, J., Aronow, M., and Moskowitz, S. Developing reading test norms for deaf children. *American Annals of the Deaf, 108* (1963), 311-316.

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Appendix

ASL/English Storytelling Syllabus

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PART 1 — ASL

This syllabus has been designed for use with deaf children, ages 4-7, who are in an environment such as a residential school, where ASL tends to be the principal language of social interaction. Part 1 is divided into ten units, each of which focuses on one or more functional/grammatical features of ASL. Part 2 has ten units, each of which serves as a very elementary introduction to an aspect of English structure that varies greatly in surface features from ASL. Each unit is based on a different story which incorporates the linguistic material to be introduced. The purpose is: first, to introduce ASL into the classroom curriculum, providing reinforcement for those children of deaf parents who are already fluent in the language, at least in conversational settings, and giving instruction in the language for other children who have less developed linguistic skills; and second, to introduce English as a language distinct from ASL by teaching a few simple basic examples of how the two languages might differently express the same idea.

UNIT ONE: Story: *Goldilocks and the 3 Bears*

1) Referring to people and things (pronouns)

   This focuses on indexic reference with referents present and absent, scene setting, and includes possessives (your, his, etc), reflexives (yourself, myself), and number incorporation (the three-of-you, etc).

2) Describing (word order)

   This illustrates the sign order of noun followed by descriptor which is common in ASL but not acceptable in English.

UNIT TWO: Story: *One Fine Day*

Expressing location and direction (locational and directional verbs)

This unit will introduce verbs which maintain the same orientation, such as "give," "show," "tell," "go sit," and those which involve a change in orientation, such as "ask," "say no," "fly."

UNIT THREE: Story: *The Little Red Hen*

1) Asking questions

   This part of the unit focuses on how to ask yes/no questions in ASL with appropriate sign order and facial expression.

2) Saying "no"

Various forms of the negative are introduced here.

UNIT FOUR: Story: *The Hare and the Tortoise*

1) Locating and moving living and inanimate things (classifiers)

   This focuses on location and movement in classifiers, while ignoring handshape.

2) Describing action (adverb in corporation)

   This focuses on how to modulate verbs of action to indicate movement, e.g. fast, slow, stop/start, and nature, e.g. careless.

UNIT FIVE: Story: *Amos and Boris*

Representing people and things (handshape classifiers and some size and shape specifiers)

This unit focuses on the different handshapes used in ASL for representing persons, cars and objects of varying sizes, shapes and patterns.

UNIT SIX: Story: *The Boy Who Cried Wolf*

Talking about events that have already happened, are happening now, or will happen sooner or later (timeline).

This unit introduces the ASL timeline, or the way tense is marked in that language. The story introduces different points on the timeline such as: yesterday, ago, distant past, a few days, weeks ago, recently, tomorrow, will, a few days from now, soon, etc.

UNIT SEVEN: Story: *The Three Little Pigs*

1) Describing how you do things (temporal aspect)

   This focuses on the facial expressions and sign movements that represent the marking of verbs for temporal aspect to express ideas such as: "again and again," "continuously."

2) Describing the order in which actions are carried out (distributional aspect).

   This covers the movements attached to verb signs when marked for distributional aspects, e.g. "you, then you," or "all of you together."

3) Expressing completion or incompletion (aspect marked syntactically). This introduces the important ASL concepts "finish" and "not yet".

UNIT EIGHT: Story: *The Three Billy Goats Gruff*

Identifying and emphasizing topics (topicalization)

This focuses on word order adjustments and facial expressions that are used to emphasize or draw attention to particular aspects of an utterance.

UNIT NINE: Story: *Sylvester and the Magic Pebble*

1) Expressing doubt or uncertainty (conditionals)

   Simple conditionals are introduced using the correct sign order and facial expression.

2) Giving more information about persons or things (relative clauses)

   Again, sign order and facial expression are the means to relativize in ASL.

3) Asking questions (Wh-questions)

This focuses on how to form Wh-questions in ASL using the correct vocabulary, facial expression and sign order (e.g., repetition of question word at the end of the sentence).

UNIT TEN: Story: *The Lion and the Rat*

1) Specifying action (object incorporation)

   This introduces some ASL verbs which can be modified to incorporate the object such as "chop three," "close window."

2) Noun-verb distinction

   Finally some noun/verb pairs are introduced that share the same sign but are distinguished only by an additional movement, e.g. "sit/chair," "drive/car," "fly/plane."

A unit normally takes at least one week and possibly two weeks of classroom time, at one hour per day. Stories are chosen to facilite the appropriate focus/foci for the particular unit, but frequently include elements from other units.

PART 2 — ENGLISH

In Part 2 the focus is on introducing several elementary English constructions and showing how the same function is performed differently in ASL and English. Each story is told first in English then in ASL, with the teacher continuing to use ASL as the medium of instruction.

UNIT ONE: Story: *The Little Girl and the Big Bear*

Referring to people and things (pronouns)

This unit introduces the English nominative pronouns, as represented by the English sign system Signing Exact English (SEE 2).

UNIT TWO: Story: *The Beautiful Rat*

Describing (basic word order of the English noun phrase: article, adjective, noun)

The purpose of this unit is to introduce the definite article and focus on the English word order adjective + noun in comparison to the ASL word order noun + adjective. Although the English word order is acceptable in ASL also, the differing forms are presented in order to reinforce the concept of two distinct languages.

UNIT THREE: Story: *Where Can an Elephant Hide?*

Saying "no" (negatives)

This unit is restricted to introducing the English forms "no" and "not," and the contractions "can't," "don't," and "won't."

UNIT FOUR: Story: *Cinderella*

Asking questions

This unit introduces the wh-question words with the verb "to be," and yes/no questions of the form "do you...," "did you...," and "can I...."

UNIT FIVE: Story: *The Horse, the Fox and the Lion*

Using adverbs

This unit introduces a number of English adverbs, most of which involve the suffix -LY which is represented in SEE 2 as a separate sign tagged on to the adjective sign (e.g., SLOW-LY, HAPPY-LY, etc.).

UNIT SIX: Story: *Hansel and Gretel*

Describing things that have happened or will happen (past and future tenses)

The simplest forms of the past and future tense are introduced in this unit. Thus the sign PAST following an English verb is used to indicate past time, and the sign FUTURE before the verb is used for future time, in accordance with the SEE 2 system.

UNIT SEVEN: Story: *The Magic Porridge Pot*

Talking about things that are happening now (present progressive; habitual)

This unit introduces the two verb inflections -ING and -S for the third person singular, and also the verb "to be" (copula) in the present tense.

UNIT EIGHT: Story: *Jack and the Beanstalk*

Using prepositions

Some of the most frequently used English prepositions are introduced here, particularly in environments where ASL would normally incorporate them into the verb.

UNIT NINE: Story: *Little Wood Duck*

Giving more information about persons or things (relative clauses)

This introduces the use of "who" and "that" in English relative clauses.

UNIT TEN: Story: *Leo the Lop*

Expressing doubt or uncertainty (conditionals)

This is difficult and should be included only if the children have mastered the present and future tense forms.