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APPROACHES IN THE PREPARATION OF TEACHERS OF DEAF AND HARD OF HEARING LEARNERS: CLINICAL AND CULTURAL PERSPECTIVES

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by

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Abstract

In response to reports of the poor academic achievement of deaf and hard of hearing learners, there has been a century-long debate over which language/mode of communication and language teaching strategies are to be utilized in classrooms. Deaf and hard of hearing individuals are intellectually and cognitively similar to their hearing peers in all major abilities (Paul and Jackson, 1993; Paul and Quigley, 1990; as cited in Paul and Quigley, 1994). The differences in achievement between deaf and hard of hearing and hearing individuals may be based on linguistic, cultural, environmental, and task factors (Paul and Quigley, 1994). According to Nover (1998), studies conducted to compare and contrast the literacy abilities of deaf and hard of hearing individuals and their hearing peers may be based on faulty assumptions about the students; these tests are conducted in English and English is a foreign/second language for a number of deaf and hard of hearing students. Thus it may be more appropriate to compare the literacy abilities of deaf and hard of hearing students with hearing peers whose second language is English.

Wink (1997) states that it is necessary for teachers to continuously question their beliefs and assumptions when working with all students. The beliefs and assumptions of pre-service teachers may be created and influenced by teacher trainers. If this is the case, it may be appropriate to determine whether pre-service teachers are adequately prepared to work with deaf and hard of hearing students as a linguistic and cultural minority.

The primary purpose of this study is to describe and compare the

structure and functions of forty-three graduate-level teacher preparation programs that prepare teachers of the deaf and hard of hearing. The study describes and assesses current conditions, opinions, and trends. A survey was sent to program coordinators followed by interviews with eight randomly-selected program coordinators. The interviews focused on the areas of (a) communicative competence, (b) language proficiency, (c) cultural proficiency, and (d) knowledge of second language principles.

Results present the overall beliefs and attitudes of teacher trainers regarding first and second language teaching, learning and culture. Teacher trainers appear to believe that use of first language teaching strategies may be the way to increase the academic achievement of deaf and hard of hearing learners. Results also indicate that the actual practice of programs that identified themselves with particular philosophical orientations did not necessarily reflect the intent of that orientation.

Recommendations for teacher trainers and the field of deaf and hard of hearing education are offered and suggestions for future research is presented.

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Chapter I

Statement of the Problem

Statement of the Problem

The academic achievement of the majority of deaf and hard of hearing individuals by the end of their school careers is described as being at the third or fourth grade level (Paul, 1998; Allen, 1986; King and Quigley, 1985; Quigley and Paul, 1990; as cited in McAnnally, Rose and Quigley, 1994; DiFrancesa, 1972; Furth, 1966; Wrightstone, Aronow and Moskowitz, 1963; as cited in Strong, 1988). Deaf and hard of hearing individuals are however, intellectually and cognitively similar to their hearing peers in all major abilities (Paul and Jackson, 1993; Paul and Quigley, 1990; as cited in Paul and Quigley, 1994). The differences in achievement between deaf and hard of hearing and hearing individuals may be based on linguistic, cultural, environmental, and task factors (Paul and Quigley, 1994). Nover (1998), however, points out that studies conducted to compare and contrast literacy abilities of deaf and hard of hearing and hearing peers may be based on faulty assumptions; in that, English is the first language of the hearing. English is a foreign/second language for deaf and hard of hearing students. It may be more appropriate to compare literacy abilities of deaf and hard of hearing students with hearing peers whose English is also their foreign/second language (Nover, 1998). If this is the case, pre-service teachers must be prepared to work with deaf and hard of hearing students as learning in a second language and as part of a cultural minority.

Proponents of the cultural perspective of deafness also suggest that deaf and hard of hearing individuals should be viewed as a cultural and linguistic minority. This view emerged when American Sign Language (ASL) was recognized as a language (Cokley and Baker-Shenk, 1991; Paul, 1998). Educators who hold a cultural view of deafness consider language and culture to be the two critical issues in the field of deaf and hard of hearing education. They believe that language and culture cannot be separated (Paul, 1998).

This study explores the perceived importance of language and culture in graduate teacher education program that prepare teachers to work with individuals who are deaf and hard of hearing.

The Significance of the Problem

The literature indicates that one contributing factor to the underachievement of deaf and hard of hearing individuals may be the under preparation of teachers. More than twenty percent of teachers of deaf and hard of hearing individuals receive one or no courses in reading and almost forty percent of teachers receive no graduate reading courses (Coley and Bockmiller, 1980; Bockmiller and Coley, 1981; as cited in King and Quigley, 1985). Actual participation in reading classes may actually be much lower because the survey on which these data are based was sent specifically to reading teachers, not teachers in general. Dr. Carol LaSasso states that no studies have been done since the Bockmiller and Coley studies (personal communication, September 8, 1996). Studies that discuss the findings on the relationship between writing and

deafness are largely based on writing samples of deaf and hard of hearing individuals rather than on how teachers of deaf and hard of hearing are prepared to teach writing to deaf and hard of hearing individuals (Paul, 1998).

A number of deaf and hard of hearing learners use American Sign Language/sign language to communicate. The Gallaudet Research Institute's Center for Assessment and Demographics Studies (CADS) reported in 1985, that ninety-one percent of the learners in residential schools, seventy percent of the students in local, self-contained classes, sixty-two percent of the students integrated in non-academic contexts, and eighteen percent of the students who are integrated in academic contexts, reportedly used sign language (as cited in Allen and Karchmer; 1990). Though American Sign Language/sign language is the language/mode of communication of large numbers of deaf and hard of hearing students, teachers may not have the communicative competence necessary to enhance the language learning of their students. Rudser (1988) described teachers' signing skills as minimal. Erting (1982) indicated that teachers not only have difficulty with their expressive skills but they also have poor receptive skills in ASL or ASL-like signing (as cited in Erting, 1988).

Teacher education programs may be failing to prepare teachers to be communicatively competent for their deaf and hard of hearing students. Few studies focus on teachers' communication practices and how these affect students' English performance (Woodward, Allen and Schildroth, 1987). Maxwell (1985) reports that teachers indicate that they experience difficulty in

understanding their deaf and hard of hearing students because sign language was not a major component of their preparation. In addition, her study indicated that there was no consistency in sign language instruction and that sign language classes were not required. Stewart (1992) states that teacher preparation programs do not put forth a maximum effort to facilitate the communicative competence of teachers.. He states that studies by Akamatsu and Stewart (1987) and Maxwell (1985) show that teacher preparation programs offer only one to three sign language classes during the pre-service teachers' preparation, hardly enough instruction to demonstrate competence.

A study of thirty-three teacher preparation programs for the deaf and hard of hearing in 1988 indicates that many of these programs do not offer pedagogical-methodological courses. Instead, they offer courses that present a clinical perspective of deafness (Mason, 1994). Mason's work is significant in that it seeks both to examine possible alternatives for preparing pre-service teachers of the deaf and hard of hearing to be fluent in ASL and to enable them to understand how ASL users learn English as a second language. As a result of continued dissatisfaction with the quality of deaf education, Strong (1995) reported that with on-going changes in the pedagogical practices of deaf education, the opportunities for teachers of the deaf and hard of hearing to receive training in ASL-English bilingual programs are scant (as cited in Nover, 1998).

This study contributes to the deaf and hard of hearing teacher preparation

literature by further exploring the preparation of teachers in sign language and communicative/cultural competence. Findings will be useful to teacher educators who have responsibility for the planning of the curriculum for teachers of the deaf and hard of hearing. Findings will also provide direction to enhance the quality of ASL instruction and English as a second language in programs that prepare teachers of the deaf and hard of hearing. In addition, the results of this study can inform the Council on Education of the Deaf in determining accreditation criteria for teacher preparation programs of the deaf and hard of hearing.

Statement of the Purpose

The purpose of this study is to examine the roles of (a) communicative competence, (b) language proficiency, (c) knowledge of literacy learning, (d) cultural proficiency, and (e) knowledge of second language principles in graduate level programs that prepare pre-service teachers to teach deaf and hard of hearing learners.

Research Questions

1. What patterns emerge in the areas of (a) communicative competence, (b) language proficiency, (c) literacy learning, (d) cultural proficiency, and (e) knowledge of second language learning principles in the preparation of pre-service teachers of the deaf and hard of hearing?
2. What is the relationship between these patterns, program philosophies and structures?

Definition of Terms

American Sign Language (ASL):

The Deaf community in North America uses ASL, and considers it to be their natural language. ASL is independent from English and has all the necessary characteristics that make any language a unique communication system (Valli, & Lucas, 1992).

Bilingualism/Biculturalism in the Deaf and Hard of Hearing Community:

Deaf and hard of hearing individuals may use two languages, ASL and English, in their daily lives. Their ability to use these two languages greatly varies. They tend to use ASL with members of the deaf community and more English-like signing with hearing individuals (Parasnis, 1996). The experiences of deaf and hard of hearing individuals coexist in both the "Deaf" and "Hearing" cultures (Parasnis, 1996).

Communicative Competence:

Communicative competence recognizes cultural, visual, non-verbal, verbal, and language issues. Communication competence must include grammatical, discourse, socio-linguistic, pragmatic, and strategic elements to maintain successful communication (Brown, 1994).

Cultural Proficiency:

Cultural proficiency is "the ability to use a cultural base to interact with the behaviors, attitudes, and beliefs of one's culture" (Parasnis, 1996, p.30).

Deaf and Hard of Hearing:

The terms, "deaf," with a lower case 'd', and hard of hearing only provide audiometrical information. Individuals who are deaf have a hearing loss that is greater than 70 dB and do not understand speech even with a hearing aid. Hard of Hearing individuals have a hearing loss that ranges from 35-69 dB. They have difficulty understanding speech even with the use of a hearing aid (Moores, 1996).

Language Proficiency:

Language proficiency is "the ability to perform particular functions in a language" (Parasnis, 1996, p.39).

Knowledge of Literacy Learning:

The term, "literacy," refers to reading, writing, computer, mathematics, and text-based literacy skills (Douglas, 1989; Garton and Pratt, 1989; Paul, 1993a, as cited in Paul, 1998). Knowledge of literacy learning includes knowledge of studies and principles that are based on a number of psycho-linguistic and pedagogical domains of inquiry (Brown, 1994).

Knowledge of Second Language Learning Principles:

Second language learning principles includes cognitive, affective, and linguistic principles. Knowledge of second language learning principles defines as an understanding of (a) mental and intellectual functions, (b) how one feels about a language and the tie between language and culture and (c) complex linguistic systems that play a role in second language learning (Brown, 1994).

Manually Coded English (MCE) Systems:

"Any of several signing systems invented by educators to represent English sentences using signs borrowed from ASL combined with signs contrived to serve as translation equivalents for English function words (articles, prepositions, etc.) and prefixes and suffixes." (Lane, Hoffmeister, & Bahan, 1996, p.270).

Simultaneous Communication:

Simultaneous Communication refers to a mode of communication in which both sign and speech are used simultaneously (Marschark, 1997).

Total Communication:

"An educational policy that encouraged teachers to use all means of communication at their disposal, including ASL, English, pantomime, drawing, and fingerspelling." (Lane, Hoffmeister, & Bahan, 1996, p.270).

Theoretical Framework

This study is grounded in (a) theory of communicative competence, (b) the belief that ASL is indeed a language and that there is an existence of Deaf Culture which consists of two languages and two cultures, and (c) the assumption that teaching and learning in classrooms are communicative acts.

The quality of a student's cognitive development largely depends on the quality of the teachers' communicative use of language (Moll, 1990). A major principle of Vygotsky's theory is that learning is a transactional process, with the child representing only one half of an interacting partnership (White, 1987).

White (1987) pointed out that effective communication between children and adults is essential for successful language learning.

However, effective communication between children and adults as a basis for successful language learning may not be available to deaf and hard of hearing students. A number of studies indicate that teachers of the deaf and hard of hearing may not have the communicative competence necessary to enhance the language learning of their students (Rudser, 1988; Erting, 1982; Erting, 1988; Gallaudet Research Institute's Center for Assessment and Demographics Studies, 1985; Woodward, Allen and Schildroth, 1985; as cited in Bowe, 1991). One of fifty-two recommendations made to Congress in 1988 was for teachers of the deaf and hard of hearing to be more communicatively competent. This recommendation was based on the 1985 study of Woodward, Allen and Schildroth (as cited in Bowe, 1991). However as of 1991, this recommendation had not been met.

Bonkowski, Gavelek, and Akamatsu (1991) conclude that the experiences deaf and hard of hearing children have with the nature and quality of communication have left them facing great difficulty in understanding "the linguistic marking of everyday experience."

The Deaf community in North America uses ASL, and considers it to be their natural language. ASL is independent from English and has all the necessary characteristics that make any language a unique communication system (Valli and Lucas, 1992). A number of studies (Anderson, 1994; Barnum,

1984; Bienvenu, 1992; Lucas, 1996; Padden and Humphries, 1988; Kannapell, 1974, 1978; Padden and Ramsey, 1993; Parasnis, 1996; Stokoe, 1980; Wilcox, 1989) have proven that Deaf Culture along with its values and traditions exist and that it is a result of a long history of development (as cited in Nover, 1998).

In spite of the volume of studies listed above, a number of studies indicate that this linguistic and cultural perspective may not be widely accepted by the majority of today's teachers of deaf and hard of hearing (as cited in Nover, 1998). Wink (1997) states that it is necessary for teachers to continuously question their beliefs and assumptions when working with students. The beliefs and assumptions of pre-service teachers may be influenced by teacher trainers.

Chapter II

Literature Review

Introduction

This chapter provides a review of the literature related to deaf and hard of hearing education with particular emphasis on (a) perspectives of the deaf and hard of hearing community, (b) performance of deaf and hard of hearing individuals in reading and writing, (c) communication systems, (d) quality of the home language of deaf and hard of hearing individuals, (e) communicative competence of teachers, (f) the quality of training teachers receive in reading and writing instruction and in developing communicative competence; and (g) the critical characteristics of language instructors.

Two Perspectives of the Deaf and Hard of Hearing Community

There are two main, diametrically opposed, perspectives of educating the deaf and hard of hearing. The first perspective, pathological, views the deaf and hard of hearing community as a deficit model. This perspective applies the standards of the hearing majority and then determines that deaf and hard of hearing individuals are different and somehow lacking. Proponents of this view believe that they and society need to be available to "normalize" deaf and hard of hearing individuals. Proponents are typically hearing professionals who work with individuals who are deaf and hard of hearing (Cokely and Baker-Shenk, 1991).

The pathological view rests on three assumptions to describe deaf and

hard of hearing individuals. The first assumption is based on the level of hearing loss. Proponents who share this view regard hearing loss as an obstacle to the development of speech, but continue to encourage the development of speech (Schein, 1968; as cited in Cokely and Baker-Shenk, 1991). The second assumption is that hearing loss and communication difficulties cause individuals to have learning and psychological problems (Levine, 1956; Davis and Silverman, 1960; Myklebust, 1960; Rainer et al, 1963; Altschuler, 1964, Rainer and Altschuler, 1966; as cited in Cokely and Baker-Shenk, 1991). Third, the pathological perspective assumes negative treatment of deaf and hard of hearing individuals because they are seen as a minority group (Vernon and Makowsky, 1969; as cited in Cokely and Baker-Shenk, 1991).

The cultural perspective, on the other hand, is more positive. It highlights the language, experiences, and values of deaf and hard of hearing individuals. Supporters of the cultural perspective believe that deaf and hard of hearing individuals should be viewed as a cultural and linguistic minority. This view did not exist until American Sign Language (ASL) was recognized as a language (Cokely and Baker-Shenk, 1991).

The cultural perspective uses two characteristics to describe deaf and hard of hearing individuals. The first characteristic is a common means of communication. Deaf and hard of hearing individuals share a common means of communication (signs). This common means of communication helps to create

group cohesion and identity (Schlesinger and Meadow, 1972; as cited in Cokely and Baker-Shenk, 1991). The second characteristic is that deaf and hard of hearing individuals share a common language (ASL) and a common culture (Woodward and Markowicz, 1975; Padden and Markowicz, 1976; Markowicz and Woodward, 1978; as cited in Cokely and Baker-Shenk, 1991).

To be a member of the Deaf culture, one must maintain attitudinal deafness. Attitudinal deafness is apparent in an individual who supports and shares the values of the deaf and hard of hearing community. From supporting and sharing the values of the community, this individual is seen to be a part of the group. Studies show that attitudinal deafness rather than the level of one's hearing loss is what determines whether one is a member of the Deaf culture (Padden, & Markowicz, 1976, as cited in Cokely, & Baker, 1991).

Attitudinal deafness implies four things. First, it assumes that not all deaf and hard of hearing individuals choose to be members of the deaf and hard of hearing community. Second, members of the deaf and hard of hearing community have some degree of hearing loss. However, a hearing person may be a member of the community as long as s/he maintains attitudinal deafness (Meadow, 1972; Furth, 1973; Woodward and Markowicz, 1975; as cited in Cokely and Baker-Shenk, 1991). The third assumption is that within the deaf and hard of hearing community, attitudes are defined by one's audiological, political, linguistic and social abilities. Finally, the level to which a member is accepted in the deaf and hard of hearing community varies. One's skills,

experiences, and attitudes determines the level of acceptance (Cokely and Baker-Shenk, 1991).

As described earlier, the attitudes of the deaf and hard of hearing community are expressed in audiological, political, linguistic, and social terms. The term 'audiological' refers to the "degree of hearing loss." This is a factor that determines the level and speed of how quickly one may be accepted into the community. For instance, a hearing person is not accepted into the community as quickly as a deaf and hard of hearing person. The level to which this hearing person is accepted is also not the same as that of a deaf and hard of hearing person. This may be true even if the hearing person has similar skills, experiences, and attitudes. The "political" reference describes not only how well a person is able to influence issues that are important to the community but also the types of proposals and decisions s/he initiates. A hearing person may not always be accepted by the community. Fluency in ASL is critical because the deaf and hard of hearing community uses ASL to express and share its values, goals and beliefs. Socially, the person must have the ability to interact with deaf and hard of hearing individuals. The level of acceptance depends on how much at ease this person feels in these interactions with deaf and hard of hearing individuals. Having deaf and hard of hearing friends promotes acceptance (Cokely and Baker-Shenk, 1991).

In sum, attitudes toward the values, experiences and language of the deaf and hard of hearing community are based on political, linguistic, and social

terms as well as a hearing loss. A hearing person who wishes to be a member of the community should satisfy the linguistic and social prerequisites (Cokely and Baker-Shenk, 1991).

Educators who hold a cultural view of deafness, consider language and culture to be the two critical issues in the field of deaf and hard of hearing education. They believe that language and culture cannot be separated. When one discusses deaf and hard of hearing education, one tends to talk about language. When one talks about language used in schools, the issue of culture is frequently raised (Continuing Education and Outreach, 1993).

Since there are two perspectives of the deaf and hard of hearing community, pathological and cultural, teacher preparation programs should consider the implications of both these views. This study is grounded in the assumption that teacher preparation programs should recognize that there are deaf and hard of hearing individuals who consider themselves to be a part of a cultural and linguistic minority and that there are some who choose or attempt to live, with varying levels of success, in the hearing world. In addition, teacher preparation programs must recognize that deaf and hard of hearing individuals with various levels of hearing loss have the right to membership in the deaf and hard of hearing community, hearing community, or both. The decision to become a member of a community is a matter of individual choice. This choice is based on a person's preferences, experiences, lifestyle, and comfort level in interacting with the community. In other words, the information presented in

preparation programs must be wholistic, respectful, and non-judgmental.

Teacher preparation programs should also prepare pre-service teachers to recognize the implications of both the cultural and pathological views of the deaf and hard of hearing as they relate to instruction. Two languages and two cultures must be emphasized in the preparation of deaf and hard of hearing learners by teachers able to orient students to either community. In order to accomplish these goals, teacher preparation programs should prepare pre-service teachers to have attitudinal deafness and to understand that the degree of hearing loss among deaf and hard of hearing individuals varies and that this has implications for teaching and learning (not language modification).

Performance of Deaf and Hard-of-Hearing Individuals in Reading and Writing

The reading and writing performance of deaf and hard of hearing individuals is an on-going issue in the field of deaf and hard of hearing education. "Third or fourth grade level" is frequently used to describe the academic achievement of the majority of deaf and hard of hearing individuals by the end of their school career (Allen, 1986; King and Quigley, 1985; Quigley and Paul, 1990; as cited in McAnally, Rose and Quigley, 1994; DiFrancesa, 1972; Furth, 1966; Wrightstone, Aronow and Moskowitz, 1963; as cited in Strong, 1988). A recent report indicates that the literacy achievement of these individuals is below the 3.5 grade level (Gallaudet Research Institute's Center for Assessment and Demographic Studies (CADS), 1991; as cited in Paul and

Quigley, 1994).

Even a slight hearing loss affects the quality of language, literacy, and academic achievement (Paul and Quigley, 1987; Ross, Bracket and Maxon, 1982; as cited in McAnally, Rose and Quigley, 1994). McAnally, Rose and Quigley (1994) state that deaf and hard of hearing individuals have normal cognitive abilities to develop language, though this occurs less rapidly than their hearing peers. However, other studies show that deaf and hard of hearing individuals are intellectually and cognitively similar to their hearing peers in all important abilities (Paul and Jackson, 1993; Paul and Quigley, 1990; as cited in Paul and Quigley, 1994). The studies of Braden (1984) and Hiskey (1966) show that deaf and hard of hearing and hearing individuals do not vary in their 'nonverbal intelligence tasks' results on the Wechsler Intelligence Scale for Children-Revised (WISC-R; Wechsler, 1974) and the HNTLA (as cited in Paul and Quigley,1994). The studies conclude that the difference between deaf and hard of hearing and hearing individuals is based in linguistic, cultural, environmental, and task factors (Paul and Quigley, 1994). It has been suggested that the poor performance in reading and writing of deaf and hard of hearing individuals is the result of educators using a uniform educational approach despite differences between individual and between groups (Strong, 1988).

The literature indicates that deaf and hard of hearing individuals have normal cognitive abilities and are able to acquire language. Poor performance

in reading and writing may be due to the following factors:

1. The communication systems used in schools for the deaf and hard of hearing are used to visually represent English rather than support language development.
2. Deaf and hard of hearing individuals do not receive complete language input.
3. Many deaf and hard of hearing individuals do not receive high quality language input at home, making communication at school even more important.
4. Many teachers have minimal signing skills and are not communicatively competent.
5. Teachers may not receive rigorous courses in reading/writing and experiences that promote communicative competence

Communication Systems

Historically, educators have attempted to improve the literacy levels of deaf and hard of hearing individuals by employing different modes of communication. Though educators of the deaf and hard of hearing tend to equate communication modes with language teaching strategies, use of a specific mode of communication cannot be considered a 'strategy' to teach language (Paul and Quigely, 1994). The controversy over the choice of language and communication modes for education continues even today (Paul and Quigley, 1994). Again, this controversy is over which mode of

communication and language is best to teach English. Ironically, language teaching strategies are not considered. Understanding the relationship between mode of communication and the reading/writing performance of deaf and hard of hearing individuals is essential. Communication modes determine how teachers communicate with deaf and hard of hearing individuals.

In the past, educators have attempted to find ways to improve the reading and writing skills of deaf and hard of hearing individuals. These attempts resulted in the development of a wide range of communication approaches, from the oral philosophy to the philosophy of Total Communication (Strong, 1988).

Manually Coded English (MCE) is used to describe a communication mode frequently used by teachers (Rudser, 1988). MCE variations are created to provide deaf and hard of hearing individuals a visual representation of the structure of standard written English (Paul and Quigley, 1994). For instance, Signing Exact English, one of the MCE variations, was created because its developers believed that the systems would make it easier for deaf and hard of hearing individuals to acquire English. Once English is acquired, it was assumed that literacy achievement will be improved (Gustason et al., 1980; as cited in Paul and Quigley, 1994). As a result of learning English through visual representations, it was assumed that reading and writing performance would improve (Rudser, 1988).

