

Educating Deaf Children in Two Languages

CHARLOTTE EVANS



This chapter describes a study of literacy learning in Deaf children who acquire American Sign Language (ASL) as a first language and learn to read and write English as a second language.¹ Literacy can be defined beyond the basic tasks of reading and writing to include the strong connection between language learning and the individual's thinking, identity, and community. This framework emphasizes the importance of literacy acquisition for all individuals, including deaf people, and the problems that can occur when literacy in this broad sense is impaired.

Overall, there is agreement that early exposure to ASL allows deaf children to establish an effective way to communicate and interact with the world around them (Paul & Quigley, 1987). Disagreements arise in how this knowledge should be applied to guide them into reading and writing English. We know that deaf children who grow up in an ASL environment learn ASL in ways analogous to hearing children learning their spoken language (Meier, 1991; Pettito & Marentette, 1991). What we do not know is how deaf children learn to read and write English. There is now growing evidence from case studies to support bilingually focused alternative conceptions and pedagogies as successful in the language and literacy education of deaf children, and that evidence deserves further exploration.

Bilingualism and Deaf Children

Although bilingual education programs have been accepted as beneficial for hearing children for several decades, the idea of deaf education as a form

1. Following the convention proposed by Woodward (1972), I use lower-case *deaf* to refer to the audiologic condition of not hearing and upper-cased *Deaf* to refer to deaf children and adults who share a language—American Sign Language—and a culture. In addition, *deaf* is also used inclusively to refer to all children with hearing losses, including those who may eventually become *Deaf* children or adults.

of bilingual education is recent (Strong, 1988). The movement to teach English to deaf students as a second language came out of the research documenting natural sign languages of Deaf as languages (Baker & Battison, 1980; Johnson, Liddell, & Erting, 1989). As this research became widely known, Deaf people throughout the world began to identify themselves as a linguistic minority rather than a disabled group. Gradually, the shift to cultural affiliation has influenced deaf education by somewhat of a shift in focus from special education to bilingual education, although not all programs have accepted the use of a natural sign language for school communication.

Bilingual Deaf Education (BDE) differs from other bilingual programs in significant ways. The first difference is in language modality. Proponents of BDE advocate that students' first language be a natural visual-spatial language such as ASL (Davies, 1991; Johnson et al., 1989). Such a language, they argue, functions and is represented mentally in ways analogous to spoken languages, therefore the difference in modality is of no relevance. Evidence for this position is based on linguistic (Klima & Bellugi, 1979), developmental (Meier, 1991), and neurological research (Bellugi, Poizner, & Klima, 1989).

Another significant feature of BDE is that the first languages, ASL, and other natural sign languages do not have a written form. Some have argued that this feature will reduce transfer of proficiency from ASL to English (Mayer & Wells, 1996; Ritter-Brinton, 1996). The argument assumes, however, that literacy consists only of the reading and writing components of language. When literacy is defined more broadly, it includes the ability to use appropriate language forms depending on the social context. Schley (1992) studied the ability of Deaf children to modify their ASL use in contextualized and decontextualized language situations and found that the children did produce different types of language appropriate to the situations. Their literacy-related and metalinguistic skills were part of the deeper structures of ASL, and knowledge of them transferred across languages in bilingual children. By expanding the definition of literacy in this way, bilingual proficiency and literacy would be expected to develop even where one language does not have a written form.

BDE differs from both bilingual education in heritage languages and bilingual education in second-language immersion programs in that the family language background of deaf children is not consistent. Among chil-

dren born deaf, fewer than 10% come from families with even one Deaf parent or older Deaf relative (Meadow, 1972; Trybus & Jensema, 1978). For most parents, their deaf child is the first deaf person they have encountered, and this is generally unexpected and traumatic. The families of deaf children seldom have the sign language communication skills required to provide these children immediate access to the acquisition of sign language in a natural context, a circumstance that limits access to cultural knowledge and resources. Such children tend to enter kindergarten without a sophisticated competence in any language, signed or spoken (Johnson et al., 1989). Bilingual programming for these children, therefore, requires that they first develop proficiency in ASL before facilitating acquisition of English as a second language.