Visually representing English to students produces its own set of problems. Educators are typically more concerned with how to represent the

form of the spoken English than content (Continuing Education and Outreach, 1993). MCE is not a language but a visual representation intended to make it easier for deaf and hard of hearing individuals to learn English (Rudser, 1988). Proponents of MCE variations assume that deaf and hard of hearing students will learn the structure of written standard English through visual representations of spoken language (Paul, & Quigley, 1994). However, written and spoken structures differ greatly.

The goal of Total Communication is to provide deaf and hard of hearing individuals with equal access to visual and auditory communication so as to meet the communicative needs of all deaf and hard of hearing students. In other words, teachers employ a range of communication modes and two languages, ASL and English (Paul and Quigley, 1994). However, the philosophy of Total Communication poses problems that have to do with the simultaneous use of sign language and speech. Such an approach is also referred to as simultaneous communication or sign supported speech. Teachers also tend to use MCE variations rather than American Sign Language (Lou, 1988; Paul, 1990; Quigley and Paul, 1984; Reagan, 1990; as cited in Paul and Quigley, 1994). Studies show that the majority of teachers do not use ASL (Woodward and Allen, 1988; as cited in Paul and Quigley, 1994) despite the fact that ASL is the natural language of the majority of deaf and hard of hearing individuals. Only a few schools use ASL as the language of instruction (Nover & Ruiz, 1993).

This lack of fluency in ASL affects deaf and hard of hearing individuals

who come from deaf and hard of hearing families as well as deaf and hard of those who learn ASL from ASL-using peers (Erting, 1985; Johnson and Erting, 1984; as cited in Erting 1988). Deaf and hard of hearing individuals from hearing families who are exposed to ASL-like signing use ASL principles in their communication (Goodhart, 1984; Gee & Goodhart, 1986; as cited in Schein and Stewart, 1995). Individuals exposed to teachers who use one of the MCE variations also use ASL features in their communication (Hoffmesiter, 1978: 1982; Hoffmeister and Goodhart, 1978; Goodhart, 1984; Mounty, 1986; Raffin, 1976; Spulla, 1988; Suppalla, 1982; Schick, 1987; as cited in Hoffmesiter, 1990).

Before ASL was recognized as a language, sign language skills of the deaf and hard of hearing were seen as being of either high or low form (Baker and Cokely, 1980; Reagan, 1990; Wilbur, 1987; as cited in Paul and Quigley, 1994). Signing in English word order was referred to as the "high" form of signing; whereas, those who signed in nonstandard English were seen to use the "low" form of signing. A language chauvinism emerges because many teachers and practioners in the field do not understand the "low" form of signing. Further, proponents of oralism and the MCE variations believe that ASL hinders English acquisition despite evidence to the contrary (Nover and Ruiz, 1993). While Total Communication claims to offer equal communication access, it does not use ASL for ASL users or teach ASL as a language.

As a result of the continued limited achievement in the writing and reading

of deaf and hard of hearing individuals, educators began to study the quality of MCE variations. It was found that teachers who use simultaneous communication do not provide deaf and hard of hearing individuals with a complete language system (Kluwin, 1981, on junior high school teachers; Marmor and Petito, 1979, on high school teachers; Strong and Charlson, 1987, on elementary school teachers; Swisher, 1984, on hearing parents; as cited in Strong, 1988). Teachers may experience a linguistic overload from having to speak and sign at the same time (Marmor and Petitio,1979; as cited in Rudser, 1988). Consequently, teachers tend to make deletions. The most common deletions are function words, grammatical morphemes, subjects, and main verbs (Rudser, 1988).

Woodward and Allen (1988) demonstrated that only 167 out of 722 teachers actually follow the principles of a MCE variation (as cited in Woodward, 1990). Rather, teachers employ Sign English. Sign English is neither ASL nor English nor a complete language. It is a mixture of both ASL and English and cannot support the learning of English (Woodward, 1990). Deaf and hard of hearing individuals do not make any significant progress in their reading and writing when their teachers use one of the MCE variations (Rudser, 1988). As a result of continued exposure to an incomplete language system, deaf and hard of hearing individuals continue to do poorly in reading and writing (Strong, 1988).

Quality of the Home Language of Deaf and Hard of Hearing Individuals

Deaf and hard of hearing individuals have normal cognitive abilities to acquire language, but do so less rapidly (McAnally, Rose and Quigley, 1994). Ninety percent of deaf and hard of hearing individuals come from hearing families and many of their parents are unable to communicate with them (Strong, 1988). The quality of the home language experiences of these individuals is so poor that they frequently arrive at school with minimal communication skills (Strong, 1988). This limited language exposure may influence the rate of language learning and the reading and writing performance of deaf and hard of hearing individuals.

On the other hand, hearing individuals come to school with a strong foundation in their first language. Similarly, deaf and hard of hearing individuals from deaf and hard of hearing families also have a strong first language. Deaf and hard of hearing individuals from deaf, hard of hearing and hearing families are exposed to a complete language system and have access to communication throughout the day. Incidental learning also occurs from exposure to the language of adults. Frequently, these students perform better academically than those who do not have access to the same quality of communication at home (summarized by Moores, 1978; Meadow, 1968; Quigley and Frisina,1961; Stevenson, 1964; Stuckless and Birch, 1966; as cited in Strong, 1988). Consistent language input (Strong, 1988) and parental acceptance (Corson, 1973; as cited in Strong, 1988) are other important factors that facilitate greater

achievement.

Despite the fact that the achievement of some deaf and hard of hearing individuals is higher than that of others, they are still are not on par with their hearing peers (Continuing Education and Outreach, 1993). Low achievement expectations for deaf and hard of hearing learners and general attitudes towards deaf people are contributing factors that may explain the discrepancy in the academic achievement between deaf and hard of hearing individuals and their hearing peers (Erting, 1985, 1982; Hoffmeister, 1978; Hoffmeister and Shettle 1983; Johnson, Liddell and Erting, 1989; as cited in Hoffmeister, 1990).

Communicative Competence of Teachers

Communicative competence is "all the kinds of communicative knowledge that individual members of a cultural group need to possess to be able to interact with one another in ways that are both socially appropriate and strategically effective " (Schulz, Florio, & Erickson, 1982, p.167). Teachers of the deaf and hard of hearing often do not have the communicative competence necessary to enhance the language learning of their students. Rudser (1988) described teachers' signing skills as minimal. Erting (1982) indicated that teachers not only have difficulty with their expressive skills but they also have poor receptive skills in ASL or ASL-like signing (as cited in Erting, 1988). The 1985 Gallaudet Research Institute's Center for Assessment and Demographic Studies (CADS) study demonstrated that 79.9 percent of teachers rated their receptive skills lower than their spoken English and 70.8 percent of teachers

rated their expressive skills lower than their spoken English skills (as cited in Woodward, 1990). One recommendation made to Congress in 1988 was for teachers of the deaf and hard of hearing to be more communicatively competent. This recommendation was based on the 1985 study of Woodward, Allen and Schildroth (as cited in Bowe, 1991). However as of 1991, this recommendation had not been met.

The concern of educators over the quality of teachers' communicative competence began in 1956. Groht, in 1956, pointed out that deaf and hard of hearing individuals receive language in a limited, stereotypical , parrot-like fashion (as cited in McAnally, Rose and Quigley, 1994). Classroom communication patterns may be teacher-dominated and teacher-controlled (Craig and Collins, 1970; Crandall and Albertini 1980; Kluwin, 1983; Lawson, 1978; Wood, Griffiths, Howarth and Howarth, 1982, Wood, et al, 1982; as cited in King and Quigley, 1985). Teachers were found to initiate conversation more frequently than their students. They initiated conversation eleven times to every one student initiation (Craig and Collins, 1970; as cited in King and Quigley, 1985). This shows that the correlation between teachers' questioning and initiation of students in communication is negative (Wood, et al.,1982; as cited in King and Quigley, 1985).

The lack of teachers' fluency in ASL is a significant concern. One hundred forty of 1450 teachers claimed that they use ASL in their classrooms; however, the nature of their responses showed that only six of those may in fact

have been using ASL. This implies that most of these teachers did not understand the difference between ASL and other modes of communication, perhaps because communication issues were not sufficiently discussed in the preparation programs of these teachers (Woodward and Allen, 1987; as cited in Stewart, 1992). Stewart (1983) reported that 83.6 percent of teachers felt the need to improve their ASL abilities. One area often overlooked by teachers are the nuances that are signaled by nonmanual forms. Instead they use vocal intonation and stress patterns. Nuances in spoken and signed communication may differ in semantic frames; therefore, teachers not only experience language conflicts, but cultural conflicts as well (Continuing Education and Outreach, 1993).

The education of deaf and hard of hearing individuals depends on the communicative competence of teachers (Rudser, 1988). The poor quality of the linguistic, cognitive, and emotional development in deaf and hard of hearing individuals may be a reflection of teachers' lack of communicative competence (Erting, 1988). Communicative competence in teachers is critical, especially because the language learning of children will be affected if they do not experience fluent and intelligible communication with an adult in their early years (McAnally, Rose and Quigley, 1994). Many deaf and hard of hearing individuals experience a severe lack of conventional communication at home and come to school as a result with little or no language development. Teachers must not contribute to this early language deprivation but instead be competent enough to

foster the language growth of these learners.

Quality of Training Teachers Receive in Reading and Writing Instruction and in Developing Communicative Competence

Delaney, et al. (1984) states that teachers' skills and knowledge are one of the factors that contribute to the literacy achievement of deaf and hard of hearing individuals (as cited in Paul and Quigley, 1994). Teachers of the deaf and hard of hearing must have the same linguistic knowledge and skills as chemistry teachers have about teaching chemistry (Russell, Quigley and Power, 1976; as cited in Paul and Quigley, 1994). However more than twenty percent of teachers receive one or no courses in reading and almost forty percent of teachers do not receive any graduate reading courses (Coley and Bockmiller, 1980; Bockmiller and Coley, 1981; as cited in King and Quigley, 1985). The authors feel that the above percentages may in fact be much lower because the survey was sent specifically to reading teachers, not teachers in general. Information on whether teachers have adequate training in teaching how to teach writing, is scant.

Communicative Competence

Few studies focus on teachers' communication practices and how these affect students' English performance (Woodward, Allen and Schildroth, 1987). Maxwell (1985) reported that teachers experienced difficulty in understanding their deaf and hard of hearing students because sign language was not a major component of their preparation. In addition, her study indicated that there was

no consistency in sign language instruction and that sign language classes were frequently not required. Stewart (1992) states that teacher education programs do not put forth maximum effort to facilitate the communicative competence of pre-service teachers. He states that studies by Akamatsu and Stewart (1987) and Maxwell (1985) show that teacher preparation programs offer only one to three sign language classes.

A 1985 CADS study shows that teachers in residential schools learned sign language from deaf students, co-workers, and friends rather than from their sign language classes. These teachers stated that the primary source from which they acquired sign language was from deaf and hard of hearing students. Learning on the job at the expense of deaf and hard of hearing individuals' education is as unacceptable as hearing teachers in general education learning to speak and write English on the job.

Three factors influence teachers' communicative behaviors: (a) teachers' beliefs about deafness and language learning, (b) teachers' comfort when interacting with deaf and hard of hearing individuals, and (c) teachers' view of themselves as hearing-speaking persons (Erting, 1988). Erting explains that teacher preparation programs play a significant role in forming the perspectives and beliefs of its teachers toward deafness and language learning. Frequently, the emphasis of preparation programs is on the English language deficiency of deaf and hard of hearing individuals. This is a powerful message that leads teachers to teach English rather than to have meaningful communication with

their students. That is, they view their communication as a strategy to teach English. Consequently, they attempt to visually represent English and stress methods of memorization, rote, and drill (Erting, 1988).

Cokely and Baker-Shenk (1991) in their general discussion of sign language, suggest that in the past the focus of sign language instruction was mainly on vocabulary instruction. However, they also pointed out that sign language instruction is increasingly focusing on ASL as a language (grammar and vocabulary). Sign language instruction has not reached its full potential even though there are a great number of classes, conferences, organizations, activities, journals, bookstores, and publishing companies attempting to facilitate better development of sign language instruction. Even though it is on the rise sign language instruction has not met the needs of the target population (Rudser, 1988).

Finally, educators must ask themselves if there is something inherent in deaf and hard of hearing students that causes them to learn English less rapidly or whether it is the circumstances that force them to acquire English at a slower rate. The deficiency of deaf and hard of hearing individuals in reading and writing is frequently pointed out in the literature. The needs of teachers however are much less frequently mentioned (Continuing Education and Outreach, 1993). Teacher preparation programs should be more accountable to their students and ask the following questions:

1. What can teacher preparation programs do to facilitate the communicative

competence of teachers?

2. What can teacher preparation programs do to increase teachers' understanding of language teaching principles?
3. What can teacher preparation programs do to foster teachers' respect for two languages, ASL and English, and two cultures, deaf and hard of hearing and hearing?

Which teacher preparation programs should prepare their pre-service teachers to be communicatively competent in two languages?

In the field of deaf and hard of hearing education, there are three educational philosophies: (a) Oralism, (b) Total Communication, and (c) Bilingualism-Biculturalism (Paul and Quigley, 1994). Teacher preparation programs that are based on the Total Communication and Bilingual-Bicultural philosophies, must provide ASL courses. The term "Bilingualism-Biculturalism" infers that ASL and English are included in the program. The philosophy of Total Communication advocates the use of various modes and two languages, to meet the communication needs of all deaf and hard of hearing individuals. The concept and principle of the language and communication continuum fits this philosophy as well.

Sign Language Instruction

Profile of Sign Language Instructors

There are currently 3200 sign language instructors at 800 different institutions. The majority of these individuals have undergraduate degrees, but

none of them have degrees in ASL teaching or second language teaching (Baker-Shenk, 1987; as cited in Kanda and Fleischer, 1988). Newell (1995) reported that in 1993, 147 out of 359 sign language instructors were members of American Sign Language Teacher Association (ASLTA). A membership in the ASLTA is an indicator of whether a sign language teacher is an active professional in sign language instruction. A certification from ASLTA or Sign Instructors Guidance Network (SIGN), a predecessor organization, is also an indicator of the individual 's involvement in professional development. One hundred and one out of 359 instructors have ASLTA or SIGN certification.

Foreign/second language pedagogy

Kanda and Fleischer (1988) state that sign language instructors must have six critical qualifications. Two of the six qualifications include knowledge of foreign/second language pedagogy and proficiency in the language. Before sign language instructors begin their language teaching careers, they must formally study the language, including educational and pedagogical principles. They must take courses in "grammar and structure, literature, translation, acquire a theoretical base in pedagogical principles appropriate to the age of the target population, educational foundations, educational philosophy, integration of affective, cognitive, and psychomotor domains, metacogntion, learning styles and whole brain instruction." In addition, they must know second language teaching theory and methodology.

While there appear to be more sign language instructors today who are

aware of the skills and knowledge needed to teach ASL as a foreign/second language, these numbers are still small (Cokely and Baker-Shenk, 1991). The lack of quality sign language instructors may result from an insufficient number of training programs that prepare these teachers (Schein and Stewart, 1995). However, it was suggested that the establishment of the National Consortium of Programs for the Training of Sign Language Instructors, (Cokely and Baker-Shenk, 1991) would allow more and better communication among sign language instructors.

Kanda and Fleischer (1988) state that sign language instructors must show interest in maintaining personal and professional growth. They must be viewed as leaders in the field of ASL. That is, they must be involved in professional development activities and have their linguistic research-based work published.

The National Association for the Deaf offers a certified examination that specifically indicates a person's level of competence and may be a good source for determining the qualifications of sign language teachers. Attendance to one or two ASL workshops and specified amount of ASL teaching experience are the two criteria for obtaining an ASL instructor certificate (Schein and Stewart, 1995).

The primary role of sign language instructors should be a model of ASL use. They therefore must have native or near native competency in ASL (Cokely and Baker-Shenk, 1991). Proficiency in the target language is listed as one of

the six critical qualifications for sign language instructors (Kanda and Fleischer, 1988). Qualified sign language instructors are those who use ASL and have knowledge of the teaching principles. They are unqualified if : (a) they just know a little something about the history or structure of ASL, (b) just use ASL, or (c) are just ASL interpreters (Cokely and Baker-Shenk, 1991).

Sign language instructors must feel comfortable enough to interact in the deaf and hard of hearing community (Kanda and Fleischer, 1988). Cokely and Baker-Shenk (1991) state that in order to maintain ASL skills, sign language instructors must have continued interaction with the deaf and hard of hearing community. If people study the target language from the perspective of their own culture, their use of the target language will not be effective and will cause frequent communication breakdowns to occur. Therefore, language instructors must know the cultural meanings of words, phrases, idioms, and expressions. Kanda and Fleischer (1988) add that the formal study of language alone will not give language instructors a "gut-level" feel in teaching the target language. "Gut-level" teaching will allow sign language instructors to determine appropriate grammatical structures used in different situations; know when to apply appropriate registers, and when to shift the registers.

Interacting in the culture helps language instructors develop fluency in the target language and respect for the community. Sign language instructors must respect the language and its history (Kanda and Fleischer, 1988). They must be aware of the historical oppression of the community and the language.

Sign language instructors must respect and protect ASL and its teaching. Unqualified people must be prevented from teaching ASL, those who have limited skills, knowledge and lack of respect for the community (Kanda and Fleischer, 1988).

Interviews with seventy-two students who took ASL courses found that students prefer deaf sign language instructors to hearing instructors (Schein, & Stewart, 1995). Deaf instructors were found to be (a) more flexible, (b) able to present a more realistic picture of how to communicate in the Deaf community and (c) able to demonstrate varieties of ASL. Deaf instructors are also more likely the ones who interact in the community the most. As a result of these interactions, they are able to present students with a realistic picture of how to communicate with a wide range of deaf and hard of hearing individuals.

The attitudes toward learning a language is a critical factor in determining their ability of individuals to learn the language. Language instructors must have 'attitudinal deafness'. They then can influence the attitude of students in a positive way (Cokely and Baker-Shenk, 1991).

Implications for teacher preparation programs

Teacher preparation programs that are based on a Comprehensive or Bilingual/Bicultural philosophy should hire language instructors who are: (a) fluent in ASL, (b) hold a degree in ASL teaching, (c) certified members of ASLTA or SIGN, (d) native or near native language users, (e) members of the deaf and hard of hearing community, (f) have attitudinal deafness, (g) interact and able to

communicate with a variety of deaf and hard of hearing individuals and (h) understand and know about classroom communication dynamics. Characteristics 'g' & 'h' promote sign communicative competence in teachers. In addition, teacher preparation programs must contact the National Association of the Deaf to obtain specific qualifications for sign language instructors and view sign language instructors as professional members of the academia. That is, sign language instructors must meet the requirements for professorship i.e. they must conduct research on the sign language skills of teachers, on teaching sign language primarily to teachers, publish articles on ASL teaching and pre-service teachers, and participate in planning the teacher preparation program curriculum.

Rationale for a Bilingual-Bicultural Educational Approach

Proponents of the bilingual-bicultural approach advocate a different educational approach for deaf and hard of hearing individuals. The rationale behind this is: (a) deaf and hard of hearing individuals traditionally experience low literacy achievement, (b) Cummins' linguistic interdependence fits the needs of deaf and hard of hearing individuals, and (c) studies suggest that deaf and hard of hearing individuals use more ASL like principles in their spontaneous language, even if these individuals come from hearing families.

The Common Underlying Proficiency theory (Cummins, 1981; as cited in Strong, 1988) suggests that individuals must have a strong first language base in order to learn a second language (Cummins 1979, 1980; as cited in Strong,

1988). Additionally, use of the native language to develop academic and cognitive development is essential. That is, individuals should use their native language not just for their interpersonal and communicative skills but academics as well (Strong, 1988).

Many deaf and hard of hearing individuals may exhibit low literacy levels because they do not have a strong first language base. Hearing families may not effectively communicate with their deaf and hard of hearing children. As a result, many of these children do not experience a 'full-blown, bona-fide linguistic system' in their early years. A 'full-blown, bona-fide linguistic system' is necessary to develop high-level thinking and literacy skills (Chomsky, 1975, Goodluck, 1991; for deaf students learning ASL, Newport and Meier, 1985; Wilbur, 1987; as cited in McAnally, Rose and Quigley, 1994).

Troike (1978) and Cummins (1981) reviewed several evaluations and studies on the bilingual educational approach in the United States and abroad. The results of these reviews indicate positive outcomes (as cited in Strong, 1988). Troike (1978) concludes that the bilingual educational approach is more effective than instruction in English only. In addition to the reviews, Chesarek (1981) conducted a study on a group of Crow-speaking learners, on a reservation in Montana. Crow-speaking learners in the bilingual educational program did better on nonverbal tests. Their overall English achievement was also better than those who did not enter the bilingual program (as cited in Strong, 1988).

Subtractive and additive bilingualism must be recognized in the field of deaf and hard of hearing education. Teachers tend to focus more on the English end of the communication continuum. This indicates that teachers do not value ASL highly. Deaf and hard of hearing individuals have the right to be educated in the language in which they are most fluent (ASL and English) (Rudser, 1988). Schein and Stewart (1995) explain that not many schools use ASL as a formal language for instruction. English is more widely used because educators believe that since deaf and hard of hearing individuals must live in an English-speaking environment (Schein and Stewart , 1995). While English is necessary, so is ASL, since these individuals also live in an ASL-signing environment (Schein and Stewart, 1995). Thus fluency in both languages is critical. Hearing learners receive formal English language instruction at their schools and universities. Schein and Stewart (1995) argue that deaf and hard of hearing learners must also be educated about ASL.

Bilingual-Bicultural Teacher Preparation

At the annual meeting of the National Association for Bilingual Education (NABE) in 1989, members approved the development of national standards for the preparation of bilingual/multicultural teachers (NABE, 1992). Teacher preparation programs should recognize these standards when preparing bilingual/multicultural teachers. As stated in the standards, the teacher's role should include communicating with learners and their parents, organizing educational experiences and directing paraprofessionals. In addition, these

professionals should advise the larger school community and become responsible for establishing the communication link between the school and home (NABE, 1992).

Educators in the field of deaf and hard of hearing education must communicate effectively with deaf and hard of hearing learners. Many of these learners may come from homes with limited communication. The teachers then become their most critical communication partners. Establishing effective communication links between learners and their parents or caregivers is necessary to facilitate academic achievement and communication. Deaf and hard of hearing learners in inclusive settings may not have the opportunity to learn English or ASL as a second language or learn the difference between the hearing and deaf cultures. Teachers must therefore have the knowledge and skills to work with general educators.

Standards

Bicultural/multicultural teachers must have the same quality of academic preparation as other teachers (NABE, 1992; Norris, 1972, and Blatchfor, 1982; as cited in Ambert and Melendez, 1985). They must also be proficient in non-English languages and understand issues of cultural diversity, bilingualism and second language pedagogy (NABE, 1992).

In addition to courses and credit hours, teachers should also have positive personal qualities, attitudes, skills, experiences, and knowledge (Norris, 1977). The bilingual/multicultural teacher should therefore (a) know and apply

the bilingual-bicultural educational philosophy, (b) have a sincere and genuine interest in linguistically and culturally diverse learners, (c) have the knowledge and proficiency to use the learner's language as a positive tool in teaching and (d) understand the nature of the learner's language (Blatchfor, 1982; the Center for Applied Linguistics, 1974; as cited in Ambert, & Melendez, 1985; Norris, 1977). Teachers who teach English as a second language must use methods to teach English that are different from those used to teach English-speaking learners.

Teacher preparation programs should prepare their pre-service teachers to be a 'welcome stranger' in the target culture (Morain, 1977). To accomplish this, preparation programs should require travel in a foreign country. Pre-service teachers of the deaf and hard of hearing must visit deaf clubs, deaf and hard of hearing organizations, meetings, and events. Such gatherings can serve to be a "cultural island," giving pre-service teachers the opportunity to talk to native speakers, read newspapers and magazines (i.e. NAD Broadcast or Deaf Life), view foreign films (films about the deaf and hard of hearing), and watch foreign language news broadcasts (Deaf Mosaic) (Morain, 1972).

Bilingual/multicultural teachers should understand the relationship between language and culture. As learners go through the process of enculturation, they must be cognizant of the values, beliefs, and rules for social behavior in the other culture. When students learn English, they must learn not only English phonology, syntax, and vocabulary but must know how concepts

are expressed in the dominant culture and understand its rules for social behavior. A bicultural educational approach explains two cultures.

Teacher preparation programs must equally value both the linguistic and cultural competencies of teachers. Pre-service teachers must be trained to be conscious of how an individual's culture influences his or her thinking and behavior. Courses in Cultural Anthropology (the notion of cultural relativity) and the Ethnography of Communication (method of observing and describing communication events in different cultures and describing classroom interaction) should be offered. From a cultural perspective, the purpose is to change the unconscious micro-behaviors of teachers. Observational training is useful for this end.

Conclusion

This study assumes that the literacy levels of deaf and hard of hearing individuals will improve dramatically if teacher preparation programs offer rigorous courses that demand communicative competence and literacy awareness in teachers. Courses in communicative competence should include both a formal study of languages (ASL and English) as well as instructional communicative competence courses. The latter does not refer to developing competence in MCE and its variations. Instead it refers to general pedagogical knowledge. It is here that teachers can display communicative competence; in asking questions, interpreting non-manual behaviors in writing and in synthesizing everything that is known about human pedagogical knowledge to

manage communicatively appropriate instruction.

Course offerings alone are not sufficient to develop the necessary knowledge base and skills for teachers. Strict entrance and exit standards to programs must be also considered. The quality of teacher educators in the field is yet another consideration. The literature indicates that teachers have minimal signing skills, so it should be no surprise to report a similar trend among teacher educators. When teacher educators have minimal sign skills, programs themselves cannot serve as models for pre-service teachers. Further, the minimal signing skills of teacher educators keeps them from interacting closely with the deaf and hard of hearing community. If teacher educators lack an insider's perspective of the issues that the community faces, the insight and expertise that they can share with pre-service teachers is limited and removed from reality. Finally, if teacher educators do not display communicative competence themselves, then they will not be able to supervise the field work experiences of pre-service teachers and give them the feedback that is so critical to growth.

Chapter III

Methodology

Research Design

The primary purpose of this study is to describe and compare the structure and function of graduate-level teacher preparation programs that prepare teachers of the deaf and hard of hearing. The main role of descriptive research is to describe and assess current conditions, opinions, and trends (Best, 1982). While program materials were used to better understand the current working of various programs, these alone did not provide all the necessary details. Survey research was therefore utilized to obtain more detailed information. Cozby (1993) states that questionnaires and interviews are two strategies that can be used to elicit information from a sample population. The use of questionnaires is described in Phase Two, and the use of interviews is described in Phase Three of the study.

Participants/Setting

The participants were teacher educators/program coordinators from all graduate programs across the country that prepares teachers of the deaf and hard of hearing. A listing of these programs in the 1996 publication of the *American Annals of the Deaf* indicated that there was a total of fifty such programs in the United States. Data regarding the participants is presented in Table 3.1.

Table 3.1

State	*University*	*Program Coordinator*
Arizona	University of Arizona	Dr. Shirine Antia
Arkansas	University of Arkansas at Little Rock	Dr. Bob Rittenhouse
California	California State University, Fresno	Dr. Karen Jensen
California	University of Southern California	Dr. Barbara Hecht
California	California State University, Northridge	Dr. E. Schneiderman
California	San Diego State University	Dr. Steven J. Kramer
California	San Francisco State University	Dr. Barbara Franklin
California	San Jose State University	Dr. Gerilee Gustason
Colorado	University of Northern Colorado	Dr. J.L. Luckner
District of Columbia	Gallaudet University	Dr. B. Bodner-Johnson
Florida	University of Northern Florida	Dr. Thomas Serwatka
Georgia	University of Georgia	Dr. Joan Laughton
Idaho	Idaho State University	Dr. David J. Mercaldo
Illinois	Illinois State University	Dr. Maribeth Nelson Lartz
Indiana	Ball State University	Dr. John Merbler
Kansas	University of Kansas Medical Center	Dr. Barbara Luetke-Stahlman
Kentucky	Eastern Kentucky University	Dr. Karen Dilka
Louisiana	Southern University	Dr. Partricia Bockmiller
Louisiana	University of New Orleans	Dr. J. Miller
Maryland	Western Maryland College	Dr. Judith Coryell
Massachusetts	Boston University	Dr. Robert Hoffmeister
Massachusetts	Smith College-Clarke School	Dr. Alan Marvelli
Michigan	Michigan State University	Dr. David Stewart
Michigan	Eastern Michigan University	Dr. Dorothea French

Missouri	SW Missouri State University	Dr. Harold W. Meyers
Missouri	Washington University-Central Institute	Dr. Gerald R. Popelka
Nebraska	University of Nebraska-Lincoln	Dr. Brenda Schick
Nebraska	University of Nebraska at Omaha	Dr. David F. Conway
New York	Canisius College-St. Mary's	Dr. Mary Delaney
New York	Adelphi University	Dr. Joan Callahan
New York	Hunter College-CUNY	Dr. Rosemary Gaffney
New York	Teachers College-Columbia University	Dr. Robert Kretschmer
New York	National Techincal Institue for the Deaf	Dr. Gerald C. Bateman
North Carolina	University of North Carolina at Greensboro	Dr. Edgar H. Shroyer
North Dakota	Minot State University	Dr. Faye Miller
Ohio	Bowling Green State University	Dr. Martha Gonter Gaustad
Ohio	University of Cincinnati	Dr. Roberta Truax
Ohio	Ohio State University	Dr. Patricia A. Connard
Ohio	Kent State University	Dr. Harold Johnson
Oregon	Western Oregon State University	Ms. Laurene Gallimore
Oregon	Lewis and Clark College	Dr. H. William Brelje
Pennsylvania	Bloomsburg University	Dr. Samuel Slike
Pennsylvania	University of Pittsburgh	Dr. Virginia Swisher
Tennessee	University of Tennessee	Dr. Olga Welch
Texas	University of Texas	Dr. M. Bernstein
Texas	Lamar University	Dr. Jean F. Andrews
Texas	Texas Woman's University	Dr. Alfred White
Texas	Incarnate Word College	Dr. Wallace Bruce
Utah	Utah State University	Dr. James Blair

Wisconsin	University of Wisconsin, Milwaukee	Dr. Amy Otis-Wilborn
n=50		

Phase One

To obtain basic program information from each of the teacher preparation programs, the following materials were requested: (a) the sequence of required courses, (b) a description of the courses, (c) a policy book stating eligibility and other requirements, and (d) program description, including mission and philosophy statements.

Program materials were used in different ways. First, the information in the program materials was used to guide the development of the survey. Secondly, survey responses were compared with the program materials in order to determine whether the responses of the teacher educators reflected actual practice or the desired goals of programs. Contradictions, if any, and questions regarding the program materials was discussed and clarified during the interviews in phase three.

Phase Two

A survey was sent to the fifty program coordinators of deaf and hard of hearing teacher preparation programs. The purpose of the survey was to gather demographic information regarding faculty, program size, voice on/off policies in communication, professional beliefs and other programmatic details that were not apparent in the general program materials.

Development of the Survey Instrument

Survey items were developed based on the literature in the field of deaf and hard of hearing education and bilingual/bicultural education. Professionals in the field of deaf and hard of hearing education were also consulted in the process of constructing the items. Settke and Alreck (1995) explain that the way in which questions are asked on a survey is critical. A review of a survey is useful in preventing common mistakes from occurring and in dealing with threats to reliability and validity. The first draft of the survey along with a cover letter explaining the purpose of the survey was mailed to five teacher educators on January 24, 1997. Revisions were made to the survey based on comments from the teacher educators. The survey was finalized with approval from a committee member and the dissertation chairperson on April 24, 1997. Recommendations were made by the individuals who reviewed the survey. It was suggested that (a) a series of 'topics' and 'skills' statements be inserted separately in two different sections of the survey; (b) that the Likert scale be employed

Phase Three

Survey responses cannot always be taken at face value. A good study seeks to understand the reasons behind the responses to the survey questions (Settle and Alreck, 1995). Interviews were necessary and useful in this regard.

Interviews were conducted with program coordinators from programs that prepare teachers of the deaf and hard of hearing. Interviewees were selected from a sub-sample of those teacher educators/program coordinators who

responded to the survey. One of the survey items asked respondents to indicate which of three philosophical orientation their programs subscribed to. A representative group of informants was selected from each of these three pools of respondents.

The purpose of the interviews was to gather more detailed information about the programs. Specific information was sought in the areas of (a) communicative competence, (b) language proficiency, (c) cultural proficiency, and (d) knowledge of second language principles and also to document the relationships between the patterns, program philosophies and structures of programs.

Procedures for Data Collection and Analysis

Phase I. Program Materials Document collection was used to obtain basic program information. A letter requesting the materials (see Appendix A) was faxed three times, November 20, 1996; February 28, 1997; and March 18, 1997. Materials were received from a total of thirty graduate-level teacher preparation programs that prepare teachers of the deaf and hard of hearing.

Phase II. Surveys of Teacher Preparation Programs of the Deaf and Hard of Hearing Document collection was used to gather information about the teacher preparation programs. A letter informing the program coordinators that they would be receiving a survey (see Appendix B), was faxed on May 26, 1997. The survey along with a cover letter explaining the purpose of the survey (see Appendix C) was mailed on May 23, 1997 to fifty program coordinators of deaf

and hard of hearing teacher preparation programs. A dollar bill was attached to each survey for purpose of increasing the response rate.

A total of thirty-three program coordinators responded to the survey on the first attempt. A month following the first mailing, a second set of surveys with cover letters was sent to the program coordinators who did not respond the first time. The second attempt resulted in obtaining ten additional responses. Thus, a total of forty-three surveys was received.

Phase III. Randomly Selected Teacher Preparation Programs of the Deaf and Hard of Hearing Formal letters (see Appendix D) were sent to those programs that responded to the survey, explaining the purpose of the study and requesting permission to study their programs. Confidentiality was maintained with the use of pseudonyms for programs and all participants. Consent forms were sent at this stage (Appendix E).

Phase IV. Interviews of the Randomly Selected Teacher Preparation Programs Document collection, including the teacher education curriculum, program descriptions and plans, policies for deaf and hard of hearing education and assessment procedures was used to evaluate: (a) department evaluation procedures; (b) pre-service teachers' communicative competence, language proficiency, cultural proficiency, and knowledge of second language learning principles, (c) student teaching performance, and (d) candidacy requirements.

Formal interviews were conducted with the program coordinators and/or teacher educators to gain information about the following: program composition

and beliefs regarding (a) language learning, (b) the importance of the native language, (c) the bilingual-bicultural philosophy, (d) the role of culture, and (e) the teacher trainers' role in the language learning of preservice teachers.

A cover letter, explaining the purpose of the interview along with a copy of the consent form was faxed to nine randomly selected program coordinators on the following dates: May 25, 1999; July, 1999; October, 1999; and February 2, 2000. A total of eight program coordinators responded to the letter and consent form. The first set of interview questions (see Appendix F) was e-mailed to the interviewees on February 13, 2000.

Follow-up Interviews Follow-up interviews were conducted where necessary to: (a) verify data obtained from the initial interviews, (b) gather additional data, and (c) provide participants an opportunity to add to or further relevant issues. Interviews were conducted via E-mail and e-mail correspondence was printed.

Data Analysis A frequency count was conducted on items from the survey. Patterns of data that emerged as a result of this analysis was recorded. Schwandt (1997) describes constant comparative analysis as the ongoing review of data to form categories. Indicators from the data were identified for similarities and differences. From this process, the researcher identified underlying uniformities in the indicators and produced a coded concept or category. Categories were compared with indicators and within each other to sharpen the categories and define their properties. Glaser and Strauss suggest

four states of constant comparative analysis:

1. Items applicable to each category were compared. While coding, ideas were compared which developed within a category with those that previously arose in the same category.

2. Categories and their properties were integrated. From comparing items in other items, the researcher then compared items with the properties of the category.

3. While comparing and linking categories, patterns were found in the categories which aided in the formation of theory.

4. Theoretical notes were collated which were in a category, summarized, and major themes were established.

The Survey Instrument As previously stated, survey items were developed based on the literature in the field of deaf and hard of hearing education and bilingual/bicultural education. They elicited demographic information and aspirations of individuals in the deaf and hard of hearing teacher education program regarding current program practices. The survey items addressed six (6) major areas: (a) mode of communication and language used by pre-service teachers, teacher trainers and sign language instructors; (b) theoretical aspects of first and second language learning; (c) cultural issues and the relationship between language and culture; (d) philosophy of educating deaf and hard of hearing learners; (e) theoretical aspects of educating deaf and hard of hearing learners; and (f) entrance/exit requirements regarding language and

cultural proficiency.

Chapter IV

Results

The survey along with a cover letter explaining the purpose of the survey was mailed on May 23, 1997 to fifty program coordinators of deaf and hard of hearing teacher preparation programs. On the first attempt, a total of thirty-three program coordinators responded to the survey. A second set of surveys was sent one month after the first mailing to the program coordinators who did not respond to the first mailing. The second attempt resulted in ten additional responses. Thus, a total of forty-three surveys was received.

Program Characteristics

Respondents were asked to describe their programs regarding duration, format (semester or quarter), availability of summer programs, faculty demographics and the number of students. In terms of duration, nearly two-thirds (63 percent) of the respondents indicated that the average length of their programs was two years. Eleven percent of the respondents indicated that the average time for completion was one year and eleven percent indicated the average completion time to be 1.5 years. Only six programs (16 percent) indicated an average completion time longer than two years. The reason for the significantly longer preparation time in one program (10.5 years) was because many of the students were part-time. Considering this extended time an outlier, time for completion of the programs ranged from one to four years. Data showing the duration of various programs is shown in Table 4.1.

Table 4.1

The average length of time students are enrolled in your deaf and hard of hearing education program is:		
Years Enrolled	*Number of Programs*	*Percentage*
2	24	63.2
1.5	4	10.5
1	4	10.5
2.5	2	5.3
4	2	5.3
3	1	2.6
10.5	1	2.6
n=38		

When analyzed by program philosophy, the average length of time for the oral programs was 1.5 years and 2.2 years for the bilingual/bicultural programs. The average duration of twenty-nine of the thirty-one comprehensive programs was 1.9 years.

In terms of program format, most of the respondents indicated that their school calendars was organized by semesters (90 percent), with a few programs following the quarter system (10 percent). Almost two thirds of the programs (63 percent) offered a summer program. When contrasting Oral, Comprehensive, and Bilingual/Bicultural programs, all the oral and bilingual/bicultural programs reported that their school calendar was based on the semester system. Twenty-nine out of thirty-one comprehensive programs indicated that their programs were based on the semester system. Two oral programs offered summer

programs and one reported that it offered a summer practicum experience. Four bilingual/bicultural programs offered summer programs as also seventeen out of twenty-eight comprehensive programs.

Program respondents were asked to describe the number of faculty members (including sign language instructors) whose primary responsibility was deaf education teacher preparation. The number of program faculty ranged from between one to twenty-five, with a median and mode of five. Programs generally used more part-time than full-time faculty members. One program utilized five faculty members hired on a contractual basis, for field supervision. Regarding the hearing status of faculty members, the highest number of deaf and hard of hearing faculty members in a program was reported as fourteen. However, overall, few deaf and hard of hearing faculty members were reported. Deaf and hard of hearing faculty members were also usually part-time employees. Only one program employed twelve full-time deaf and hard of hearing faculty members. Faculty contracts for the responding programs are presented in Table 4.2.

Table 4.2

Of these faculty, how many are:			
Faculty Contract	*Range of Faculty in Programs*	*Median*	*Mode*
Full-time (n=38)	1-20	2	2
Part-time (n-32)	0-23	3	3
Hired on Contract Basis for Field Supervision (n=27)	0-5	0	0
Deaf and hard of hearing (n=28)	0-14	1	0
Deaf and hard of hearing & Full-time (n=26)	0-12	0	0
Deaf and hard of hearing & Part-time (n=30)	0-4	1	1
Deaf and hard of hearing & Hired on Contract Basis for Field Supervision (n=20)	0-4	0	0

The number of faculty in oral programs ranged from seven to twenty-five with a mean of twelve; two to ten with a mean of five in bilingual/bicultural programs and one - thirteen faculty members with a mean of two in comprehensive programs.

Information regarding the preparation of faculty members was also requested. Within the programs, respondents indicated that faculty members most often had degrees in deaf and hard of hearing education (85 percent), and special education with an emphasis in deaf and hard of hearing education (68 percent). Only seven percent of the programs had faculty prepared in English as a second language, and two in bilingual/bicultural education. This data is

summarized in Table 4.3.

Table 4.3

Faculty members in your program have degrees in (Check all that apply):		
Degrees	***# of Responses***	***Percentage***
Deaf and hard of hearing Education	35	85
Special Education with Emphasis in deaf and hard of hearing Education	28	68
Speech & Hearing Sciences	18	44
Language/Linguistics/Psycholinguistics	16	39
Literacy (English: Reading & Writing)	13	32
Subject-Matter Areas	11	27
English as a Second Language	3	7
Bilingual/Bicultural	2	5
Other	0	0
		n=41

When analyzed by program philosophy, oral program respondents reported that the degrees most commonly held by their faculty members was in deaf and hard of hearing education (100 percent). Five of the bilingual/bicultural program respondents indicated that faculty members in five of the programs had degrees in deaf and hard of hearing education. Degrees in deaf and hard of hearing education (61 percent) and special education with an emphasis in deaf and hard of hearing education (51 percent) was also common among the comprehensive programs.

The number of students enrolled in programs varied greatly, ranging from

3 to 250, with a median number of fourteen and a mode of twelve. The range of deaf and hard of hearing students enrolled in programs ranged from 0 to 163, with a median of two and a mode of zero. The highest number (163) of deaf and hard of hearing students represents enrollment in a deaf education teacher education program that described its program philosophy as bilingual/bicultural.

Program Beliefs

The first question on the survey asked respondents to rate their program philosophies on a seven point continuum, ranging from Oral (1-2), Comprehensive (3, 4, and 5), and Bilingual/Bicultural (6-7). Analyses of responses for further questions was then conducted across all responses and for programs which self-identified themselves as Oral, Comprehensive, or Bilingual/Bicultural. The responses to this question are presented in Table 4.4.

Table 4.4

Your program philosophy for communication in deaf and hard of hearing education settings is best described on a continuum as (Please circle the appropriate number):		
Program Philosophy	*# of Response*	*Percentage*
Oral		
1	4	10.0
2	1	2.5
Comprehensive		
3	2	5.0
4	19	47.5
5	9	22.5
Bilingual/Bicultural		
6	1	2.5
7	4	10.0
n=40		

Three-fourths (75 percent) of the responding programs described their program philosophy as Comprehensive. Far fewer respondents described their program philosophy as Oral (13 percent) and Bilingual/Bicultural (13 percent). In looking across programs to see the extent to which they identified with a particular program philosophy it was noted that the mean response for programs which identified themselves as Oral was 1.2. The mean response for the Comprehensive programs was 4.24, and the mean response for Bilingual/Bicultural programs was 6.8.

Program beliefs were also examined through questions regarding communicative competence, language use, language, and cultural membership

(see Table 4.5). Respondents were asked to designate on a scale of 1 to 7, with 1 indicating 'disagreement' and 5 indicating 'agreement,' whether they disagreed or agreed with English or ASL being the basis of communicative competence. Most (97 percent) of the respondents agreed that English was an essential factor in one's communicative competence. However, eighty percent of the respondents also reported that ASL was essential. The overall means for ASL and English are 6.29 and 6.87 respectively.

Table 4.5

Communicative competence is a result of being proficient in:														
	ASL (n=31)							***English (n=33)***						
	Dis-agree			Unsure	Agree			Dis-agree			Unsure	Agree		
	1	2	3	4	5	6	7	1	2	3	4	5	6	7
# of Respondents	1	-	-	5	-	1	24	-	-	-	1	-	1	31
Percentage	3	-	-	16	-	3	77	-	-	-	3	-	3	94
Overall Mean	6.29							6.87						

When contrasting oral, comprehensive, and bilingual/bicultural programs, mean responses indicated that respondents from the bilingual/bicultural programs were the only ones who were certain that communicative competence was a result of being proficient in both ASL (mean = 7) and English (mean = 7). The comprehensive programs respondents were not as clear in their responses as to whether ASL and English were critical for communicative competence

(means of 6.27 and 6.83 respectively). The oral program respondents were more clear in their beliefs that communicative competence was a result of being proficient in English (7) rather than in ASL (5). This data is summarized in Table 4.6.

Table 4.6

Communicative competence is a result of being proficient in:				
	Oral (1 & 2)	***Comprehensive (3,4, &5)***	***Bilingual/Bicultural (6 & 7)***	***Overall Mean***
English	7.0 (n=5)	6.83 (n=23)	7.0 (n=5)	6.87 (n=33)
ASL	5.0 (n=5)	6.27 (n=21)	7.0 (n=5)	6.29 (n=31)
Mean				

Respondents were asked to indicate the modes of communication in which they believed deaf and hard of hearing students should be proficient. This data is summarized in Table 4.7. All the respondents (100 percent) agreed that written English was the language in which deaf and hard of hearing students should be proficient. Seventy-four percent (74 percent) of the respondents also reported that deaf and hard of hearing students should be fluent in ASL. More than half (52 percent) of the respondents suggested proficiency in simultaneous communication, and another half (50 percent) in the use of spoken English.

Table 4.7

Deaf and hard of hearing children should be proficient in:								
		Disagree			Unsure	Agree		
		1	2	3	4	5	6	7
Written English (n=36)	# of respondents	-	-	-	-	1	4	31
	Percentage	-	-	-	-	3	11	86
ASL (n=31)	# of respondents	2	-	-	6	-	4	19
	Percentage	7	-	-	19	-	13	61
Sim-Com (n=27)	# of respondents	7	1	1	4	1	10	3
	Percentage	26	4	4	15	4	37	11
Spoken English (n=34)	# of respondents	8	1	2	6	2	2	13
	Percentage	24	3	6	18	6	6	38

When contrasting oral, comprehensive, and bilingual/bicultural programs, mean responses suggested that the bilingual/bicultural program respondents appeared to be the only ones who were certain about the language/mode of communication in which deaf and hard of hearing children should be proficient. They reported that the two languages should be ASL (mean = 7) and written English (mean = 7). The comprehensive program respondents valued written English (mean = 6.8) a little more than ASL (mean = 6.1). The oral program respondents felt that deaf and hard of hearing children should be proficient in written English (7) and spoken English (6.3). These data are summarized in Table 4.8.

Table 4.8

Deaf and hard of hearing children should be proficient in:				
Language/Mode of Communication				
	Oral (1 & 2)	***Comprehensive (3,4, &5)***	***Bilingual/Bicultural (6 & 7)***	***Overall Mean***
Written English	7.00 (n=5)	6.76 (n=26)	7.00 (n=5)	6.8 (n=36)
ASL	2.00 (n=5)	6.14 (n=21)	7.00 (n=5)	5.9 (n=31)
Spoken English	6.25 (n=5)	4.80 (n=24)	1.75 (n=5)	4.5 (n=34)
Simultaneous Communication	2.50 (n=5)	4.86 (n=17)	1.75 (n=5)	4.2 (n=27)
Mean				

In sum, the comprehensive and bilingual/bicultural program respondents supported written English and ASL. The oral program respondents were the only respondents who were clear about the need for proficiency in spoken and written English. The overall means of each item indicated that deaf and hard of hearing children should be proficient in both written English (mean = 6.8) and ASL (mean = 5.9).