The Research Study

The primary purpose of the study reported here was to reduce the gap between theory and practice—between the theoretical understanding that Deaf students can learn written English as a second language, and how to actually facilitate that process. This was accomplished through extensive observation of three elementary students attending a bilingual/bicultural program for Deaf students. The students were primarily observed in their classrooms during language arts instruction, but were also observed interacting with their parents in their homes. Two of the students had Deaf parents, but for all three of the students, ASL was considered to be their first language, and they were learning English as a second language in written form. The students' three teachers were all hearing individuals with fluency in ASL and more than 5 years of teaching experience in a bilingual/bicultural program for deaf students. The study discovered effective strategies employed by teachers, parents, and students, and it uncovered some limitations of a bilingual deaf education program. Both of these findings contribute to the overall goal of learning more about putting theory into practice.

Effective Teaching Strategies

The things that the teachers were doing well included consistently using ASL as the language of instruction, providing conceptually accurate translations between the two languages, and presenting meaningful language in a multi-modal way through signs, spoken words, print, and pictures.

An essential element of a bilingual/bicultural program for deaf students is that the teachers value and believe in ASL as a bona fide language (Hanson & Mosqueira, 1995). The teachers in this study clearly expressed and demonstrated their respect for the role that ASL plays in Deaf culture and in their students' cognitive and linguistic development. In their comparisons or translations between English and ASL, the languages were presented as equal but different. The teachers' use of spoken English, which was not accessible to all the students, was limited to one-to-one situations with individual students. In these situations, it was used to provide additional information, usually about print, rather than to develop their auditory or oral skills.

The teachers were generally consistent about keeping the languages separate and distinct in that they did not sign and talk at the same time. Some mixture of the languages accompanied the signing in the form of mouthing words or whispering. These behaviors tended to occur during activities where the two languages were closely linked (e.g., during discussions of a specific written sentence or passage). The tendency to mix languages in these situations appeared to reflect the mental difficulty of talking about one language in another.

A true respect for ASL goes beyond simply developing competence in using the language and extends to an appreciation of its visual nature. The teachers used eye gaze to direct classroom interaction and ensure a shared focus. All three teachers were able to ignore irrelevant or inappropriate auditory information, such as students calling out names or answers rather than signing or raising their hands. This resistance to the strong "auditory pull" spoken language has on most hearing people reflected the teachers' competence in ASL and that they had truly learned to see from the perspective of their deaf students (Erting, 1992).

Translation skills, or methods for comparing the languages of ASL and English, are necessary strategies in teaching deaf children within a bilingual/bicultural context (Hanson & Mosqueira, 1995; Mahshie, 1995). It is important to distinguish between literal and conceptual translation. Literal translation involves establishing a one-to-one correspondence between words and signs. This is similar to the manual codes for English that were established to make spoken English more visual. The problem with such codes is that, in many instances, they did not link the spoken words to signs that were meaningful to the students. One code (manual) simply linked with

another code (spoken), but neither was linked to the underlying concept. The purpose of linking print to signs is to mediate a link between the printed form and the concept. This is called conceptual translation, and it is something the teachers were using in their classrooms. Methods such as giving multiple translations for a word or phrase (either in print or in ASL) or explaining the importance of context were used effectively by the teachers to avoid using a limited, one-to-one correspondence between signs and print.

The teachers effectively presented information to their students through multi-modal methods, including the use of pictures, print, spoken words, and signs to illustrate the same message or meaning. This strategy ensured that students of varying language levels would find the information meaningful. It also provided many opportunities for students to explore and discover the relationships between the various languages and communication modes. Teaching was meaning-driven and gave the students an active role in their own learning.

The effective strategies of using ASL, conceptual translation, and multi-modal presentation provided useful information regarding the implementation of a bilingual/bicultural program for deaf children. However, the teaching strategies and classroom activities that did not appear to be consistent with a bilingual/bicultural approach were also observed. A discussion of these observations provides further insight into the practical application of this philosophy.

Inconsistencies Within a Bilingual/Bicultural Approach

The observations that were inconsistent with a bilingual/bicultural approach to educating deaf students included an emphasis on explicit teaching methods, as well as an emphasis on word-based rather than discourse-based language structures, small class sizes, and inconsistent incorporation of culture into the classroom.