Perceptions regarding the study of ASL as a formal language was also examined (see Table 4.9). The majority (70 percent) of the respondents agreed that deaf and hard of hearing children should study ASL as a formal language. A mean of six indicates an overall tendency to agree with the idea of having deaf and hard of hearing children study ASL as a formal language.

Table 4. 9

Deaf and hard of hearing children should study ASL as a formal language:							
	Disagree			*Unsure*	*Agree*		
	1	2	3	4	5	6	7
# of respondents	3	-	-	6	2	6	13
Percentage	10	-	-	20	7	20	43
n=30							

In analyzing data by program philosophy, only bilingual/bicultural (see Table 4.10) program respondents absolutely agreed that deaf and hard of hearing children should study ASL as a formal language (mean = 7). Oral programs did not agree (mean = 1), and comprehensive programs somewhat agreed (mean of 5.45). The overall mean (mean = 5.5) indicated that the program respondents saw the importance for deaf and hard of hearing children to study ASL as a formal language.

Table 4.10

Deaf and hard of hearing children should study ASL as a formal language:				
	Oral (1 & 2)	*Comprehensive (3,4, & 5)*	*Bilingual/Bicultural (6 & 7)*	*Overall Mean*
	1.0 (n=5)	5.45 (n=20)	7.0 (n=5)	5.46 (n=30)
Mean				

Respondents were asked to indicate their beliefs regarding the mode of communication to be used in the classroom with deaf and hard of hearing students. These data are presented in Table 4.11. ASL and simultaneous

communication were the language and mode of communication mentioned by the greatest number of respondents. Sixty-six percent of the respondents stated that teachers of the deaf and hard of hearing should use ASL in the classroom. Fifty percent of the respondents were in favor of using simultaneous communication. MCE without voice (36 percent) and the use of ASL only to teach concepts (37 percent) were chosen least frequently as approaches to be used in the classroom.

Table 4.11

Teachers of deaf and hard of hearing students should use the following in the classroom:								
Mode of communication /language		***Disagree***			***Unsure***	***Agree***		
		1	2	3	4	5	6	7
ASL (n=27)	# of respondents	2	-	-	7	2	2	14
	Percentage	7	-	-	26	7	7	52
Simultaneous Communication (n=28)	# of respondents	6	-	1	7	-	6	8
	Percentage	21	-	4	25	-	21	29
Use ASL to Teach Concepts (n=27)	# of respondents	11	-	-	6	3	3	4
	Percentage	41	-	-	22	11	11	15
MCE (w/o voice) (n=27)	# of respondents	10	1	-	6	2	2	6
	Percentage	37	4	-	22	7	7	22

Distinctive differences were found when data was analyzed by program philosophy (see Table 4.12). The oral program respondents were certain that

they should not use MCE without voice (mean = 1) and use ASL to teach concepts (mean = 1). The comprehensive program respondents were more inclined to agree that teachers should use simultaneous communication (mean = 5.30) and ASL (mean = 5.26). The bilingual/bicultural program respondents reported that teachers should use ASL (mean = 7.0) in the classroom. Overall, the program respondents felt that teachers of deaf and hard of hearing children should use ASL (mean = 5.6) and simultaneous communication (mean = 4.6).

Table 4.12

Teachers of deaf and hard of hearing students should use the following in the classroom:				
	Oral (1 & 2)	***Comprehensive (3,4, &5)***	***Bilingual/Bicultural (6 & 7)***	***Overall Mean***
ASL	4.0 (n=5) (r=1.5)	5.26 (n=17) (r=2)	7.0 (n=5) (r=1)	5.55 (n=27)
Simultaneous Communication	4.0 (n=5) (r=1.5)	5.30 (n=18) (r=1)	2.80 (n=5) (r=2)	4.60 (n=28)
MCE (w/o voice)	1.0 (n=5) (r=3.5)	4.47 (n=17) (r=3)	1.60 (n=5) (r=4)	3.70 (n=27)
Use ASL to teach concepts	1.0 (n=5) (r=3.5)	4.30 (n=17) (r=4)	1.75 (n=5) (r=3)	3.55 (n=27)
Mean				

Belief systems about students were also examined. Respondents were asked to indicate on a scale of one to seven, whether they believed that deaf and hard of hearing children were members of ASL (or other native sign) linguistic and Deaf cultural minority groups. This data is summarized in Table

4.13. Less than half (42 percent) of the respondents agreed that deaf and hard of hearing children were members of ASL (or other native sign language) linguistic and Deaf cultural minority groups. Twenty-six percent of the respondents were unsure. A mean of four indicated an overall uncertainty about the membership of deaf and hard of hearing children.

Table 4.13

Deaf and hard of hearing children are members of ASL (or other native sign language) linguistics & Deaf cultural minority groups:							
	Disagree			***Unsure***	***Agree***		
	1	2	3	4	5	6	7
# of respondents	6	4	-	8	3	1	9
Percentage	19	13	-	26	10	3	29
n=30							

When data were analyzed by program philosophy, mean responses indicated that the bilingual/bicultural program respondents were more likely to agree that deaf and hard of hearing children were members of ASL (or other native sign language) linguistic and Deaf cultural minority groups. One respondent from a bilingual/bicultural program did not indicate agreement or disagreement but said that there was no forced membership. However ASL was most accessible to deaf and hard of hearing children. Another respondent from a similar philosophical background indicated that s/he would respond to the question only if a change was made to the statement. It was suggested that 'are' in the statement be changed to 'may be.' The comprehensive program

respondents (mean = 4.3) were unsure about their response to this statement; and the oral program respondents (mean = 1) disagreed. The overall mean (4.2) indicated that the program respondents were unsure of whether deaf and hard of hearing children were members of ASL (or other native sign language) linguistic and Deaf cultural minority groups. These data are summarized in Table 4.14.

Table 4.14

Deaf and hard of hearing children are members of ASL (or other native sign language) linguistics & Deaf cultural minority groups:				
	Oral (1 & 2)	***Comprehensive (3,4, &5)***	***Bilingual/Bicultural (6 & 7)***	***Overall Mean***
	1.0 (n=5)	4.3 (n=20)	5.0 (n=5)	4.19 (n=30)
Mean				

There was more consistency in response to the question of whether deaf and hard of hearing children should demonstrate knowledge in Deaf Culture and mainstream hearing American culture (see Table 4.15). The mean for each category was 7, indicating that the respondents were in favor of having deaf and hard of hearing children demonstrate knowledge in both Deaf Culture and mainstream hearing American culture. However, more individuals (91 percent) believed that deaf and hard of hearing children should demonstrate knowledge in mainstream hearing American culture compared with (82 percent) of the respondents who believed that deaf and hard of hearing children should demonstrate knowledge in Deaf Culture. Only one respondent disagreed that deaf and hard of hearing children should demonstrate knowledge in Deaf

Culture and mainstream hearing American culture.

Table 4.15

Deaf and hard of hearing children should demonstrate knowledge in:								
		Disagree			*Unsure*	*Agree*		
Deaf Culture (n=33)		1	2	3	4	5	6	7
	# of respondents	1	-	-	5	3	6	18
	Percentage	3	-	-	15	9	18	55
Mainstream hearing American Culture (n=33)	# of respondents	1	-	-	2	5	8	17
	Percentage	3	-	-	6	15	24	52

When analyzed by program philosophy, all respondents indicated that deaf and hard of hearing children should demonstrate knowledge in both cultures. The bilingual/bicultural program respondents indicated a mean of seven, oral (means = 6.0 to both cultures) and comprehensive (mean = 6.0 for Deaf Culture, 6.13 for mainstream hearing culture). These data are summarized in Table 4.16.

Table 4.16

Deaf and hard of hearing children should demonstrate knowledge in:				
	Oral (1 & 2)	*Comprehensive (3,4, &5)*	*Bilingual/Bicultural (6 & 7)*	*Overall Mean*
Deaf Culture	6.0 (n=5)	6.0 (n=23)	7.0 (n=5)	6.00 (n=33)
Mainstream hearing American Culture	6.0 (n=5)	6.13 (n=23)	7.0 (n=5)	6.09 (n=33)
Mean				

Programs were presented with a series of 'goal statements' and asked to indicate the level of agreement regarding the importance of each item to their programs. 'Goals' were described as 'aspirations' of most individuals in the program whose primary responsibility was deaf education Respondents were asked to designate on a scale of 1 to 7, with 1 = 'disagree', 4 = 'unsure', and 7 = 'agree,' whether they agreed, were unsure, or disagreed with the items according to how critical they were to their program. The items addressed the question of what language is used with pre-service teachers in courses other than sign language classes; questions about sign language classes; characteristics of sign language/Deaf Culture instructors; and entrance/exit requirements of pre-service teachers to indicate proficiency in language.

Communication in Classrooms

Seventy-six percent of the respondents reported that teacher educators in deaf and hard of hearing teacher preparation programs should use spoken

English (with interpreters if necessary) for instruction in the classroom. A little more than half (56 percent) of the respondents stated that ASL should be the language employed in instructing pre-service teachers, and about a third (38 percent) of the respondents believed that simultaneous communication should be the mode of communication used. Sixty-four percent of the respondents disagreed that MCE should be used in classrooms with pre-service teachers. Table 4.17 presents these data.

Table 4.17

Instruction in pre-service teachers' courses other than sign language classes should be conducted using:								
Mode of Communication /Language		***Disagree***			***Unsure***	***Agree***		
		1	2	3	4	5	6	7
Spoken English (w/interpreters if necessary) n=38	# of respondents	4	1	-	4	2	3	24
	Percentage	10.5	2.6	-	10.5	5.3	7.9	63.2
ASL n=31	# of respondents	6	4	1	4	2	4	10
	Percentage	19.4	12.9	3.2	12.9	6.5	12.9	32.3
Sim Com n=32	# of respondents	9	3	1	7	3	3	6
	Percentage	28.1	9.4	3.1	21.9	9.4	9.4	18.8
MCE n=33	# of respondents	14	4	3	4	2	4	2
	Percentage	42.4	12.1	9.1	12.1	6.0	12.1	6.1

When data were analyzed by program philosophy, mean responses indicated that all the respondents agreed that teacher educators should not use Manually Coded English in classes. The mean responses are presented in Table 4.18. The oral program respondents believed that only spoken English (with interpreters, if necessary); (mean = 6.0) should be used. The comprehensive program respondents opted for spoken English with interpreters if necessary (mean = 5.9), but they were unsure about ASL (mean = 4.3) and simultaneous communication (mean = 4.3). The bilingual/bicultural program

respondents favored ASL (mean = 6.0). Program respondents preferred to use spoken English with an interpreter (mean = 5.7) in courses other than sign language classes.

Table 4.18

Instruction in pre-service teachers' courses other than sign language classes should be conducted using:				
	Oral (1 & 2)	Comprehensive (3, 4, & 5)	Bilingual/Bicultural (6 & 7)	Overall Mean
Spoken English (w/interpreters, if necessary)	6.0 (n=5) (r=1)	5.93 (n=28) (r=1)	4.20 (n=5) (r=2)	5.73 (n=38)
ASL	1.33 (n=5) (r=2)	4.27 (n=21) (r=3)	6.40 (n=5) (r=1)	4.41 (n=31)
Simultaneous Communication	1.33 (n=5) (r=3)	4.33 (n=22) (r=2)	3.40 (n=5) (r=3)	3.79 (n=32)
MCE	1.33 (n=5) (r=4)	3.46 (n=23) (r=4)	1.60 (n=5) (r=4)	2.90 (n=33)
Mean				

Respondents were asked if sign language instructors should use voice in sign language classes. Data regarding the use of voice in sign language classes are presented in Table 4.19. Sixty-six percent of the respondents did not think that voice should be used in sign language classes to facilitate the learning of sign language.

Table 4.19

Sign language instructors should use voice with signs to facilitate learning of sign language							
	Disagree			Unsure	Agree		
	1	2	3	4	5	6	7
# of respondents	16	4	3	7	-	2	3
Percentage	45.7	11.4	8.6	20.0	-	5.7	8.6
n=35							

When analyzing by the program philosophy (see Table 4.20), mean responses indicated that the oral program respondents (mean = 4.0) were unsure whether sign language instructors should use voice with signs to facilitate learning of sign language, whereas both the comprehensive (mean = 2.8) and bilingual/bicultural (mean = 1.0) program respondents disagreed with the idea of using voice in sign language classes. In sum, the overall mean (2.7) indicated that sign language instructors should not use voice with signs to facilitate the learning of sign language.

Table 4.20

Sign language instructors should use voice with signs to facilitate learning of sign language				
	Oral (1 & 2)	Comprehensive (3, 4, & 5)	Bilingual/Bicultural (6 & 7)	Overall Mean
	4.0 (n=5)	2.8 (n=25)	1.0 (n=5)	2.68 (n=35)
Mean				

Characteristics of Sign Language and Deaf Culture Instructors

Most of the respondents felt that sign language instructors should be either Deaf with native ASL skills (81 percent) or deaf (80 percent). Over three-fourths (76 percent) of the respondents agreed that hearing individuals with native ASL skills could be sign language instructors too. An equal number (65 percent) of the respondents reported that sign language instructors could be hard of hearing and ASLTA certified. More than half (61 percent) favored sign language instructors who could demonstrate skills for teaching a second language. These data are summarized in Table 4.21.

Table 4.21

Sign Language instructors should be:								
Characteristics of Sign Language Instructors		Disagree			Unsure	Agree		
		1	2	3	4	5	6	7
Deaf with native ASL skills (n=32)	# of respondents	-	-	1	5	2	8	16
	Percentage	-	-	3.1	15.6	6.3	25.0	50.0
deaf (n=35)	# of respondents	3	-	-	4	3	8	17
	Percentage	8.6	-	-	11.4	8.6	22.9	48.6
Hearing & with native ASL skills (n=33)	# of respondents	3	-	-	5	3	7	15
	Percentage	9.1	-	-	15.2	9.1	21.2	45.5
ASLTA certified (n=34)	# of respondents	3	1	2	6	3	7	12
	Percentage	8.8	2.9	5.9	17.6	8.8	20.6	35.3
Hard of hearing (n=31)	# of respondents	2	-	1	8	5	5	10
	Percentage	6.5	-	3.2	25.8	16.1	16.1	32.3
Skilled in teaching a second language (n=36)	# of respondents	-	3	2	9	2	5	15
	Percentage	-	8.3	5.6	25.0	5.6	13.9	41.7
Hearing (n=32)	# of respondents	5	2	-	10	4	3	8
	Percentage	15.6	6.3	-	31.3	12.5	9.4	25.

In looking at oral, comprehensive, and bilingual/bicultural programs, it was noted that the oral program respondents reported that sign language instructors should be ASLTA certified (mean = 5.8), skilled in teaching a second language (mean = 5.4) and be either deaf or hearing with native ASL skills (5.5).

The comprehensive program respondents offered the following characteristics for their ideal sign language instructors: Deaf with native ASL skills (mean = 5.9) and hearing with native ASL skills (mean = 5.8). The profile for sign language instructors in a bilingual/bicultural teacher preparation program was as follows: Deaf with native ASL skills (mean = 7.0) and ASLTA certified (mean = 6.4)/skilled in teaching a second language (mean = 6.6). Program respondents indicated that it was more important for their sign language instructors to be Deaf with native ASL skills (overall mean = 6.0), deaf (overall mean = 5.8) or hearing with native ASL skills (overall mean = 5.6) than be skilled in teaching a second language (mean = 5.4) or being ASLTA certified (mean = 5.2). These data are presented in Table 4.22.

Table 4.22

Sign Language instructors should be:				
Characteristics of Sign Language Instructors	Oral (1 & 2)	Comprehensive (3, 4, & 5)	Bilingual/Bicultural (6 & 7)	Overall Mean
Deaf with native ASL skills	5.50 (n=5)	5.86 (n=22)	7.0 (n=5)	6.03 (n=32)
deaf	5.50 (n=5)	5.74 (n=25)	5.80 (n=5)	5.75 (n=35)
Hearing & with native ASL skills	5.50 (n=5)	5.78 (n=23)	4.60 (n=5)	5.60 (n=33)
Skilled in teaching a second language	5.40 (n=5)	5.04 (n=26)	6.60 (n=5)	5.36 (n=36)
hard of hearing	4.75 (n=5)	5.36 (n=21)	4.50 (n=5)	5.22 (n=31)
ASLTA certified	5.75 (n=5)	4.75 (n=24)	6.40 (n=5)	5.17 (n=34)
Hearing	4.75 (n=5)	4.52 (n=22)	3.25 (n=5)	4.46 (n=32)
Mean				

In looking at the academic preparation of sign language instructors, all the respondents supported the idea that sign language instructors have academic preparation in all of several listed items (see Table 4.23). An equal number (89 percent) indicated that sign language instructors should have academic preparation in ASL linguistics and second language teaching principles. A large number (84 percent) of the respondents reported that sign

language instructors should have academic preparation in Deaf Culture. More than half agreed that the following, spoken language linguistics (78 percent) and ASL literature (77 percent), was necessary for instructors to be effective.

Table 4.23

Sign Language instructors should have academic preparation in:								
Academic preparation in		Disagree			Unsure	Agree		
		1	2	3	4	5	6	7
ASL Linguistics (n=37)	# of respondents	1	2	1	-	3	4	26
	Percentage	2.7	5.4	2.7	-	8.1	10.8	70.3
Second Language teaching principles (n=37)	# of respondents	-	2	1	1	8	6	19
	Percentage	-	5.4	2.7	2.7	21.6	16.2	51.4
Deaf Culture (n=37)	# of respondents	-	1	-	5	-	7	24
	Percentage	-	2.7	-	13.5	-	18.9	64.9
Spoken Language Linguistics (n=36)	# of respondents	2	2	2	2	6	3	19
	Percentage	5.6	5.6	5.6	5.6	16.7	8.3	52.8
ASL Literature (n=35)	# of respondents	-	1	-	7	3	6	18
	Percentage	-	2.9	-	20.0	8.6	17.1	51.4

When analyzed by program philosophy, mean responses indicated that the oral program respondents preferred that sign language instructors have academic preparation in second language teaching principles (mean = 5.0), whereas the comprehensive program respondents regarded ASL linguistics

(mean = 6.4) and Deaf Culture (mean = 6.4) as the most important aspects of sign language instructors' academic preparation. The bilingual/bicultural program respondents were unsure about whether sign language instructors should have academic preparation in spoken language linguistics (mean = 4.8), but indicated that it was critical that they had knowledge of all the elements listed, with Deaf Culture as most critical (mean = 7.0). The overall means showed that program coordinators believed that sign language instructors should have preparation in Deaf Culture (overall mean = 6.3) and ASL Linguistics (overall mean = 6.2). The mean responses are summarized in Table 4.24.

Table 4.24

Sign Language instructors should have academic preparation in:				
Academic Preparation in:	Oral (1 & 2)	Comprehensive (3, 4 & 5)	Bilingual/Bicultural (6 & 7)	Overall Mean
Deaf Culture	4.0 (n=5) (r=4)	6.44 (n=27) (r=1.5)	7.0 (n=5) (r=1)	6.27 (n=37)
ASL Linguistics	3.75 (n=5) (r=5)	6.44 (n=27) (r=1.5)	6.60 (n=5) (r=2.5)	6.18 (n=37)
Second Language teaching principles	5.0 (n=5) (r=1)	5.94 (n=27) (r=3)	6.60 (n=5) (r=2.5)	5.93 (n=37)
ASL Literature	4.25 (n=5) (r=3)	5.96 (n=25) (r=2)	6.80 (n=5) (r=2)	5.91 (n=35)
Spoken Language Linguistics	4.40 (n=5) (r=2)	5.92 (n=26) (r=4)	4.80 (n=5) (r=3)	5.58 (n=36)
Mean				

Respondents were asked to describe the characteristics they believed that Deaf Culture instructors should have. The responses to this question is presented in Table 4.25. The majority of the respondents reported that instructors should have academic preparation in Deaf Culture (89 percent) and should consider themselves culturally Deaf (88 percent). Half the respondents (50 percent) stated that the instructor should also be audiologically deaf. Less than the half of the respondents (41 percent) disagreed over having hearing individuals as Deaf Culture instructors.

Table 4.25

If you had a course on Deaf Culture would you prefer that the instructor be:								
Characteristics of 'Deaf Culture instructor'		Disagree			Unsure	Agree		
		1	2	3	4	5	6	7
Academically prepared in Deaf Culture (n=37)	# of respondents	1	-	1	2	4	6	23
	Percentage	2.7	-	2.7	5.4	10.8	16.2	62.2
Culturally Deaf (n=34)	# of respondents	2	-	-	2	2	5	23
	Percentage	5.9	-	-	5.9	5.9	14.7	67.6
Audiologically deaf (n=32)	# of respondents	6	2	1	7	7	4	5
	Percentage	18.8	6.3	3.1	21.9	21.9	12.5	15.6
Hearing (n=32)	# of respondents	8	1	4	8	8	1	2
	Percentage	25.0	3.1	12.5	25.0	25.0	3.1	6.3
Audiologically hard of hearing (n=31)	# of respondents	6	2	3	8	6	3	3
	Percentage	14.0	4.7	7.0	18.6	14.0	7.0	7.0

When analyzed by program philosophy, the oral program respondents preferred that 'Deaf Culture' instructors had academic preparation in Deaf Culture (mean = 5.8). The bilingual/bicultural program respondents believed that it was more important for the individual to be culturally Deaf (mean = 7.0) than have academic preparation in Deaf Culture (mean = 5.8), whereas the comprehensive respondents regarded both of the elements as being equally

important (mean = 6.3). The overall mean indicates that the program respondents affirmed the importance for instructors teaching Deaf Culture to be culturally Deaf (mean = 6.2) and have academic preparation to teach Deaf Culture (mean = 6.2). These data are summarized in Table 4.26.

Table 4.26

If you had a course on Deaf Culture would you prefer that the instructor be:				
Characteristics of Deaf Studies instructors	Oral (1 & 2)	Comprehensive (3, 4 & 5)	Bilingual/Bicultural (6 & 7)	Overall Mean
Culturally Deaf	4.25 (n=5)	6.33 (n=24)	7.0 (n=5)	6.20 (n=34)
Academically prepared in Deaf Culture	5.80 (n=5)	6.31 (n=27)	5.80 (n=5)	6.18 (n=37)
Audiologically deaf	2.75 (n=5)	4.78 (n=22)	3.25 (n=5)	4.21 (n=32)
Hearing	3.50 (n=5)	3.73 (n=22)	2.20 (n=5)	3.56 (n=32)
Audiologically hard of hearing	2.75 (n=5)	4.41 (n=21)	2.75 (n=5)	3.87 (n=31)
Mean				

Pre-service Teachers: Proficiency in Language Use

Respondents were asked what mode of communication and/or language pre-service they believed pre-service teachers be proficient in. With a mean of six, many of the respondents (79 percent) indicated that pre-service teachers should achieve proficiency in ASL. Sixty-two percent agreed that pre-service

teachers should achieve proficiency in MCE and sixty-five percent in simultaneous communication. These data are presented in Table 4.27.

Table 4.27

Pre-service teachers should achieve proficiency in:								
Mode of communication/ language		Disagree			Unsure	Agree		
		1	2	3	4	5	6	7
ASL (n=38)	# of respondents	4	1	-	3	5	10	15
	Percentage	10.5	2.6	-	7.9	13.2	26.3	39.5
MCE (n=39)	# of respondents	9	2	2	2	3	12	9
	Percentage	23.1	5.1	5.1	5.1	7.7	30.8	23.1
Simultaneous Communication (n=37)	# of respondents	8	1	2	2	10	9	5
	Percentage	21.6	2.7	5.4	5.4	27.0	24.3	13.5

Table 4.28

Pre-service teachers should achieve proficiency in:				
Mode of Communication/ Language	Oral (1 & 2)	Comprehensive (3, 4 & 5)	Bilingual/Bicultural (6 & 7)	Overall Mean
ASL	2.0 (n=5) (r=3)	5.78 (n=28) (r=1)	7.0 (n=5) (r=1)	5.47 (n=38)
MCE	2.25 (n=5) (r=2)	5.52 (n=29) (r=2)	1.40 (n=5) (r=3)	4.53 (n=39)
Simultaneous Communication	2.80 (n=5) (r=1)	5.33 (n=27) (r=3)	2.00 (n=5) (r=2)	4.41 (n=37)
Mean				

Regarding language proficiency for admission to the program (see Table 4.29), the majority of respondents indicated that pre-service teachers must demonstrate a beginning level of proficiency in written English (83 percent) and spoken English (65 percent). Many of the respondents disagreed with simultaneous communication (72 percent) and Manually Coded English (70 percent). More than the half of the respondents (58 percent) disagreed with the idea of pre-service teachers having to demonstrate proficiency in ASL.

Table 4.29

Upon admission to your program, pre-service teachers of deaf and hard of hearing students must demonstrate beginning level proficiency in:								
Mode of communication/ language		Disagree			Unsure	Agree		
		1	2	3	4	5	6	7
Written English (n=36)	# of respondents	3	1	-	2	2	3	25
	Percentage	8.3	2.8	-	5.6	5.6	8.3	69.4
Spoken English (n=37)	# of respondents	8	3	-	2	5	3	16
	Percentage	21.6	8.1	-	5.4	13.5	8.1	43.2
ASL (n=36)	# of respondents	13	4	1	1	2	1	14
	Percentage	36.1	11.1	2.8	2.8	5.6	2.8	38.9
MCE (n=37)	# of respondents	22	4	-	-	5	1	5
	Percentage	59.5	10.8	-	-	13.5	2.7	13.5
Simultaneous Communication (n=36)	# of respondents	20	4	2	-	3	1	6
	Percentage	55.6	11.1	5.6	-	8.3	2.8	16.7

In analyzing the data by program philosophy, mean responses indicated that the oral program respondents preferred that pre-service teachers of deaf and hard of hearing students demonstrate beginning level proficiency in written (mean = 5.8) and oral (mean = 5.8) English. The comprehensive program respondents favored written English (mean = 6.2) and spoken English (mean = 5.1). The bilingual/bicultural program respondents were more likely to agree

that ASL (mean = 4.8) and written English (mean = 4.8) should be the languages in which pre-service teachers demonstrate beginning level proficiency (see Table 4.30). Overall, program respondents indicated a preference for pre-service teachers to demonstrate beginning level proficiency in written English (overall mean = 6.0).

Table 4.30

Upon admission to your program, pre-service teachers of deaf and hard of hearing students must demonstrate beginning level proficiency in:				
Mode of communication/ language	Oral (1 & 2)	Comprehensive (3, 4 & 5)	Bilingual/Bicultural (6 & 7)	Overall Mean
Written English	5.80	6.24	4.80	6.00
Spoken English	5.80	5.15	2.60	4.78
ASL	2.20	4.00	4.80	3.94
Simultaneous Communication	2.20	3.16	1.20	2.69
MCE	2.20	3.00	1.20	2.59
Mean				

In terms of exit requirements, more than half the respondents reported that pre-service teachers must demonstrate an intermediate to advanced level proficiency in all the listed elements. These results are presented in Table 4.31. However, written English (97 percent) was the dominant category followed by ASL (86 percent). Many of the respondents (70 percent) agreed that spoken English was more critical than simultaneous communication (66 percent) and Manually Coded English (62 percent). 'Written English' was the only item with a

mean of 7.

Table 4.31

Upon exiting your program, pre-service teachers of deaf and hard of hearing students must demonstrate intermediate to advanced level proficiency in:								
Mode of communication/ language		Disagree			Unsure	Agree		
		1	2	3	4	5	6	7
Written English (n=36)	# of respondents	1	-	-	-	2	8	25
	Percentage	2.8	-	-	-	5.6	22.2	69.4
ASL (n=35)	# of respondents	3	1	-	1	5	8	17
	Percentage	8.6	2.9	-	2.9	14.3	22.9	48.6
Simultaneous Communication (n=38)	# of respondents	9	1	1	2	3	12	10
	Percentage	23.7	2.6	2.6	5.3	7.9	31.6	26.3
Spoken English (n=37)	# of respondents	9	1	-	1	6	6	14
	Percentage	24.3	2.7	-	2.7	16.2	16.2	37.8
MCE (n=37)	# of respondents	12	1	-	1	5	9	9
	Percentage	32.4	2.7	-	2.7	13.5	24.3	24.3

When comparing by program philosophy (see Table 4.32), oral program respondents reported that pre-service teachers of deaf and hard of hearing students must demonstrate an advanced level proficiency in both written (mean = 7.0) and spoken (mean = 7.0) English. The comprehensive program respondents were more eclectic in their responses and were in favor of all listed elements. They regarded ASL (mean = 6.1) and written English (mean = 6.3) as

the most important elements. The bilingual/bicultural program responses were similar to those of the comprehensive respondents, but they regarded ASL more highly (mean = 7.0) than written English (mean = 6.6). The overall means to indicate the importance for pre-service teachers to demonstrate intermediate to advanced level proficiency in written English and ASL are 6.5 and 5.7 respectively.

Table 4.32

Upon exiting your program, pre-service teachers of deaf and hard of hearing students must demonstrate intermediate to advanced level proficiency in:				
Mode of communication/ language	Oral (1 & 2)	Comprehensive (3, 4 & 5)	Bilingual/Bicultural (6 & 7)	Overall Mean
ASL	2.40 (n=5) (r=4.5)	6.12 (n=25) (r=2)	7.0 (n=5) (r=1)	5.74 (n=35)
Written English	7.0 (n=5) (r=1.5)	6.36 (n=26) (r=1)	6.60 (n=5) (r=2)	6.50 (n=36)
Spoken English	7.0 (n=5) (r=1.5)	4.88 (n=27) (r=5)	3.20 (n=5) (r=3)	4.83 (n=37)
Simultaneous Communication	3.60 (n=5) (r=2)	5.59 (n=28) (r=3)	1.80 (n=5) (r=4)	4.71 (n=38)
MCE	2.40 (n=5) (r=4.5)	5.35 (n=27) (r=4)	1.60 (n=5) (r=5)	4.32 (n=37)
Mean				

In terms of being knowledgeable in Deaf Culture upon admission to the program, there was no agreement as to whether pre-service teachers must demonstrate an introductory level knowledge in Deaf Culture (see Table 4.33). Fifty-one percent of the respondents were in favor of having pre-service teachers demonstrate an introductory level of knowledge in Deaf Culture, and forty-three percent of the respondents disagreed.

Table 4.33

Upon admission to your program, pre-service teachers of deaf and hard of hearing students must demonstrate introductory level knowledge in Deaf Culture							
	Disagree			Unsure	Agree		
	1	2	3	4	5	6	7
# of respondents	12	4	-	2	5	2	12
Percentage	32.4	10.8	-	5.4	13.5	5.4	32.4
n=37							

When comparing by program philosophy, mean responses indicated that the bilingual/bicultural program respondents were apparently the only ones who agree that pre-service teachers should demonstrate an introductory level knowledge in Deaf Culture. Program respondents indicated that they were not sure whether it was important for pre-service teachers to demonstrate an introductory level of knowledge in Deaf Culture (overall mean = 4.0). These data are summarized in Table 4.34.

Table 4.34

Upon admission to your program, pre-service teachers of deaf and hard of hearing students must demonstrate introductory level knowledge in Deaf Culture				
	Oral (1 & 2)	Comprehensive (3, 4 & 5)	Bilingual/Bicultural (6 & 7)	Overall Mean
	1.60 (n=5)	3.85 (n=27)	6.80 (n=5)	4.02 (n=37)
Mean				

Seventy-seven percent of the respondents indicated that knowledge of Deaf Culture must be exhibited upon exiting the program (see Table 4.35).

Table 4.35

Upon exiting your program, pre-service teachers of deaf and hard of hearing students must demonstrate advanced level knowledge in Deaf Culture							
	Disagree			Unsure	Agree		
	1	2	3	4	5	6	7
# of respondents	1	3	1	4	4	8	18
Percentage	2.6	7.7	2.6	10.3	10.3	20.5	46.2
n=39							

When discussing the results by program philosophy (see Table 4.36), the mean responses showed that both the comprehensive (mean = 5.7) and bilingual/bicultural (mean = 7.0) respondents reported that pre-service teachers should demonstrate an advanced level knowledge in Deaf Culture upon exiting the teacher preparation program. The oral program respondents indicated that they were not in absolute disagreement with this, with a mean of (mean = 3.4). The overall mean to represent pre-service teachers' need to demonstrate advanced level knowledge in Deaf Culture upon exiting the programs is 5.6.

Table 4.36

Upon admission to your program, pre-service teachers of deaf and hard of hearing students must demonstrate introductory level knowledge in Deaf Culture				
	Oral (1 & 2)	Comprehensive (3, 4 & 5)	Bilingual/Bicultural (6 & 7)	Overall Mean
	3.40 (n=5)	5.75 (n=29)	7.0 (n=5)	5.64 (n=39)
Mean				

Topics and Skills

Respondents were asked to determine whether topics and skills that addressed American Sign Language were critical to the preparation of pre-service teachers. The majority of the respondents thought that all the listed items (see Table 4.37) were critical to the program. At least fifty percent of the respondents rated each item highly.

Table 4.37

Items involving issues that address American Sign Language								
		Disagree			Unsure	Agree		
		1	2	3	4	5	6	7
ASL Acquisition (n=37)	# of respondents	1	1	-	2	9	5	19
	Percentage	2.7	2.7	-	5.4	24.3	13.5	51.4
ASL Fluency (n=40)	# of respondents	3	-	1	2	7	8	19
	Percentage	7.5	-	2.5	5.0	17.5	20.0	47.0
Linguistics of ASL	# of respondents	1	2	2	3	5	13	1
	Percentage	2.6	5.1	5.1	7.7	12.8	33.3	33.3
ASL Literature (n=38)	# of respondents	2	-	4	3	10	12	7
	Percentage	5.3	-	10.5	7.9	26.3	31.5	18.4
ASL-Assessment (n=35)	# of respondents	1	3	1	7	8	5	10
	Percentage	2.9	8.6	2.9	20.0	22.9	14.0	28.6
ASL Storytelling (n=40)	# of respondents	3	2	6	5	6	10	8
	Percentage	7.5	5.0	15.0	12.5	15.0	25.0	20.0

Items involving issues that address American Sign Language								
ASL Role in English Literacy Development (n=38)	# of respondents	3	2	6	5	6	10	8
	Percentage	7.5	5.0	15.0	12.5	15.0	25.0	20.0

When analyzing the results by program philosophy, the oral program respondents were found to be unsure about ASL Acquisition (mean = 4.3) and somewhat disagreed with ASL Role's in English Literacy Development (mean = 3.8) and the need for Linguistics of ASL (mean = 3.6). The comprehensive and bilingual/bicultural program respondents agreed with the importance of all the listed items. Overall, *ASL Role in English Literacy Development* (overall mean = 6.6) was ranked the highest of all the items involving issues that addressed American Sign Language. These data are presented in Table 4.38.

Table 4.38

Items involving issues that address American Sign Language				
	Oral (1 & 2)	Comprehensive (3, 4 & 5)	Bilingual/Bicultural (6 & 7)	Overall Mean
ASL Role in English Literacy Development	3.75 (n=5) (r=2)	5.73 (n=28) (r=3)	7.00 (n=5) (r=1.5)	6.55 (n=38)
ASL Fluency	3.00 (n=5) (r=4)	5.97 (n=30) (r=2)	7.00 (n=5) (r=1.5)	5.75 (n=40)
Linguistics of ASL	3.60 (n=5) (r=3)	5.71 (n=29) (r=4)	6.00 (n=5) (r=5)	5.56 (n=39)
ASL-Assessment	2.50 (n=5) (r=5)	5.12 (n=25) (r=5)	6.60 (n=5) (r=4)	5.10 (n=35)
ASL Acquisition	4.33 (n=5) (r=1)	5.98 (n=27) (r=1)	6.60 (n=5) (r=4)	5.08 (n=37)
ASL Storytelling	2.20 (n=5) (r=6)	4.81 (n =30) (r=6)	6.60 (n=5) (r=4)	4.76 (n=40)
Mean				

When asked to determine whether topics and skills that addressed English were critical to the preparation of pre-service teachers (see Table 4.39) , the majority of respondents indicated that fluency in English (98 percent) and assessment of written English (95 percent) were most critical. Out of these elements, MCE (33 percent) drew the highest amount of disagreement.

Table 4.39

Items involving issues that address English								
		Disagree			Unsure	Agree		
		1	2	3	4	5	6	7
English Fluency (n=40)	# of respondents	-	-	-	1	-	11	28
	Percentage	-	-	-	2.5	-	27.5	70.0
Written English (n=37)	# of respondents	-	-	-	2	2	8	25
	Percentage	-	-	-	5.4	5.4	20.6	67.6
Linguistics of English (n=39)	# of respondents	1	1	-	2	6	11	18
	Percentage	2.6	2.6	-	5.1	15.4	28.2	46.2
English Literature (n=38)	# of respondents	1	3	2	2	12	8	10
	Percentage	2.6	7.9	5.3	5.3	31.6	21.1	26.3
Oral/Aural Teaching Competencies (n=40)	# of respondents	2	3	4	2	4	9	16
	Percentage	5.0	7.5	10.0	5.0	10.0	22.5	40.0
Sim Com (n=39)	# of respondents	6	-	4	2	4	16	7
	Percentage	15.4	-	10.3	5.1	10.3	41.0	17.9
English Phonetics in Reading (n=38)	# of respondents	4	1	3	5	5	7	13
	Percentage	10.5	2.6	7.9	13.2	13.2	18.4	34.2
Manually Coded English (n=40)	# of respondents	7	1	5	1	8	14	4
	Percentage	17.5	2.5	12.5	2.5	20.0	35.0	10.0
Spoken English (n=37)	# of respondents	3	2	1	3	6	9	13
	Percentage	8.1	5.4	2.7	8.1	37.8	2.7	35.1

When analyzing by program philosophy, oral program respondents showed strong support for pre-service teachers' oral/aural (mean = 7) teaching competencies, English fluency (mean = 7), written English (mean = 7) and spoken English (mean = 7). The comprehensive program respondents agreed that all the listed items should be incorporated into a teacher preparation program, but they emphasized pre-service teachers' English Fluency (mean = 6.6) and written English (mean = 6.4). The bilingual/bicultural program respondents agreed that pre-service teachers must demonstrate fluency in written English (mean = 7). They were supportive of the other items with the exception of spoken English, English Phonetics in Reading, Oral/aural Teaching Competencies, Manually Coded English, and Simultaneous Communication. The program respondents ranked *English fluency* (overall mean = 6.7) the highest of all the items involving issues that addressed English. The mean responses are presented in Table 4.40.

Table 4.40

Items involving issues that address English				
	Oral (1 & 2)	Comprehensive (3, 4 & 5)	Bilingual/Bicultural (6 & 7)	Overall Mean
English Fluency	7.0 (n=5) (r=2.5)	6.59 (n=30) (r=1)	6.60 (n=5) (r=2)	6.65 (n=40)
Written English	7.0 (n=5) (r=2.5)	6.35 (n=27) (r=2)	7.0 (n=5) (r=1)	6.52 (n=37)
Linguistics of English	5.60 (n=5) (r=3)	5.93 (n=29) (r=3)	6.40 (n=5) (r=3)	5.97 (n=39)
Oral/Aural Teaching Competencies	7.0 (n=5) (r=2.5)	5.62 (n=30) (r=5)	2.20 (n=5) (r=6)	5.35 (n=40)
Spoken English	7.0 (n=5) (r=2.5)	5.65 (n=27) (r=4.5)	3.0 (n=5) (r=5.5)	5.33 (n=37)
English Phonetics in Reading	5.1 (n=5) (r=4)	5.65 (n=28) (r=4.5)	2.6 0(n=5) (r=5.5)	5.10 (n=38)
Simultaneous Communication	4.0 (n=5) (r=5)	5.61 (n=29) (r=6)	2.60 (n=5) (r=5.5)	4.89 (n=39)
Manually Coded English	3.40 (n=5) (r=6)	5.21 (n=30) (r=7)	1.80 (n=5) (r=7)	4.50 (n=40)
Mean				

Respondents were asked to indicate whether topics and skills that addressed cultural issues were critical to the preparation of pre-service teachers (see Table 4.41). Majority of the respondents felt that knowledge of deaf culture/deaf history (98 percent) and multi-cultural awareness (95 percent),

should be incorporated into the program.

Table 4.41

Items that address cultural issues								
		Disagree			Unsure	Agree		
		1	2	3	4	5	6	7
Multicultural Awareness (n=40)	# of respondents	-	-	1	1	6	13	19
	Percentage	-	-	2.5	2.5	15.0	32.5	47.5
Knowledge of Deaf Culture/Deaf History (n=40)	# of respondents	-	-	-	1	8	9	22
	Percentage	-	-	-	2.5	20.0	22.5	55.0

When comparing by program philosophy (see Table 4.42), mean responses suggested that all the respondents felt that both these items should be included in a teacher preparation program. The overall means for the items, *Multicultural Awareness* and *Knowledge of Deaf Culture/Deaf History* are 6.2 and 6.3 respectively.

Table 4.42

Items that address cultural issues				
	Oral (1 & 2)	Comprehensive (3, 4 & 5)	Bilingual/Bicultural (6 & 7)	Overall Mean
Multicultural Awareness (n=40)	5.0 (n=5) (r=1.5)	6.2 (n=30) (r=2)	7.0 (n=5) (r=1.5)	6.20 (n=40)
Knowledge of Deaf Culture/Deaf History (n=40)	5.0 (n=5) (r=1.5)	6.3 (n=30) (r=1)	7.0 (n=5) (r=1.5)	6.30 (n=40)
Mean				

When asked to rate whether topics and skills that addressed deaf education in general were critical to the preparation of pre-service teachers, the majority of respondents indicated that Philosophy, Theory, & History of Deaf Education (95 percent) and Psychological Aspects of Deafness (88 percent) should be incorporated into the program. The results are presented in Table 4.43.

Table 4.43

Items that address Deaf Education in General								
		Disagree			Unsure	Agree		
		1	2	3	4	5	6	7
Philosophy, Theory, & History of Deaf Education (n=39)	# of respondents	-	1	-	1	5	13	19
	Percentage	-	2.6	-	2.6	12.8	33.3	48.7
Psychological Aspects of Deafness (n=40)	# of respondents	-	2	-	3	5	11	19
	Percentage	-	5.0	-	7.5	12.5	27.5	47.5

The mean responses (see Table 4.44) suggested that all the respondents rated these items highly except for the bilingual/bicultural program respondents who were unsure about the Psychological Aspects of Deafness (mean = 4.6).

Table 4.44

Items that address Deaf Education in General				
	Oral (1 & 2)	Comprehensive (3, 4 & 5)	Bilingual/Bicultural (6 & 7)	Overall Mean
Philosophy, Theory, & History of Deaf Education	5.0 (n=5) (r=2)	6.3 (n=29) (r=2)	7.0 (n=5) (r=1)	6.3 (n=39)
Psychological Aspects of Deafness	7.0 (n=5) (r=1)	6.5 (n=30) (r=1)	4.6 (n=5) (r=2)	6.0 (n=40)

Table 4.45

Items involving issues that address Language								
		Disagree			Unsure	Agree		
		1	2	3	4	5	6	7
Teaching Reading & Writing to Deaf & Hard of Hearing Learners (n=40)	# of respondents	-	-	-	-	-	3	37
	Percentage	-	-	-	-	-	7.5	92.5
Language & Cognition (n=40)	# of respondents	-	-	-	-	-	8	32
	Percentage	-	-	-	-	-	20.0	80.0
Language Acquisition/ Learning Theory & its Pedagogical Implications (n=39)	# of respondents	-	-	-	-	1	5	33
	Percentage	-	-	-	-	2.6	12.9	84.6
Theories of Child & Adult Learning & its Pedagogical Implications (n=38)	# of respondents	-	-	-	-	2	11	25
	Percentage	-	-	-	-	5.3	28.9	65.8
Theories of Literacy Development (n=40)	# of respondents	-	-	-	1	3	9	27
	Percentage	-	-	-	2.5	7.5	22.5	67.5
Principles of Reading to the Deaf (n=39)	# of respondents	1	-	-	2	2	6	28
	Percentage	2.6	-	-	5.1	5.1	15.4	71.8

Items involving issues that address Language								
Second Language Pedagogy that Focuses on the Integration of Language and Content (n=38)	# of respondents	-	-	1	6	8	11	12
	Percentage	-	-	2.6	14.0	18.6	25.6	27.9
Second Language Acquisition/ Learning Theory & its Pedagogical Implications (n=39)	# of respondents	-	-	1	3	11	9	15
	Percentage	-	-	2	8	11	9	15

When analyzing by program philosophy, the mean responses indicated that the oral program respondents were somewhat unsure about discussing second language acquisition/learning theory and its pedagogical implications (mean = 4.7) and second language pedagogy that focuses on the integration of language and content (mean = 4.7). With an overall mean of 6.9, *teaching reading and writing to deaf and hard of hearing learners* was ranked the highest of all the items involving issues that addressed language development, literacy, and language pedagogy. These data are summarized in Table 4.46.

Table 4.46

Items involving issues that address Language development, Literacy, & Language Pedagogy				
	Oral (1 & 2)	Comprehensive (3, 4 & 5)	Bilingual/Bicultural (6 & 7)	Overall Mean
Teaching Reading & Writing to Deaf & Hard of Hearing Learners	7.0 (n=5) (r=3.5)	6.90 (n=30) (r=1)	7.0 (n=5) (r=2.5)	6.92 (n=40)
Language Acquisition/Learning Theory & its Pedagogical Implications	4.75 (n=5) (r=6.5)	5.81 (n=29) (r=6)	7.0 (n=5) (r=2.5)	6.83 (n=39)
Language & Cognition	7.0 (n=5) (r=3.5)	6.76 (n=30) (r=3)	6.80 (n=5) (r=6)	6.80 (n=40)
Theories of Child & Adult Learning & its Pedagogical Implications	7.0 (n=5) (r=3.5)	6.55 (n=28) (r=3)	6.60 (n=5) (r=6)	6.61 (n=38)
Theories of Literacy Development	6.80 (n=5) (r=4)	6.41 (n=30) (r=5)	7.0 (n=5) (r=2.5)	6.55 (n=40)
Principles of Reading to the Deaf	5.80 (n=5) (r=5)	6.46 (n=29) (r=4)	6.80 (n=5) (r=2.5)	6.43 (n=39)
Second Language Pedagogy that Focuses on the Integration of Language and Content	4.75 (n=5) (r=6.5)	5.59 (n=28) (r=7)	7.0 (n=5) (r=2.5)	5.72 (n=38)
Mean				

A list of 'topics' and 'skills' and 'knowledge of theories' was presented to the respondents. They were asked to select five (5) items from the list, that they believed were most important to their programs (see Table 4.47). From the 'topics' list, more than half of the respondents considered Language and Cognition (65 percent) as being critical for inclusion in the teacher education curriculum. It was the only 'topic' item that was favored by more than half the respondents. From the 'skills' list, Teaching Reading and Writing to Deaf & Hard of Hearing Learners was the only item that was favored by the majority of the respondents (77 percent). The remaining seven 'skills' items were not considered as critical. From the 'demonstrating knowledge' list, Assessment, Diagnosis, & Evaluation Procedures in the areas of written English (65 percent), spoken English (61 percent), and ASL (56 percent) and Theories of Child and Adult Language Learning Theory and its Pedagogical Implications (51 percent) were favored by more than half of the respondents.