When children do not learn language or concepts from natural exposure and stimulation, there is a tendency among educators to teach them more explicitly (Rhodes & Dudley-Marling, 1988; Stires, 1991). This process involves imposing structures, incorporating drill and practice, and breaking down the information into smaller, but less meaningful, chunks. Direct teaching does have a place in any classroom, and particularly a classroom where students enter with a wide range of language levels and experiences (Kelly, 1998). The problem with explicit instruction is that it reduces the

students' active involvement in their own learning. Students must be allowed to participate in learning to decipher the "code" of a language. They must form their own hypotheses about how the structures relate, try them out, and make modifications to these hypotheses depending on the feedback they get. In this way, the knowledge becomes internalized. If the students are simply told what the rules are, their understanding may be limited to a superficial level. A compromise can be reached between explicit teaching and natural exposure. Teaching can provide guided instruction so that students know what to look for within the language they are exposed to; however, they must continue to be actively involved in forming and evaluating their own hypotheses about the rules.

Another observation that is related to the emphasis on explicit teaching methods was the emphasis on teaching word-based skills such as spelling and vocabulary. Traditionally, programs for teaching deaf students have emphasized the mechanistic features of language because they are easier to teach (Livingston, 1997). In some ways, they are also easier for deaf students to learn due to their visual sensitivity to the analysis of orthography and morphology in written English (Hirsh-Pasek & Freyd, 1984). Typically, for example, deaf students' spelling skills exceed their reading comprehension skills (Grushkin, 1998). This difference can be partially accounted for by the visual nature of spelling, but it may also be related to how deaf students are taught. The reasons for continuing to emphasize the mechanistic features of English rather than more global discourse structures need to be examined. Do the teachers consider these skills as basic building blocks, such that until the students master them, they cannot move beyond the letter, word, or sentence level?

The type of instruction students receive may also be determined by their overall language level. Students with limited language skills were not considered to be able to work beyond the level of spelling, vocabulary, and simple sentences. This seemed to be reflected in the fact that the students in the sixth-grade classroom did more work at the discourse level than the fourth- and fifth-graders. The reason for an emphasis on basic structures may also reflect the teacher's philosophy that learning to read is more of a bottom-up rather than a top-down process. It was expected that the implementation of a bilingual/bicultural approach would allow teachers to incorporate a balance of mechanistic and discourse-based strategies at all grade levels.

Another inconsistency observed in applying a bilingual/bicultural ap-

proach was the small number of students in each class. Although the small class size allowed for more individualized teaching, it again emphasized that teacher-directed instruction was what was needed and most beneficial for the students. Observations indicated that the small class sizes limited interaction among peers, which in turn, did not integrate the students of diverse language levels within the learning activities.

The teachers in Sweden and Denmark, countries where they have been implementing a bilingual/bicultural approach for almost two decades, believe that large classes are an essential component in their program (Mahshie, 1995). Larger classes allow students to be placed in different working groups so they can learn from each other, rather than depending on the teacher for all information and control, and this also fosters their problem-solving skills. Teachers can get a better sense of what each student's needs are, academically and socially, because there are more students to serve as a norm.

Despite these stated advantages, teachers of deaf students in North America have been resistant to increasing class size due to the varying competence in ASL among students. A solution to this issue was suggested by Johnson et al. (1989), which involved combining two classes but keeping both teachers, one hearing and one Deaf. This would provide the students with native language models in both ASL and English. Given the advantages of larger classes and hearing and Deaf teachers working as a team, it is surprising that this model has not been incorporated more extensively. The final observation regarding the limitations in applying a bilingual/bicultural approach was the inconsistent incorporation of Deaf culture within the classroom. The cultural elements that were consistently represented in all three classrooms were the more technical or materialistic features, including the things you can see, such as the TTY (telephone teletypewriter for the deaf), captions, flashing lights, tapping to gain attention, and use of ASL. It is more difficult to incorporate Deaf cultural values and beliefs. The question arises, however, of whether it is appropriate for hearing teachers to be teaching or modelling these values and beliefs if they are not their own. The appropriate behavior for them to model would be as allies and supporters of Deaf people. Indirectly, the teachers did this; they were respectful towards their Deaf students and colleagues and discussed cultural influences as they arose. I expected that since the hearing teachers were aware they were not native language and cultural role models for the students, they would try to include these cultural influences in their classrooms in some

way. This could be done by inviting community members or parents to participate or by using more ASL videotapes of Deaf signers and storytellers.