Table 4.47

Please pick five items from the list that you believe are the most important to your program goals.		
Items	**Frequency**	**Percentage**
Language Acquisition/Learning Theory & its Pedagogical Implications (Knowledge)	35	81.4
Teaching Reading & writing to Deaf & Hard of Hearing Learners (Skills)	33	76.7

Please pick five items from the list that you believe are the most important to your program goals.		
Language & Cognition (Topics)	28	65.1
Assessment, Diagnosis, & Evaluation Procedures in the area of Written English (Knowledge)	28	65.1
Assessment, Diagnosis, & Evaluation Procedures in the area of Spoken English (Knowledge)	26	60.5
Assessment, Diagnosis, & Evaluation Procedures in the area of ASL (Knowledge)	24	55.8
Theories of Child & Adult Language Learning Theory & its Pedagogical Implications (Knowledge)	22	51.2
Second Language Acquisition/Learning Theory & its Pedagogical Implications (Knowledge)	20	46.5
ASL Acquisition (Knowledge)	17	39.5
ASL Fluency (Skills)	16	37.2
Theories of Literacy Development (Topics)	15	34.9
ASL Role in English Literacy Development (Knowledge)	15	34.9
English Phonetics in Reading (Knowledge)	15	34.9
Knowledge of Deaf Culture/Deaf History (Topics)	12	27.9
English Fluency (Skills)	11	25.6
Second Language Pedagogy that Focuses on the Integration of Language and Content (Knowledge)	11	25.6
Psychological Aspects of Deafness (Topics)	10	23.3

Please pick five items from the list that you believe are the most important to your program goals.		
Linguistics of English (Topics)	10	23.3
Oral/Aural Teaching Competencies (Skills)	10	23.3
Principles of Reading to the Deaf (Topics)	9	20.9
Linguistics of ASL (Topics)	7	16.3
Multicultural Awareness (Topics)	7	16.3
Manually Coded English (Skills)	6	14.0
Philosophy, Theory, & History of Deaf Education (Topics)	5	11.6
Simultaneous Communication (Skills)	3	7.0
English Literature (Topics)	2	4.7
ASL Literature (Topics)	1	2.3
ASL Storytelling (Skills)	0	0.0

When considered by program philosophy, all the five bilingual/bicultural program respondents considered American Sign Language Literature (100 percent) and Linguistics of ASL (100 percent) most critical to their curriculum. These data are presented in Table 4.48.

Table 4.48

Bilingual/Bicultural Respondents: Please pick five items from the list that you believe are the most important to your program goals.		
Items	***Frequency***	***Percentage***
American Sign Language Literature (Topics)	5	100

Bilingual/Bicultural Respondents: Please pick five items from the list that you believe are the most important to your program goals.		
Linguistics of ASL (Topics)	5	100
Language Acquisition/Learning Theory & its Pedagogical Implications (Knowledge)	4	80
Second Language Acquisition/Learning Theory & its Pedagogical Implications (Knowledge)	4	80
ASL Acquisition (Knowledge)	4	80
English Literature (Topics)	4	80
Assessment, Diagnosis, & Evaluation Procedures in the areas of written English (Knowledge)	3	60
Assessment, Diagnosis, & Evaluation Procedures in the areas of ASL (Knowledge)	3	60
Second Language Pedagogy that Focuses on the Integration of Language and Content (Knowledge)	3	60
Theories of Child & Adult Language Learning Theory & its Pedagogical Implications (Knowledge)	2	40
Knowledge of Deaf Culture/Deaf History (Topics)	2	40
Second Language Acquisition/Learning Theory & its Pedagogical Implications (Knowledge)	2	40
Multicultural Awareness (Topics)	2	40
Principles of Reading to the Deaf (Topics)	0	0
Simultaneous Communication (Skills)	0	0
Philosophy, Theory, & History of Deaf Education (Topics)	0	0
Manually Coded English (Skills)	0	0
ASL Storytelling (Topics)	0	0
Oral/Aural Teaching Competencies (Skills)	0	0
Assessment, Diagnosis, & Evaluation Procedures in the areas of spoken English (Knowledge)	0	0

Bilingual/Bicultural Respondents: Please pick five items from the list that you believe are the most important to your program goals.		
ASL Acquisition (Knowledge)	0	0
ASL Fluency (Skills)	0	0
ASL Role in English Literacy Development (Knowledge)	0	0
Knowledge of Deaf Culture/Deaf History (Topics)	0	0
Linguistics of English (Topics)	0	0
Psychological Aspects of Deafness (Topics)	0	0
English Fluency (Skills)	0	0
English Phonetics in Reading (Knowledge)	0	0
Theories of Literacy Development (Knowledge)	0	0
Teaching Reading & Writing to Deaf & Hard of Hearing Learners (Skills)	0	0
Language & Cognition (Topics)	0	0
n=5		

All of the oral program respondents considered English Literature (100 percent) most critical to their programs: These data are summarized in Table 4.49.

Table 4.49

Oral Respondents: Please pick five items from the above list that you believe are the most important to your program goals.		
Items	***Frequency***	***Percentage***
English Literature (Topics)	5	100
Oral/aural Teaching Competencies (Skills)	4	80
Language Acquisition/Learning Theory & its Pedagogical Implications (Knowledge)	4	80

Oral Respondents: Please pick five items from the above list that you believe are the most important to your program goals.		
Teaching Reading & Writing to Deaf & Hard of Hearing Learners (Skills)	4	80
Language & Cognition (Topics)	3	60
Assessment, Diagnosis, & Evaluation Procedures in the areas of written English (Knowledge)	3	60
Assessment, Diagnosis, & Evaluation Procedures in the areas of spoken English (Knowledge)	3	60
English Phonetics in Reading (Topics)	3	60
English Fluency (Skills)	2	40
Psychological Aspects of Deafness (Topics)	2	40
Linguistics of English (Topics)	2	40
Second Language Acquisition/Learning Theory & its Pedagogical Implications (Knowledge)	2	40
Theories of Literacy Development (Knowledge)	1	20
Principles of Reading to the Deaf (Topics)	1	20
Multicultural Awareness (Topics)	1	20
Simultaneous Communication (Skills)	1	20
Philosophy, Theory, & History of Deaf Education (Topics)	1	20
Linguistics of ASL (Topics)	0	0
Manually Coded English (Skills)	0	0
ASL Storytelling (Skills)	0	0
ASL Literature (Topics)	0	0
Assessment, diagnosis, & Evaluation Procedures in the areas of ASL Acquisition (Knowledge)	0	0
ASL Acquisition (Knowledge)	0	0
ASL Fluency (Skills)	0	0
ASL Role in English Literacy Development (Knowledge)	0	0

Oral Respondents: Please pick five items from the above list that you believe are the most important to your program goals.		
Knowledge of Deaf Culture/Deaf History (Topics)	0	0
Theories of Child & Adult Language Learning Theory & its Pedagogical Implications (Knowledge)	0	0
Second Language Pedagogy that Focuses on the Integration of Language and Content (Knowledge)	0	0
n=5		

A majority of the comprehensive program respondents considered the following items critical to their programs: Language Acquisition/Learning Theory and its Pedagogical Implications (84 percent), Teaching Reading and Writing to Deaf & Hard of Hearing Learners (74 percent), Assessment, Diagnosis, and Evaluation Procedures in the areas of written English (68 percent), Language and Cognition (65 percent), and Knowledge of Deaf Culture and Deaf History (65 percent). These data are summarized in Table 4.50.

Table 4.50

Comprehensive Respondents: Please pick five items from the list that you believe are the most important to your program goals.		
Items	***Frequency***	***Percentage***
Language Acquisition/Learning Theory & its Pedagogical Implications (Knowledge)	26	84
Teaching Reading & Writing to Deaf & Hard of Hearing Learners (Skills)	23	74
Assessment, Diagnosis, & Evaluation Procedures in the areas of written English (Knowledge)	21	68
Language & Cognition (Knowledge)	20	65
Knowledge of Deaf Culture/Deaf History (Topics)	20	65
Assessment, Diagnosis, & Evaluation Procedures in the areas of spoken English (Knowledge)	19	61
Assessment, Diagnosis, & Evaluation Procedures in the areas of ASL (Knowledge)	19	61
Theories of Child & Adult Language Learning Theory & its Pedagogical Implications (Knowledge)	17	55
Second Language Acquisition/Learning Theory & its Pedagogical Implications (Knowledge)	16	52
ASL Acquisition (Knowledge)	13	42
ASL Fluency (Skills)	11	35
Theories of Literacy Development (Knowledge)	11	35
Oral/Aural Teaching Competencies (Skills)	10	32
ASL Role in English Literacy Development (Knowledge)	9	29
English Fluency (Skills)	8	26
Second Language Pedagogy that Focuses on the Integration of Language and Content (Knowledge)	8	26

Comprehensive Respondents: Please pick five items from the list that you believe are the most important to your program goals.		
Psychological Aspects of Deafness (Topics)	8	26
Linguistics of English (Topics)	8	26
Principles of Reading to the Deaf (Topics)	6	19
Manually Coded English (Skills)	6	19
Philosophy, Theory, & History of Deaf Education (Topics)	3	10
Simultaneous Communication (Skills)	2	6
English Literature (Topics)	2	6
ASL Literature (Topics)	2	6
ASL Storytelling (Skills)	0	0
n=31		

Programs were asked to determine the sources from which they thought input should be solicited for designing and evaluating their deaf and hard of hearing teacher preparation curricula. When analyzed by program philosophy, only three out of five (60 percent) of the oral programs responded to this question. The majority of the oral respondents suggested that input should be from the professionals (frequency count of seven). Professionals include those who are language specialists, psychologists with extensive work with the deaf, speech therapists, audiologists, and content specialists. Teachers include those who are master teachers; administrators are defined as the directors of schools of the deaf and hard of hearing. 'Hearing-impaired', 'deaf', and 'deaf and hard of hearing' were the terms the oral respondents used to describe the hearing status of the deaf and hard of hearing population. These results are summarized in Table 4.51.

Table 4.51

Oral Program Respondents:

In Designing and Evaluating your Deaf and Hard of Hearing Teacher Preparation Curriculum, Input should be Solicited from:	
Sources	*Total #:*
I. Professionals	*7*
II. Parents	*2*
III. Teachers	*1*
IV. Adults with hearing impairments	*1*
V. Administrators	*1*
VI. Former graduates	*1*
n=3	

Twenty-eight of the thirty-one (90 percent) respondents from the comprehensive programs suggested that input should be solicited from professionals, teachers, students, accrediting bodies, parents/guardians, the members of the deaf community, administrators, professional organizations, employers of graduates, theory and research studies, schools/educational programs, and advisory boards. There was little to no consensus regarding any one source. 'Hearing-impaired', 'hearing-disability', 'deaf', and 'deaf and hard of hearing' were the terms the comprehensive respondents used to describe the hearing status of the deaf and hard of hearing population. These results are summarized in Table 4.52.

Table 4.52

Comprehensive Program Respondents:

Sources:	*Total #:*
I. Professionals	*39*
II. Teachers	*21*
III. Students	*20*
IV. Accrediting Bodies	*18*
V. Parents/Guardians	*14*
VI. Deaf Community	*13*
VII. Administrators	*5*
VIII. Employers of program graduates	*4*
IX. Professional Organizations	*4*
X. Schools/Educational Programs	*2*
XI. Advisory Board	*2*
XII. Theory & Research Studies	*2*
n=28	

All (100%) bilingual/bicultural respondents provided answers to the

question regarding the sources of input for designing and evaluating deaf and hard-of-hearing teacher preparation curricula. They stated that input should be solicited from professionals, teachers, students, parents, administrators, deaf community members, schools, accrediting bodies, advisory groups and the employers of the program graduates.

Bilingual/bicultural program respondents indicated that the primary source of input should be from professionals (10). The professionals mentioned were specialized in the areas of deaf education, bilingualism/biculturalism, English as a Second Language and those who work for the deaf community. Teachers refer to those who teach deaf and hard of hearing learners and those who are master/mentor teachers; students include those who are former graduates as well as students currently enrolled in the programs; administrators refers to those who work in residential schools; schools refer to programs based on the bilingual/bicultural philosophy. 'Deaf' with a capital D and 'deaf' are the terms the respondents used to describe the hearing status of the deaf and hard of hearing population. These data are presented in Table 4.53.

Table 4.53

Bilingual/Bicultural Program Respondents:

In Designing and Evaluating your Deaf and Hard of Hearing Teacher Preparation Curriculum, Input should be Solicited from:	
Sources:	***Total #:***
I. Professionals	***10***
II. Teachers	***5***

In Designing and Evaluating your Deaf and Hard of Hearing Teacher Preparation Curriculum, Input should be Solicited from:	
III. Students	*5*
IV. Parents	*3*
V.. Administrators	*3*
VI. Deaf Community	*3*
VII. Schools	*1*
VIII. Accrediting bodies	*1*
IX. Advisory groups	*1*
X. Employers of the program graduates	*1*
n=5	

Formal interviews were conducted with randomly selected program coordinators/teacher educators; three who represented oral programs, three from comprehensive programs and two who represented bilingual/bicultural programs. The purpose of the interviews was to gain information about the program composition and beliefs regarding (a) language learning, (b) the importance of a native language, (c) the bilingual-bicultural philosophy, (d) the role of culture, and (e) the teacher trainers' role in the language learning of pre-service teachers.

Rationale for Sign Language Instruction

The individuals from the oral programs were asked to explain their rationale for offering some sign language classes in their programs, since their programs were based on the oral philosophy. Two individuals explained that it was a useful and a 'courteous' thing to have basic skills in sign language, even if an interpreter was required for more complex interactions between oral teachers and people who rely on sign language and deaf parents who wished to have their children learn in an oral environment. Another person indicated that a sign language course was required in the program because signing was part of Deaf Culture and it was therefore important for oral pre-service teachers to have exposure to sign language. The third individual clarified that even though the program was based on the oral philosophy, it was helpful to prepare pre-service teachers with at least a basic foundation in signing so they could be prepared to work in both oral or total communication settings.

In sum, the rationale for offering sign language classes in oral programs was twofold: to facilitate basic communication with individuals who relied on sign language, whether socially or academically, and to offer opportunities for pre-service teachers to work in school settings that may be based on a philosophy other than the oral philosophy. Data regarding the rationale for offering sign language classes in oral programs are presented in Table 4.54.

Table 4.54

Two main reasons for offering sign language classes in oral programs	
Rationale #1	basic communication with people who rely on sign language
Rationale #2	opportunities for pre-service teachers to work in settings other than oral settings

Profile of Sign Language Instructors

The interviewees were asked whether their programs required sign language instructors to participate in professional development activities related to second language teaching and learning (see Table 4.55). One (13%) of eight interviewees, representing the bilingual/bicultural philosophy, confirmed that the program required its sign language instructors to attend conferences and workshops related to ASL teaching and second language learning. Two (25%) individuals (oral and comprehensive) reported that their sign language instructors voluntarily attended workshops and conferences in the two mentioned areas. One person explained that the sign language instructors in

the program were required to work together and confer with each other to coordinate their teaching.

When analyzed by program philosophy, it was found that the bilingual/bicultural program was the only one that required sign language instructors to attend professional development activities in the areas of ASL and second language teaching.

Table 4.55

Are Sign Language Instructors Required to Participate in Professional Development Activities related to Second Language Teaching and Learning?			
Interviewee	**Required**	**Not required**	**Voluntarily attended conferences/workshops**
#1 (Oral)		X	
#2 (Oral)		X	
#3 (Oral)		X	X
#4 (Comp.)		X	
#5 (Comp.)		X	
#6 (Comp.)		X	X
#7 (Bilingual/ Bicultural)		X	
#8 (Bilingual/ Bicultural)	X		
n=8			

The interviewees offered the following rationale for not requiring sign language instructors to participate in professional development activities. The oral program representative explained that the ASL course was a recommended elective. The person expected faculty in the program to be experts in their speciality areas, but admitted that they did not necessarily have the same skills.

A second person from an oral program explained that the sign instructor in the program was an oral deaf adult who signed both ASL and SEE. The person was an adjunct faculty member who also had a separate, full-time job. The third person from an oral program said that the program employed one sign language instructor and this person had limited availability and worked only part-time.

A comprehensive program representative explained that the primary problem was that there were not enough programs in place to prepare individuals to teach ASL as a second language. Instead, existing second language curricula had to be used to help instructors teach ASL. Further, since this was not a requirement, it would take time and money and a clear rationale for implementing a new program. Another person from a comprehensive program reported that only a small number of students used American Sign Language but a larger number used other sign systems. The person explained that the program's goal was to prepare pre-service teachers to apply and adapt first language principles, research, and practices to signing in English, not a second language. A third person representing comprehensive programs did not discuss the barriers. One of the two bilingual/bicultural coordinators hoped to begin requiring sign language instructors to have training in teaching ASL, by beginning with ASLTA training. However this proposal had not been implemented since funding had not been found to pay the trainer.

Thus the limited time commitments of sign language instructors, the fallacy that being deaf was sufficient for teaching sign language, the cost and

time for implementing the training and the low value placed on second language (ASL) appeared to be the major barriers to requiring sign language instructors to participate in professional development activities related to second language teaching.

Interviewees were asked to indicate how many sign language instructors their programs had. This data is presented in Table 4.56. More than a half of the eight programs reported having more than one sign language instructor. All three oral programs were found to have one sign language instructor. The comprehensive programs had between three and five sign language instructors and two of the bilingual/bicultural programs had three and five respectively.

The hearing status and credentials of sign language instructors is presented in Table 4.56. All sign language classes in four (1=bilingual/bicultural; 3 = oral) of the eight programs were taught by deaf sign language instructors. Two programs had both hearing and deaf sign language instructors. The sign language instructors in one program, representing the comprehensive philosophy, were all hearing. One individual did not offer a response to this question. While all the sign language instructors in one of the bilingual/bicultural programs were ASLTA certified, the comprehensive program had one of four sign language instructors ASLTA and RID certified. When analyzing the responses by program philosophy it was found that the oral programs were the only ones that did not have hearing sign language instructors. These were the only programs too, that had no ASLTA certified

instructors. Overall it appeared that having ASLTA certification for sign language instructors was not a high priority in teacher preparation programs of the deaf and hard of hearing.

Table 4.56

How Many Sign Language Instructors do you have? What is their Hearing Status? What are their Credentials?					
Interviewee	# of sign language classes	Deaf	Hearing	ASLTA certified	No response
#1 (oral)	1	1			
#2 (oral)	1	1			
#3 (oral)	1	1			
#4 (Comp.)	3				X
#5 (Comp.)	4		4	1	
#6 (Comp.)	4	1	3		
#7 (Bilingual/Bicultural)	3	3		3	
#8 (Bilingual/Bicultural)	5	4	1		
n=8					

Sign Language Instruction

When asked to report the number of sign language classes required for pre-service teachers, little less than half the programs (38%) indicated that they offered four American Sign Language courses. One interviewee, representing the comprehensive philosophy, said pre-service teachers in the program were required to take one Signed English class; one PSE/Conceptual Sign class; and one class in ASL. Another person, representing the oral philosophy, explained

that the program offered two American Sign Language classes. The courses however were not strictly ASL but introduced pre-service teachers to CASE. One comprehensive interviewee listed one of the requirements as being an ASL language and wrote 'Other' to describe the second. Another person, representing the oral philosophy, reported that the program offered one sign language course though this was not required.

In sum, one oral program reportedly offered an ASL course. Only one person from a comprehensive program listed all the sign language courses in the program as being ASL. Both bilingual/bicultural program representatives described their sign language courses as ASL courses. These results are presented in Table 4.57.

Interviewees were asked to state the number of hours of sign language classes pre-service teachers were required to take each week (see table 4.46). Two of the oral programs required pre-service teachers to take between two to three hours of sign language a week and other outside assignments. All the three comprehensive programs required approximately thirty-two hours of sign language classes per semester. The bilingual/bicultural programs averaged seventy-two to one hundred hours per semester.

Table 4.57

What language/mode of communication does your program offer in sign language instruction? and What is the duration of each sign language class? In other words, how many hours of sign language instruction do pre-service teachers have each week?						
Interviewee	ASL	SEE	CASE	Other	No response	# of hours per week
#1 (oral)	X					2 to 3 hours
#2 (oral)			X			2.5 hours
#3 (oral)						
#4 (comp.)	X					3 semester hours
#5 (comp.)	X	X	X			3 semester hours
#6 (comp.)					X	two hours
#7 (Bilingual/ Bicultural)	X					10 hours per week and an additional 10 hours over the semester
#8 (Bilingual/ Bicultural)	X					6 hours per week
n=8						

Teacher educators/coordinators were asked to describe the kinds of activities that gave pre-service teachers exposure to sign language, outside of class time. Two programs, representing the comprehensive and bilingual/bicultural philosophy, had sign language labs that allowed pre-service teachers to work with tutors. All the programs required pre-service teachers to participate in deaf-related activities and visit schools for the deaf.

When asked whether pre-service teachers were required to exhibit basic competence in sign language and to describe the requirements, nearly all the

respondents (88%) indicated that they did not require pre-service teachers to exhibit any basic competence in sign language (see Table 4.58). One program required demonstration of basic understanding of sign language vocabulary. Additional explanations were offered by three program coordinators: One bilingual/bicultural program representative said that pre-service teachers came to the program with basic competency in sign language. It was strongly recommended in another program, representing the comprehensive philosophy, that students have at least one year of ASL prior to entering the program. Students who had ASL skills were given preference in admission. One comprehensive program coordinator said that pre-service teachers had to be able to demonstrate conversational ASL with a deaf individual. If this requirement was not met, pre-service teachers were required to acquire this skill before finishing the first year of graduate training. Both oral and bilingual/bicultural programs did not require pre-service teachers to exhibit entry level competence in sign language.

Interviewees were asked to describe the exit requirements that ensured that pre-service teachers were competent in using sign language (see Table 4.47). The largest number of program representatives (75%) indicated that certain requirements were to be met, in the area of sign language competency. Three individuals (2=oral; 1=comprehensive) reported using course examinations as an assessment tool. Three others (1=bilingual/bicultural; 2=comprehensive) said they used their own assessment tools. One

comprehensive program coordinator required pre-service teachers to take a competency examination before a committee of three instructors. If the examination was failed, pre-service teachers were assigned to specific experiences (generally over a summer) that required them to interact in ASL with children who were Deaf. The examination had to then be taken again. A comprehensive program representative advised that it was necessary for pre-service teachers to be expressively and receptively tested in signed English if they majored in Early Childhood and Elementary Education. Those who majored in secondary education and wished to work in residential schools for the deaf would also have to be tested in ASL. Pre-service teachers in the particular program were allowed to decide in which of the three language/modes of communication (ASL, SEE, & CASE) they wanted to be tested. One bilingual/bicultural program reported that it developed a series of tests (each approximately two hours long) to measure competency following each sign language class. There was a fifth test or exit exam also required. This test was said to be different from the ASLPI and SCPI in that it was reportedly not as subjective in determining the competency levels of pre-service teachers. Instead, norms were developed for the tests and correlated with student grades obtained from the instructors and the ASLPI. One program coordinator, representing the bilingual/bicultural philosophy, used a state examination to evaluate sign language competence and another program did not have any requirements for determining competence.

In looking at assessment by program philosophy, it was noted that two of the three oral programs and one of the comprehensive programs used completion of courses and course requirements' as a means to determine exit competence. Two comprehensive programs and one bilingual/bicultural program created their own assessment tools.

Table 4.58

Are pre-service teachers entering/exiting your program required to exhibit basic competence/competence in sign language? Explain your requirements.						
Interviewee	Required for entering the program	Required for exiting the program	State-mandated examination	Meet the requirements of and completion of course work	Designed examinations	None
#1 (oral)	No	No				
#2 (oral)	No	Yes		X		
#3 (oral)	No	Yes		X		
#4 (comp.)	No	Yes			X	
#5 (comp.)	No	Yes		X		
#6 (comp.)	Yes	Yes			X	
#7 (bilingual/ bicultural)	No	Yes	X			
#8 (bilingual/ bicultural)	No	Yes			X	
n=8						

Regarding sign language competency, the interviewees were asked whether their programs evaluated pre-service teachers with regard to (a) language proficiency (b) communicative competence or (c) both, and to explain the nature of this evaluation. Nearly all the programs (75%) reportedly

evaluated pre-service teachers' language proficiency and communicative competence. When analyzing this by program philosophy it was found that two of the oral programs evaluated their pre-service teachers' language proficiency and communicative competence in both oral and written English. The remaining interviewees said that evaluation focused primarily on sign language.

In addition to questions about entrance/exit requirements to demonstrate sign language competency, individuals were asked who conducted the evaluations of pre-service teachers. These results are presented in Table 4.59. Six interviewees reported that the ASL teaching staff or course instructors acted as the evaluators. One comprehensive program representative identified as being the director and consequently the evaluator while one bilingual/bicultural program representative said that the state education agency was responsible for conducting evaluations. When pressed for details regarding the demographics of the state level evaluators, the individual did not offer the information but volunteered the name of a contact person who would know more. Thus, sign language instructors were the ones who primarily conducted evaluations in all three oral programs; two comprehensive programs; and one bilingual/bicultural program.

Table 4.59

Who conducts the evaluation?			
Interviewee	State-mandated examination	ASL/sign language teaching staff	Director of the program
#1 (oral)		X	
#2 (oral)		X	
#3 (oral)		X	
#4 (comp.)			X
#5 (comp.)		X	
#6 (comp.)		X	
#7 (bilingual/ bicultural)	X		
#8 (bilingual/ bicultural)		X	
n=8			

When asked whether the evaluators were trained to evaluate pre-service teachers' proficiency and/or communicative competence, a large number of individuals (75%) seemed to believe that their evaluators had expertise in this area. Their definitions of expertise were however seen to vary. Two of the oral program coordinators believed that their evaluators were trained individuals. This assumption was based on the fact that one of the evaluators knew sign language and the other was an expert in the field of auditory/oral development and linguistics. The third oral program representative did not think the program's evaluator was trained to evaluate pre-service teachers' proficiency and/ or communicate competence. Individuals from the comprehensive programs offered the following information; one person explained that the

program's evaluator was RID certified. Another simply stated that the evaluators in the program had been trained in methods of evaluating sign language. A third representative did not respond to the question. One of the bilingual/bicultural program coordinators believed that the program's evaluators were competent in evaluating the proficiency and communicative competence of its teachers since these individuals participated in related research activities and diagnostic measures of ASL.

Interviewees were asked whether their programs offered separate courses that taught the use of sign language in specific subject matter areas i.e. mathematics, science or whether this was somehow incorporated into the regular sign language classes. A large number of programs (88%) said they did not offer separate courses to teach subject-matter specific signs. The one person from a bilingual/bicultural program who responded in the affirmative explained that the specialized signs were offered in a language class that discussed bilingual methods and codeswitching. The second bilingual/bicultural program representative thought that this was an important area to attend to. The barrier to implementing the course was limited funding and the need to get academic approval. The remaining respondents did not indicate specific barriers to preparing pre-service teachers with subject-matter area sign language skills.

Fluency in English

The interviewees were asked to describe how their programs evaluated pre-service teachers' proficiency in written English (see Table 4.60). Two out of

the eight interviewees, representing the oral philosophy, (25%) said that this was accomplished by means of a state examination, the use of admission essays, and GRE/MAT tests. One bilingual/bicultural program representative reported the use of a university-wide literacy test. Another bilingual/bicultural program representative explained that the program did not have specific assessment tools to evaluate pre-service teachers' proficiency in English but when the need arose, individuals were put in English composition classes. Use of course evaluations in language courses (13%) and course work (13%) were means employed by two programs (1=oral; 1=comprehensive). Two (25%) of the interviewees, representing the oral philosophy, said they used more than one assessment tool to evaluate pre-service teachers' proficiency in written English.

When analyzed by program philosophy, two out of the three interviewees that represented oral programs reported that their programs used more than one assessment tool to evaluate pre-service teachers' proficiency in written English. Both the comprehensive and bilingual/bicultural programs reported use of only one assessment tool each.

Table 4.60

How do you evaluate pre-service teachers' proficiency in written English?							
Interviewee:	State Examination	Course Evaluations in language courses	Course work	University-wide literacy test	None	Admission essay	GRE
#1 (oral)	X	X					
#2 (oral)						X	
#3 (oral)	X						X
#4 (comp.)						X	
#5 (comp.)			X				
#6 (comp.)							X
#7 (Bilingual/ Bicultural)					X		
#8 (Bilingual/ Bicultural)				X			
n=8							

Presented with three areas, (a) written English, (b) sign language, and (c) both written English and sign language equally, program coordinators were asked to indicate which of the areas their programs emphasized the most. The results are presented in Table 4.61.

Three (2=bilingual/bicultural;1=comprehensive) out of eight interviewees (38%) said that their programs emphasized both American Sign Language and written English. One of the three individuals, representing the bilingual/bicultural philosophy, explained that the program provided an equal number of courses

that stressed the structure of English and the structure of ASL. While both the others coordinators said they emphasized both languages, one indicated that pre-service teachers came with varying degrees of competency and the other reported that the program did not formally evaluate the weight given to English and ASL. While two individuals did not address the question directly, two oral program representatives explained that their programs not only emphasized written English but also stressed spoken English and auditory perception. One of the comprehensive program representatives who did not address the question directly explained that while the program emphasized the importance of being a skilled communicator, the role of educators in helping deaf and hard of hearing learners see the relationship between sign language and written English, was secondary. Another reported that the program emphasized both written English and the ability to read English. Individuals who could not demonstrate competence in these areas were not admitted to the program. The belief was that pre-service teachers who could not serve as models for grammatically-correct written English would not be allowed to graduate.

Table 4.61

Which of the following does your program tend to emphasize a) written English b) sign language c) written English and sign language equally? Please explain.						
Interviewees:	Written & Read English	Spoken & Written English	Both	Sign Language	No Response	Other
#1 (oral)	X					
#2 (oral)	X					
#3 (oral)					X	
#4 (comp.)	X					
#5 (comp.)			X			
#6 (comp.)						X
#7 (Bilingual/ Bicultural)			X			
#8 (Bilingual/ Bicultural)			X			
n=8						

In addressing entry requirements, individuals were asked to explain how their programs ensured that pre-service teachers entering programs exhibited basic competence in English (see Table 4.62). Four (50%) of the eight interviewees (2=oral;1=comprehensive;1=bilingual/bicultural) stated that their programs required written competency examinations. Three oral programs (38%) used the GRE or MAT to screen students for written English. One bilingual/bicultural program representative explained that the university used a university-wide literacy test. When asked to explain the nature of this examination, the person was reluctant and indicated that he disagreed with the test itself. The person disagreed with the idea that a single test could serve as a literacy test. One, representing the comprehensive philosophy, of the program

coordinators said that the program used pre-service teachers' applications to determine whether or not they had basic competence in written English. Another comprehensive program representative explained how the program scheduled a language development course at the beginning of the year. The course was taught by a member of the Speech Pathology and Audiology department. A major research paper was part of the requirement of this course and if students did not complete the course with a 'B,' they were placed on probation. Yet another comprehensive program coordinator indicated that in addition to requiring pre-service teachers to write an essay the program reviewed their undergraduate course work in English composition.

Table 4.62

What are your entry requirements to ensure that pre-service teachers entering your program exhibit basic competency in English?					
Interviewees:	GRE or MAT	Written competency examination	Application	Course work	University-wide literacy test
#1 (oral)	X	X			
#2 (oral)	X	X			
#3 (oral)	X				
#4 (comp.)			X		
#5 (comp.)				X	
#6 (comp.)		X			
#7 (Bilingual/ Bicultural)		X		X	
#8 (Bilingual/ Bicultural)					X
n=8					

Various exit requirements for programs to ensure that graduating teachers

exhibited competence in English is presented in Table 4.63. Three, representing the oral philosophy, out of eight (38%) interviewees reported that the only requirement was for students to complete all the required course work and state examinations. The use of a thesis and a university-wide literacy test were other ways to measure English competence. One comprehensive coordinator explained that his program required graduating teachers to take a six-hour written examination, and an hour-long oral examination. Another comprehensive program representative reported that the program had a two day written examination required by the Graduate School, read and graded by three members of the Graduate School, one of whom has not taught the pre-service teacher program. One, representing the bilingual/bicultural philosophy of the programs, did not have a way to ensure competence of its graduating teachers but believed that a measure was needed.

Table 4.63

What are your exit requirements to ensure that graduating teachers exhibit competence in English?						
Interviewees:	State examination	Written competency/oral examination	Course work	University-wide literacy test	Thesis	None
#1 (oral)	X		X			
#2 (oral)	X		X			
#3 (oral)	X		X			
#4 (comp.)					X	
#5 (comp.)		X				
#6 (comp.)		X				
#7 (Bilingual/ Bicultural)						X
#8 (Bilingual/ Bicultural)				X		
n=8						

Cultural Aspect

Interviewees were asked whether their programs offered a separate course on Deaf Culture and to explain the nature of the course. Five (63%) out of eight individuals, representing comprehensive and bilingual/bicultural philosophies, reported that their programs offered one course in Deaf Studies. Three programs, representing the oral philosophy, integrated Deaf Studies with other courses in the program. Six (75%) out of eight program representatives, representing oral and comprehensive philosophy, reported that the course was taught by hearing professors. One comprehensive program representative said that the course was taught by a doctoral, hearing student who was RID certified. This particular program was reportedly located in an area with a high density of

deaf citizens. It was pointed out that this enabled pre-service teachers to attend various social and cultural events.

'Bilingual/bicultural' programs appeared to have their courses taught by deaf individuals. The "oral" programs reported that they incorporated Deaf Studies topics in other courses. Table 4.64 indicates whether or not programs offered a separate course in Deaf Culture.

Table 4.64

Does your program teach a separate course on Deaf Culture? Please explain.					
Interviewees:	Separated Course	Incorporated into other courses	Taught by a deaf individual	Taught by a hearing individual	Duration of one semester
#1 (oral)		X		X	
#2 (oral)		X		X	
#3 (oral)		X		X	
#4 (comp.)	X			X	X
#5 (comp.)	X			X	X
#6 (comp.)	X			X	X
#7 (Bilingual/ Bicultural)	X		X		X
#8 (Bilingual/ Bicultural)	X		X		X
n=8					

When asked to explain how their programs ensured that pre-service teachers had the opportunity to experience deaf culture, interviewees reported that their pre-service teachers participated in social/cultural activities with local deaf groups, attended guest lectures, lived at schools for the deaf and visited schools/programs of the deaf. Further exposure was had through interactions

with deaf faculty and students in the program. Additional activities were described by two individuals. Besides community activities, one person explained that pre-service teachers in the program had to take a course entitled, *Deaf Literature*. Another person, representing the oral philosophy, explained that Level I teachers took two to five years to obtain the professional Level II credentials. During this time they were matched with a mentor teacher, took university courses, acquired CEUs, and engaged in other professional growth activities that were spelled out in an individualized professional plan. The individual explained that as part of the second tier credential, the program now required a post-graduate, two year contract with deaf adults (from oral or deaf culture backgrounds).

When asked to report the amount of time that pre-service teachers were required to spend participating in deaf cultural experiences, only two out of eight (25%) interviewees were able to answer the question. One comprehensive coordinator admitted that pre-service teachers in the program spent little time participating in deaf cultural experiences. Another person, representing the comprehensive philosophy, said that the program made three to four formal experiences available every academic year. While it was not required for pre-service teachers to attend, they tended to participate in at least two of these experiences. One comprehensive program averaged about two hours of cultural interactions per week. The comprehensive coordinator of another program quantified the amount of time by saying it equaled about a third of the time used

by the Deaf Studies course. Finally, while two comprehensive program respondents said they did not have set "clock-hour" requirements a third said there was no way of telling how much time was spent on these activities. The bilingual/bicultural program representative explained that pre-service teachers attended classes with deaf classmates. The amount of exposure depended on students' class schedules. The interviewee continued to say, "Really, in my opinion, it is the attitude of the administration and the faculty if they show the value of deaf culture and ASL, it tends to drift down in terms of the tone of the place."

The diversity of the deaf and hard of hearing community parallels that of any other group. Interviewees were asked how their programs made sure that pre-service teachers experienced the range of this diversity. Two people (oral and comprehensive) reported that there was no way to ensure exposure to diversity besides encouraging participation in deaf-related activities. Another person, representing the oral philosophy, felt that diversity was always present and that one did not have to look for it. In another comprehensive program, pre-service teachers were sent to visit six schools/programs for the deaf. Finally, one of the coordinators, representing the bilingual/bicultural philosophy, indicated that the program had a grant that made it possible for Puerto Rican, Mexican-American, and Black students to enroll in the program. Two of the four Black students were reportedly deaf.

In addressing assessment, six out of eight (75%) interviewees reportedly

assessed pre-service teachers' experience of the diversity of the deaf and hard of hearing community through course work. Assessment in one comprehensive program was done by means of a state examination (EXCET). The bilingual/bicultural program representative of another program explained that assessment took place alongside ASL teaching and went on to explain that culture and language could not be separated.

First and Second Language Learning: Theory and Practice

Interviewees were asked to report the number of courses their pre-service teachers took that focused on the theory of first and second language learning. Six out of eight program coordinators reported the average number of courses to be two. One comprehensive program coordinator said the program offered three courses in the area while another comprehensive program representative reported that the program did not offer any courses in first and second language learning. While one of the comprehensive interviewees said the program offered a course that focused on Psycholinguistics, Reading and Language development in the deaf and hard of hearing, another stated that courses in the program focused on bilingual methods, literacy and deafness.

Knowledge of first and second language learning practices was assessed by four programs by means of interviewees, course work and course examinations. One bilingual/bicultural program representative said that in addition to course work, workshops covering Signed English, Speech and Cued Speech were offered though students were not required to demonstrate mastery

in these areas. There was no formal assessment of first and second language learning in one of the programs. Spoken English was stressed as the first language in one of the programs since most of the deaf and hard of hearing children in the area were mainstreamed and used English as their first language. Three language courses that teach how language is learned by normal hearing children was reported to be included in this program. Applications were made to deaf and hard of hearing children. A bilingual/bicultural program coordinator reported that the program had a series of courses that required mastery of various learning goals and strategies which also included written examinations. "Written" exams did not only mean written English alone but also included the evaluation of ASL videotapes.

Language/Mode of Communication used with pre-service teachers in general classroom instruction (besides American Sign Language Classes)

Interviewees were asked to explain what language/mode of communication was used by professors in their programs to teach classes in the general teacher education curriculum (i.e. classes besides sign language instruction). Five interviewees reported that professors used spoken English. One comprehensive program did not indicate whether the program offered interpreters or accommodations for deaf students. Another program coordinator, representing the bilingual/bicultural philosophy, said that this depended on the class--sometimes the class was taught in ASL alone and other times in was SIMCOM. ASL or a contact variety of signing was used when teaching the deaf

education courses in one program. Finally, one coordinator of a bilingual/bicultural program reported that the Deaf and hearing professors were fluent in ASL. Thus while instruction was presented in ASL, spoken English was presented by the interpreters, for the hearing students. There was a closed FM system into which interpreters translated spoken English for the hearing students.

Chapter V

Discussion

There are two perspectives of the deaf and hard of hearing community, pathological and cultural. Teacher preparation programs should therefore take into consideration the implications of both these views. The current study is based on the assumption that teacher preparation programs should recognize that there are deaf and hard of hearing individuals who consider themselves to be part of a cultural and linguistic minority and that there are some who choose or attempt to live, with varying levels of success, in the hearing world. In addition, teacher preparation programs must recognize that deaf and hard of hearing individuals with various levels of hearing loss have the right to membership in the deaf and hard of hearing community, hearing community, or both. The decision to become a member of the community is a matter of individual choice. This choice is based on a person's preferences, experiences, lifestyle, and comfort level in interacting with the community. In other words, the information presented in preparation programs must be wholistic, respectful, and non-judgmental.

Teacher preparation programs should prepare pre-service teachers to recognize the implications of the cultural views of both the deaf and hard of hearing and hearing communities, as they relate to instruction. Two languages and two cultures must be emphasized in the preparation of deaf and hard of hearing learners, by teachers able to orient students to either community. In

order to accomplish these goals, teacher preparation programs should prepare pre-service teachers to have attitudinal deafness, to understand that the degree of hearing loss among deaf and hard of hearing individuals varies and that this has implications for teaching and learning (not language modification).

Research Question 1

1. What patterns emerge in the areas of (a) communicative competence, (b) language proficiency, (c) literacy learning, (d) cultural proficiency, and (e) knowledge of second language learning principles, in the preparation of pre-service teachers of the deaf and hard of hearing?

The findings of this study show that three-fourths (75 percent) of the program respondents indicated that their programs were based on the comprehensive philosophy. Given the premise upon which the comprehensive philosophy is built and given that the majority of teacher preparation programs indicated that they were based upon the comprehensive philosophy, programs supporting this philosophical orientation attempt to have the greatest ability to influence the preparation of future teachers by presenting "wholistic, respectful and non-judgmental" information in their programs. The findings of this study however are not convincing that programs based on the comprehensive philosophy can and do in fact present wholistic, respectful, and non-judgmental information in their programs.

Demographics

Length of Program: The average period of training in teacher preparation

programs for the deaf and hard of hearing was found to be two years. This may be a relatively short period, considering the content that must be covered with pre-service teachers. This content should include an understanding of the theoretical and practical implications of educating deaf and hard of hearing learners and the cultural aspects of the deaf and hard of hearing community, with opportunities for immersion into the culture of the deaf and hard of hearing community.

Program Faculty The mode for the number of full-time program faculty members in a teacher preparation program was two. The mode for the number of deaf and hard of hearing faculty members was zero. There were three part-time faculty members in most programs with a mode of one for the number of deaf and hard of hearing faculty members.

Providing pre-service teachers with varied perspectives on topics and issues related to educating deaf and hard of hearing learners is a challenge with small numbers of faculty. In addition to the small numbers, the hearing status of faculty members lacks diversity for deaf and hard of hearing learners, which in turn limits the faculty's understanding of the inner perspectives and the spectrum of deaf and hard of hearing individuals. The selection of topics to be covered in class, the kind of advice and leadership offered, the choice of articles and studies for reading assignments to justify theoretical arguments, are all likely to be influenced by the viewpoints of program faculty members. Despite the fact that attempts may be made to select materials and topics that seek to represent

wholistic and non-judgmental perspectives, when decisions and presentations are made by individuals that do not represent diverse backgrounds and viewpoints, the value of the 'inner perspectives' of deaf and hard of hearing individuals is not given expression. Statements made by representatives of the bilingual/bicultural and comprehensive programs portrayed how these voices and viewpoints are critical to whether programs present wholistic and non-judgmental perspectives:

> Interviewee #1 (Bilingual/Bicultural):
>
> Really, in my opinion, it is the attitude of the administration and faculty if they show the value of deaf culture and ASL. It tends to drift down in terms of the tone of the place.
>
> Interviewee #2 (Comprehensive):
>
> The program's goal was to prepare pre-service teachers to apply and adapt first language principles, research, and practices to signing in English, not a second language because only a small number of students used American Sign Language but a larger number used other sign systems.

Thus, with few full and part-time deaf and hard of hearing faculty members, the rest of whom are hearing, teacher preparation programs may be consciously or unconsciously conveying hidden agendas to pre-service teachers.

Number of pre-service teachers: The mode for the total number of pre-

service teachers in a program was twelve, with a mode of zero for the number of these individuals who were deaf and hard of hearing. The exception was one bilingual/bicultural teacher preparation program that had an average of 165 deaf and hard of hearing students per academic year, including the summer program.

Teacher preparation programs of the deaf and hard of hearing appeared to lack both an adequate representation of faculty members who were deaf and hard of hearing and of deaf and hard of hearing pre-service teachers. Poor representation of both these groups heightens the problem of the lack of expression of the 'inner perspectives' and voices of deaf and hard of hearing individuals around issues that affect the education of these individuals. This is not to imply that hearing individuals cannot appropriately participate in the preparation of teachers. Rather, the issue is to point out how critical it is for teacher preparation programs to create "cultural islands" that includes the perspectives of deaf and hard of hearing individuals. Teacher preparation programs should prepare their pre-service teachers to be 'welcome strangers' in the target culture (Morain, 1977). A "cultural island" can be created only with sufficient numbers of deaf and hard of hearing faculty and pre-service teachers in a program. These islands can offer pre-service teachers opportunities for discussing topics and issues about educating deaf and hard of hearing individuals and facilitate the sharing of experiences with "culturally" deaf and hard of hearing individuals.

Bilingual/bicultural programs, such as the one with the high enrollment of

165 deaf and hard of hearing pre-service teachers, appeared to be able to attract larger numbers of deaf and hard of hearing students to their programs. Several implications may be drawn from this. The first thing to examine is to see whether or not teacher preparation programs have traditionally created "deaf friendly" environments. Secondly, the results of the current study indicated that teacher preparation programs of the deaf and hard of hearing had more rigorous entrance and exit requirements for maintaining fluency in English than in ASL or sign language. The results also showed that these programs in general, valued fluency in written English and oral English more than the signing skills of their pre-service teachers. English is the second language of the majority of deaf and hard of hearing individuals. A balance of first and second languages in a program is essential. It may be that teacher preparation programs in general are more "forgiving" of the weak sign language skills of hearing pre-service teachers than they are of the written English skills of deaf and hard of hearing pre-service teachers. The following comments reflect some of these assumptions.

Interviewee #1 (Comprehensive):

English:

"We would not let someone into the program who could not read and write English. We would not let them out of the program if they could not serve as a model of grammatically-correct written English."

ASL/Sign Language:

"We would let pre-service teachers to choose which of the three sign language

or systems they want to sign and be tested receptively for."

Finally, programs with large numbers of deaf and hard of hearing pre-service teachers created a "cultural island" that afforded pre-service teachers the comfort and freedom to voice their viewpoints and share their experiences, without feeling like outsiders.

Sign Language Instruction

Sign language instruction in preparation programs must be radically changed (Rudser, 1988). Teacher preparation programs therefore should offer ASL and English as a formal study of language (linguistics); ASL and English courses; offer instructional courses in sign communicative competence; hire qualified sign language instructors; use innovative language teaching approaches; apply more rigorous entrance and exit requirements, increase the duration of language study; and put more emphasis on evaluation of pre-service teachers' communicative competence.

Sign Language Instructors Even though the results of the study showed that a majority of the program respondents considered ASLTA certification and degrees in teaching a second language to be the second most critical characteristic of sign language instructors in teacher preparation programs, interviews with the eight program representatives presented a different picture. Only one out of the eight interviewees indicated that all the sign language instructors in the program were ASLTA certified. The largest number of sign language instructors in this study were part-time instructors and were not

required to attend professional development activities related to teaching ASL.

The results also indicated that individuals believed that it was critical for sign language instructors to be deaf, with native skills in ASL. It was also evident that programs would consider allowing hearing individuals with native-like ASL skills to teach sign language classes in their programs. However it is important to note that one's hearing status, signing skills; education and training alone are not sufficient to ensure quality in sign language classes.

Kanda and Fleischer (1988) state that sign language instructors must have six critical qualifications. Two of the six qualifications are knowledge of foreign/second language pedagogy and proficiency in the language. Before sign language instructors begin their language teaching careers, they must formally study the language, including its educational and pedagogical principles. They must take courses in "grammar and structure, literature, translation, acquire a theoretical base in pedagogical principles appropriate to the age of the target population, educational foundations, educational philosophy, integration of affective, cognitive, and psychomotor domains, metacognition, learning styles and whole brain instruction." In addition, they must know second language teaching theory and methodology. Kanda and Fleischer (1988) also state that sign language instructors must show an interest in maintaining their personal and professional growth. They must be viewed as leaders in the field of ASL. That is, they must "participate in linguistic research, publish in major journals, be active in professional educational and linguistic organizations."