Reasons for Success

The reasons for the successful implementation of bilingual/bicultural teaching methods with deaf students stem from one significant factor: the effective use of ASL as the language of instruction. Firstly, ASL in the classroom makes information accessible to the students, which is the first step in learning. Secondly, when students and teachers share the same language, it allows them to truly converse and be active participants in learning. Traditionally, teachers of deaf students followed rigid lesson plans to control the language within the teaching interaction, to accommodate their students' limited English skills and their own limited signing skills (Erting, 1992; Livingston, 1997). The ability to communicate comfortably allows teachers to take advantage of teachable moments, pick up on students' interests, and incorporate their comments.

The third reason for success that stems from the effective use of ASL in the classroom is the influence language has on culture. The impact of learning another language goes beyond simply the technical aspects of that language, such as grammar and vocabulary. When another language is learned, it is impossible not to also develop an understanding of the culture and the community whose language you are learning. This understanding influences a change in attitude as well. It allows you to see the world from a different perspective, which can develop into an appreciation and respect for values and beliefs that are different from your own. By being bilingual and bicultural themselves, the teachers bring bilingual and bicultural elements into the classroom (Grosjean, 1992). They cannot separate themselves or their teaching methods from the languages they speak or the cultural values they possess.

Reasons for Inconsistencies

The reasons for the inconsistencies in implementing a bilingual approach with the Deaf students in this study reflect an incomplete shift from a deficit to a cultural perspective of Deaf people on the part of the teachers and the organizational structure of the school. Teachers argue that the inconsistent acquisition of ASL as a first language, the presence of other disabilities, and the transmission of culture through peers and community rather than fam-

ily indicate significant differences between Deaf bilingual programs and bilingual programs involving hearing children learning two spoken languages. These differences are presented as arguments for why a bilingual/bicultural approach is like so many other methods for teaching deaf students proposed in the past; they make sense in theory, but are not feasible in reality. However, it is important to note that these differences are primarily a result of political and educational systems, which are difficult, but not impossible, to change.

Here again, the examples of Sweden and Denmark provide ways to overcome the obstacles of implementing a bilingual/bicultural approach to teaching deaf students. Educators in those countries acknowledge that the one prerequisite for the effective implementation of a bilingual/bicultural approach is a strong first language in a natural sign language (Mahshie, 1995). Rather than focus on the fact that this does not occur in most deaf children because they have hearing parents or live in remote communities, they make it a priority to accomplish this task. Professionals and members of community and parent organizations work together to link the families with other parents who have deaf children and provide opportunities for children and parents to interact with Deaf people using sign language. This required a widespread restructuring of the early intervention system and a re-education of professionals in the fields of medicine, social work, and pre-school. This implies a huge investment of energy and resources; however, it is considered to be well worth it because no amount of excellent teaching later can make up for losing the crucial learning that occurs between children and parents during this early time (Mahshie, 1995).

Conclusion

This study has provided descriptions of effective strategies for bilingual/bicultural education for deaf students and reasons for their effectiveness. It has also provided descriptions of and reasons for the limitations and inconsistencies in implementing a bilingual/bicultural approach. Through these descriptions, many questions have been answered; however, many continue to require further investigation. In particular, this includes finding the most effective balance between explicit and naturalistic teaching methods; examining the process of teaching translation skills to determine how print can link directly to internal concepts; studying the practice of Deaf and

hearing teachers working in teams with larger classes; determining the role, place, and teachers of Deaf Studies curricula; and challenging the process of transition in deaf education—in other words, “change the system, not the children” (Mahshie, 1995, p. 179).

The ultimate goal in a bilingual/bicultural approach to educating deaf students is to maximize the student’s potential for participating in both the Deaf community and society as a whole. Deaf people emphasize the need to develop fluency in ASL and an awareness of Deaf cultural values so that students know their identity within the community. Hearing people emphasize the need for competence in reading and writing English in order to be successful in the world. Both views are valid and important, and gradually, through the implementation of bilingual teaching strategies, we are moving closer to finding the common ground.

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