Sign-language instructors should feel comfortable enough to interact in the deaf and hard of hearing community (Kanda and Fleischer, 1988). Cokely and Baker-Shenk (1981) state that in order to maintain ASL skills, continued interaction with the Deaf community is essential. It is not possible to separate culture and language because people use the understanding of their cultures to interpret the meaning of target words in the language. If people study the target language from the perspectives of their own culture, their use of the target language will not be effective and will cause frequent communication breakdowns to occur. Intrinsic knowledge and fluency in use of the language cannot be had without this close interaction (Cunz, 1966; as cited in Hochhause, 1972). Kanda and Fleischer (1988) add that the formal study of language alone will not give language instructors a "gut-level" feel for teaching the target language. "Gut-level" teaching allows sign language instructors to "know where to break the rules, where the language is used in a poetic sense or literal sense, how humor is used, the variety and to recognize characteristics of registers and the rules for shifting registers." Kanda, & Fleischer, 1988 said that sign language instructors must respect and protect ASL and its teaching.

Interviews with seventy-two students who took ASL courses found that students preferred deaf sign language instructors to hearing instructors (Schein and Stewart, 1995). Deaf instructors were found to be (a) more flexible, (b) able to present a more realistic picture of how to communicate in the Deaf community and (c) able to demonstrate varieties of ASL. Deaf instructors were also more

likely to be the ones who interacted in the community the most. As a result of these interactions, they were able to present students with a realistic picture of how to communicate with a wide range of deaf and hard of hearing individuals.

According to Kanda, & Fleischer (1988) unqualified people must be prevented from teaching ASL. Unqualified individuals are the ones who have limited skills, knowledge, and a lack of respect for the community. The lack of sufficient programs that train teachers in teaching sign language, may be one problem faced by teacher preparation programs in hiring qualified sign language instructors. However requiring sign language instructors to attend professional development activities and become involved in scholarly work, is under the control of programs. Not to offer this encouragement is not justifiable. If teacher preparation programs uphold the professional development of faculty in general, then this should include those who teach sign language classes as well. In not doing so, these programs may be communicating that proficiency in sign language for pre-service teachers is neither valued nor required.

Duration of Language Study

The results of this study showed that teacher preparation programs that prepare teachers of the deaf and hard of hearing offered only one to four sign language classes, a total of approximately twelve credit hours in the target language. Offering sign language classes alone will not facilitate sign language proficiency among pre-service teachers. Required courses in the culture and literature of the target language can enhance signing skills. The results

indicated that American Sign Language Literature was not highly valued by the program respondents and only one of the eight interviewees reported that ASL Literature was offered in the program.

A two-year foreign language program is not enough time for students to become communicatively competent in a wide range of situations in the target language. Thus, most secondary schools that offer two-year foreign language programs use proficiency based curricula (Myriam and Galloway, 1992). In order to teach a foreign language in a K-12 setting, students must take fifty-four credits in the target language as well as courses in education. The foreign language department also offers courses on the culture, civilization and literature of the target language in order to increase students' understanding of the community of people who use the language (Susan Bacon, 1996, personal communication).

The above foreign language requirements are in stark contrast to the requirements for sign language training. The question arises that if a two-year foreign language program is insufficient to prepare communicatively competent students, how can an average of one to four sign language classes prepare teachers of the deaf and hard of hearing to be culturally and communicatively competent? Thus, teacher preparation programs for the deaf and hard of hearing should also offer, at the very least, a two-year proficiency based curriculum in ASL and ASL/sign communication instructional practices.

The limited time in ASL/sign language classes, the limited number of

classes that pre-service teachers take in ASL/sign language and the quality of sign language instructors, are not necessarily the only barriers to pre-service teachers achieving proficiency in the target language. Interviews with the eight program representatives indicated that some of the classes that they reported as being classes in ASL, were really based on Conceptually Accurate Signed English (CASE). One interviewee explained that because the particular program was based on the comprehensive philosophy, classes were offered in three different language/modes of communication.

Language/ Mode of Communication Used in Teacher Preparation Programs

While it may be a good idea for teacher preparation programs to offer deaf education-related courses in the target language, the results showed that by and large, teacher educators preferred to use spoken English in classes rather than sign language. When asked if teacher trainers of the deaf and hard of hearing used ASL, manually coded English (MCE) and simultaneous communication in classes other than sign language classes, sixty-four percent reported that they would not use MCE, and thirty-eight percent were reluctant to use simultaneous communication. Sixty-six percent of the program respondents said they preferred to use ASL, though the mean for using ASL in classes other than sign language courses was 4.3. This indicates that the majority of the respondents were unsure about using ASL outside of sign language classes. Only one out of the eight interviewees reported that all the professors/instructors were fluent in ASL and used ASL in class. Interpreters were provided for

hearing pre-service teachers. Another representative explained that all the professors/instructors used a mixture of ASL, sign language and simultaneous communication when teaching deaf related courses. Both these individuals were representatives of bilingual/bicultural programs. Ironically, when asked what teachers should be using in classrooms of deaf and hard of hearing learners, seventy-nine percent of the program respondents stated that teachers should use ASL, sixty-two percent of the program respondents were in favor of using MCE and sixty-five percent for simultaneous communication.

If teacher educators of deaf and hard of hearing preparation programs expect their pre-service teachers to communicate with deaf and hard of hearing learners in ASL, MCE and simultaneous communication, they should be able to serve as role models by using the ASL and modes of communication. As stated earlier, foreign language departments expected their students to take courses in the target language. Teacher preparation programs should do the same.

The literature indicates that teachers have minimal signing skills. Thus it would not be surprising to report a similar trend among teacher educators. When teacher educators have minimal sign skills, programs cannot serve as models for pre-service teachers. Further, the minimal signing skills of teacher educators keeps them from interacting closely with the deaf and hard of hearing community. If teacher educators lack an insider's perspective of the issues that the deaf and hard of hearing community faces, the experiences they share with preservice teachers are likely to be limited and removed from reality. Finally, if

teacher educators do not display communicative competence themselves, they will be unable to assess the degree of comfort that their pre-service teachers feel in interacting with the community and will not be able to effectively recognize the strengths and needs of pre-service teachers in teaching deaf and hard of hearing students.

Entry/Exit Requirements

The results showed that while the majority of the program respondents did not think it was necessary for pre-service teachers to demonstrate even beginning level proficiency in sign language at the time of entry to the program, they were in favor of establishing requirements for students at the time of exiting/completion of the program. Based on interviews with the eight program coordinators, it was found that evaluation and exit requirements for demonstrating sign language proficiency, varied among the programs. With no established requirements for entry to the teacher preparation programs, expecting pre-service teachers to achieve fluency and proficiency in the target language in two years, with four ASL/sign language courses, is unreasonable.

Exit evaluations were reportedly primarily conducted by the sign language instructors in the program. An earlier discussion indicated that most teacher preparation programs did not require their sign language instructors to participate in professional development activities in teaching or evaluating ASL/sign language proficiency. Further there were no standard evaluation procedures used. In such a situation, it seems unlikely that the competence of

pre-service teachers' sign language is being evaluated properly. In the absence of consistent standards to evaluate fluency and proficiency in ASL/sign language in teacher preparation programs, it can be assumed that teachers come to the job with a varied degrees of competency in sign language.

Considering the limited number of credit hours pre-service teachers take in sign language classes, the quality of sign language instructors, the dearth of teacher trainers who use the target language/mode of communication, it is no wonder that the literature states that teachers of deaf and hard of hearing are not fluent in American Sign Language and do not adhere to the principles of MCE.

Educators in the field of deaf and hard of hearing education must communicate effectively with deaf and hard of hearing learners. Many of these learners may come from homes with limited communication. The teachers then become their most critical communication partners. Establishing effective communication links between learners and their parents or caregivers is necessary to facilitate academic achievement and communication. Deaf and hard of hearing learners in inclusive settings may not have the opportunity to learn English or ASL as a second language or learn the difference between the hearing and deaf cultures. Teachers must therefore have the knowledge and skills to work with these students.

Cultural Aspects

Results of the interviews shows that content regarding the cultural

aspects of the deaf and hard of hearing community was mostly integrated into the deaf-education courses and one "Deaf Studies" course. Interviewees reported that they had no way to ensure that pre-service teachers experienced the diversity of the deaf and hard of hearing community but reported that they did share information with them regarding events/activities in the deaf and hard of hearing community. It must be noted however that the majority of interviewees said they encouraged participation in events and activities of the deaf and hard of hearing community but did not require attendance at these activities.

It was found that the majority of program respondents preferred that the Deaf Studies instructor be Deaf and have academic preparation in the area of Deaf Studies. This finding does not correlate with comments made by the interviewees. As mentioned earlier, teacher preparation programs generally had two full-time, hearing faculty members and some part-time sign language instructors who were not academically prepared to teach either a second language or cultural issues.

When discussing Deaf culture, teacher preparation programs should attend to the diversity of deaf and hard of hearing people, including those who consider themselves to be a part of a cultural and linguistic minority and those who do not. The intent of this is to be able to give pre-service teachers an understanding of the diverse choices and lives of deaf and hard of hearing people. The information imparted must be positive and non-judgmental. When

this occurs, pre-service teachers can be better prepared with a knowledge base that will then let them share this information effectively with deaf and hard of hearing learners who frequently have no knowledge of the two cultures.

Anderson (1994) states that researchers often arrive at conclusions about the linguistic, psychological, and sociological characteristics of deaf and hard of hearing people without conducting field studies with them or interacting with the 'average' deaf and hard of hearing people at local clubs. These researchers often selected influential or well known deaf and hard of hearing informants and presented their experiences as being representative of the deaf and hard of hearing community. For instance, the social life of deaf people in large metropolitan areas does not necessarily resemble the experiences of those who live in much smaller cities (Anderson, 1994). Deaf culture courses should discuss the lives of deaf and hard of hearing people in both rural and urban areas. Teacher preparation programs should prepare their teachers to become familiar with the diversity of deaf and hard of hearing individuals in different settings and enable them to realize the potential impact they can have on the education and lives of these diverse deaf and hard of hearing children.

Teacher preparation programs should prepare their pre-service teachers to be 'welcome strangers' in the target culture (Morain, 1972). To accomplish this, preparation programs should require travel in a 'foreign country.' Thus pre-service teachers of the deaf and hard of hearing must be required to visit deaf clubs, deaf and hard of hearing organizations and participate in meetings and

events. Such gatherings can serve as "cultural islands," giving pre-service teachers the opportunity to talk to native speakers, read newspapers and magazines (i.e. NAD Broadcaster or Deaf Life), view foreign films (films about deaf and hard of hearing individuals), and watch foreign language news broadcasts (Deaf Mosaic) (Morain, 1972). Once again, while interviewees indicated that the above activities were made available for their pre-service teachers, there was no way to ensure participation.

Interviewee #1 (Comprehensive):

"We make three to four formal experiences available every academic year. All of our students participate in at least two of these. But, it is not a requirement. We don't ensure it. We encourage it and make opportunities available, but this is something that is on their own time, and we cannot ensure that it will happen."

Schein and Stewart (1995) insist that a critical factor in learning a language is empathy. Sensitivity to the behaviors of other people is critical thereby making the study of deaf culture a necessary and important component of sign language instruction.

Interviewee #1 (Bilingual/Bicultural):

"You cannot graduate without knowing about culture and culture and language are intertwined."

Fluency in written English

There was a great deal of consistency among the majority of the program

respondents and interviewees in their support regarding the importance of fluency and proficiency in written English. This was reflected in their requirements for entry and graduation from the programs. These expectations are in stark contrast with the reported expectations of pre-service teachers in the area of ASL/sign language skills.

Courses Offered in Teacher Preparation Programs

Programs reported that they offered courses that addressed topics and theoretical aspects in Deaf Studies, ASL and second language learning principles and issues. However, when it came to picking five items that were most important to teacher preparation programs out of two separate pools of topics and skills, two areas seemed to emerge: first language teaching principles, importance of written and oral English, and language/cognition. Interviewees reported that their programs offered an average of one to two formal classes in the course of the two-year preparation, in first and second language teaching principles.

Subtractive and additive bilingualism must be recognized in the field of deaf and hard of hearing education. Teachers tended to focus more on the English end of the communication continuum. This indicates that teachers do not value ASL highly. Deaf and hard of hearing individuals have the right to be educated in the language in which they are most fluent (ASL and English) (Rudser, 1988). Schein and Stewart (1995) explained that there are few schools that used ASL as a formal language for instruction. English is more widely used

because educators believe that deaf and hard of hearing individuals must live in English-speaking environments and are thus more dependent on English (Schein and Stewart , 1995). While English is important, competency in ASL is equally critical since these individuals also live in an ASL-signing environment (Schein, & Stewart, 1995). Thus fluency in both languages is critical. Hearing learners receive formal English language instruction at their schools and universities (Continuing Education and Outreach, 1993; Schein, & Stewart, 1995). These authors argue that deaf and hard of hearing learners must also be educated about ASL. It is unlikely that deaf and hard of hearing learners will learn about ASL and experience an additive environment if their teachers are not prepared in similar environments.

Terminology Used

It is interesting to note that programs representing the three different philosophical approaches differed in the terminology they used to describe the deaf and hard of hearing population. The oral program respondents tended to use "hearing-impaired," "deaf" and "deaf and hard of hearing" ; whereas the comprehensive program respondents used "hearing-impaired," "hearing-disability," "deaf" and "deaf and hard of hearing." The bilingual/bicultural program respondents were more consistent in their usage of terminology by distinguishing Deaf with a capital "D" and "deaf."

In the field of deaf and hard of hearing education, it is important that all educators use consistent terminology to refer to deaf and hard individuals. This

can help to create a common understanding and reference point and avoids possible confusion of meaning. This is especially true of terminology used in research. The precise description of a population or group of subjects by using precise terminology allows for more accurate interpreting and application of findings. Otherwise, too many unscientific assumptions may be made. For instance, when a term such as "hearing disability" is used, one is apt to wonder whether this refers to a person who has not accepted his/her deafness or whether the term is reflective of the user's own attitude towards deaf people. Further, this term could have been used to refer to a hard of hearing person. In short, different terminology allows for different interpretations and depends on the user and the person receiving the information. Consistency therefore is critical.

Research Question 2

What are the relationships between these patterns; program philosophies and structures?

Both the survey and interview results indicated that teacher preparation programs' practice did not necessarily reflect the philosophical foundations they had chosen to adopt. The following quotes are instances of this.

Interview #1 (Oral):

"Our program has an auditory/oral emphasis, but prepares teachers for a variety pf programs and philosophies, depending upon their backgrounds and interests."

This statement by an oral program respondent clearly shows that the program attempted to prepare pre-service teachers for a variety of programs settings and philosophical approaches. It is questionable how effective this diverse preparation can be when the primary emphasis and expertise in these programs is on auditory and oral approaches.

Interview #2 (Comprehensive):

The program's goal was to prepare pre-service teachers to apply and adapt first language principles, research, and practices to signing in English, not a second language because only a small number of students used American Sign Language but a larger number used other sign systems.

This statement from an individual representing a comprehensive program shows the bias in the assumption that only a small number of deaf and hard of hearing learners use ASL. The program's goals were tailored according to this assumption. Considering the philosophical stance of this program (comprehensive), the approach should be more inclusive and cover the spectrum of what is needed to be known in the field of deaf and hard of hearing education.

Interviewee #3 (Bilingual/Bicultural):

We cover Signed English, speech, and Cued Speech.

The statement indicates that while the program is based on the bilingual/bicultural philosophy, it does not limit itself only to written English or

English in print and American Sign Language.

Conclusion

Teacher preparation programs wield a great influence on the ultimate quality of education that deaf and hard of hearing students receive. These programs should accept their share of the responsibility for the continued low achievement of deaf and hard of hearing individuals. When student teachers graduate from programs with less than adequate knowledge and skills, teacher preparation programs share that responsibility. In deaf education, deafness, per se, has been blamed for much of the underachievement of learners. Programs and teachers that equate literacy levels with hearing loss are those that do not accept responsibility for the education of the deaf and hard of hearing. The disability itself does not bring about low achievement. Teacher preparation programs have a major role to play in turning the present low levels of deaf and hard of hearing achievement around. An outstanding teacher preparation program recognizes the extent of its influence and prepares its teachers with the knowledge, communication competence and skills to effectively teach a diversity of deaf and hard of hearing learners.

Implications:

- Teacher preparation programs should hire language instructors who (a) are fluent in ASL, (b) hold a degree in ASL teaching, (c) are certified members of ASLTA, (d) are native or near native language users, (e) members of the deaf and hard of hearing community, (f) have attitudinal

deafness, (g) interact and able to communicate with a variety of deaf and hard of hearing individuals, (h) understand and know about classroom communication dynamics; and (i) understand and ability to apply first and second language learning principles in classrooms.

- Teacher preparation programs should view sign language instructors as professional members of the institution. That is, sign language instructors must meet the requirements for professorship by conducting research on the sign language skills of teachers; on teaching sign language to teachers, publish articles on ASL teaching and pre-service teachers, and participate in planning the teacher preparation curriculum.
- Teacher preparation programs should increase the number of courses offered in ASL and include courses in Deaf Studies, ASL Literature, storytelling in ASL (composition), stylistics, debate, advanced syntax, grammar and conversation and subject-matter areas.
- Pre-service teachers should be immersed in the deaf and hard of hearing community, but this experience must be guided. Teacher preparation programs should offer concentrated instruction and facilitate pre-services' interaction in the community.
- Teacher preparation programs should strive to increase the number of deaf and hard of hearing program faculty members, not just sign language instructors, and pre-service teachers.
- Teacher preparation programs should evaluate pre-service teachers'

signing skills prior to their acceptance into the program, during their preparation, and upon completion of the program.

- Teacher preparation programs should use a standard evaluation for pre-service teachers' competency in communication and proficiency in ASL/modes of communication.
- Teacher preparation programs should be consistent in the use of terminology when referring to individuals in the deaf and hard of hearing community.
- Teacher preparation programs should offer more courses to study first and second language theories and their implications.
- Teacher preparation programs should consider evaluating pre-service teachers' knowledge and experiences of the deaf and hard of hearing community prior to their acceptance, during their preparation, and upon completion of the program.
- Teacher preparation programs should be cautious about affiliating with one philosophical orientation or the other and should prepare teachers according to their stated choices.
- Teacher preparation programs should increase the duration of programs or consider other means to ensure overall competence in graduating students. This may be done by accepting students with a background in Deaf Studies and establishing more rigorous pre-requisites and/or by means of professional development.

- Teacher preparation programs should reduce the number of part-time instructors and hire a full-time sign language professor.

Recommendations for Future Research

- A qualitative study of comprehensive programs to see the extent to which they are able to stay true to the mission and intent of the comprehensive philosophy.
- What are the barriers and facilitators to recruiting higher numbers of deaf and hard of hearing faculty and students to programs that prepare teachers of the deaf and hard of hearing.
- How is sign language currently being evaluated in programs that prepare teachers of the deaf and hard of hearing?
- A qualitative study of the content, focus, approach and 'tone' of courses that address first and second language learning in programs that prepare teachers of the deaf and hard of hearing.
- Do the students of teachers trained in comprehensive and/or bilingual/bicultural demonstrate higher academic achievement than others?

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Appendix A

Dear (or Deaf Education Program Coordinator)

We are doctoral candidates at the University of Cincinnati. Our primary interest is in deafness and teacher education. We are preparing to work on our dissertation and would appreciate materials (see list below) regarding your deaf and hard-of-hearing teacher preparation program. We decided that it would be simpler to make one combined request since we both need the same materials.

Chachie Joseph is interested in researching the views of teacher education programs on what competencies in the area of subject-matter are important for new teachers. Sally Ann Zwicker is interested in researching the curricula used in the preparation of teachers of deaf and hard-of-hearing.

The materials we would like to receive are:

1) A listing of the sequence of courses that the deaf education majors/student teachers must take.
2) A bulletin with descriptions of the courses.
3) A policy handbook that pertains to the deaf education training program with information such as entrance and exit requirements.
4) Program materials (including mission and philosophy statement)

We would appreciate additional materials that you think may help us to better understand your program. **Materials may be sent c/o**:

Sally Ann Zwicker and Chachie Joseph
(Address)

Thank you very much.
Sincerely,

Chachie Joseph Sally Ann Zwicker

Appendix B

Dear :

I am a doctoral candidate at the University of Cincinnati. I graduated from the Masters program at Gallaudet in 1994 and continued to be interested in deaf/hard-of-hearing education and teacher preparation.

For my dissertation, I am interested in examining the curricula of graduate programs that prepare teachers of the deaf and hard-of-hearing. More specifically, I am interested in examining the following areas: (a) communicative competence, (b) language proficiency, © knowledge of literacy learning, and (d) cultural knowledge.

Through this survey, I am interested in determining the extent of the goals of your program to implement the bilingual/bicultural philosophy in your program curriculum.

Since the program coordinator is the primary key person of the deaf/hard-of-hearing teacher preparation program, I feel you will fill out the survey with your best judgement of the program goals. I realize that a person in your position has a tight schedule, but again your input is greatly valued. In your tight schedule, I enclose a dollar bill for you to buy a cup of hot coffee. While you sip coffee, please fill out the survey! Smile! It should not take more than 20 minutes of your time.

Please mail the completed survey in an enclosed self-addressed envelope.

Thank you.

Sincerely,

Sally Ann Zwicker
Doctoral Candidate

Dr. Annie Bauer
Dissertation Chairperson

Appendix C

Graduate Deaf Education Teacher Preparation Program Demographics

1. Your program philosophy for communication in Deaf Education settings is best described on a continuum as (~~Please circle the appropriate number~~)

1	2	3	4	5	6	7
Oral			Comprehensive			Bilingual/Bicultural

2. The total number of faculty (including sign language instructors) whose primary responsibility is Deaf Education Teacher Preparation is _____
3. Of these (#2), how many are:
   full-time _____ part-time _____ hired on contract basis for field supervision _____
   deaf/hard-of-hearing _____ deaf/hard-of-hearing full-time faculty _____
   deaf/hard-of-hearing part-time faculty _____
   deaf/hard-of-hearing and hired on contract basis to conduct field supervision _____
4. The total number of students enrolled in the program _____
5. The total number of deaf/hard-of-hearing students enrolled in the program _____
6. The average length of time students are enrolled in your deaf/hard-of-hearing education program is
   ☐ One year ☐ Two years ☐ Other: _____
7. Do you offer a summer program? ☐ Yes ☐ No
8. Your school calendar is organized by ☐ Semester system ☐ Quarter system
9. Faculty members in your program have degrees in (Check all that apply)
   ☐ Deaf/Hard-of-Hearing Education
   ☐ Speech & Hearing Sciences
   ☐ English as a Second Language
   ☐ Bilingual&Bicultural/Multicultural Education
   ☐ Subject-Matter Areas
   ☐ Literacy (English: Reading & Writing)
   ☐ Language/Linguistics/Psycholinguistics
   ☐ Special Education with emphasis in Deaf Education
   ☐ Other: _____

Graduate Deaf Education Teacher Preparation Program Goals Survey

1. Please indicate **the level of agreement regarding the importance of each item to your program goals** by circling the appropriate response. For example, if most individuals in your program would agree that it is important for students in the program to know about 'Psychological Aspects of Deafness,' circle 7 on topic (a). ***('Goals' need not refer to current program practices but is rather a reflection of the 'aspirations' of most individuals in the program whose primary responsibility is Deaf Education Teacher Preparation).***

Topics:	Disagree			Unsure			Agree
a. Psychological Aspects of Deafness	1	2	3	4	5	6	7
b. Multicultural Awareness	1	2	3	4	5	6	7
c. Knowledge of Deaf Culture/Deaf History	1	2	3	4	5	6	7
d. Philosophy, Theory, & History of Deaf Education	1	2	3	4	5	6	7
e. ASL Literature	1	2	3	4	5	6	7
f. Linguistics of ASL	1	2	3	4	5	6	7
g. English Literature	1	2	3	4	5	6	7
h. Linguistics of English	1	2	3	4	5	6	7
i. Language and Cognition	1	2	3	4	5	6	7
j. Theories of Literacy Development	1	2	3	4	5	6	7

Skills:	Disagree			Unsure			Agree
k. Oral/Aural Teaching Competencies	1	2	3	4	5	6	7
l. American Sign Language Fluency	1	2	3	4	5	6	7
m. English Fluency	1	2	3	4	5	6	7
n. Manually Coded English	1	2	3	4	5	6	7
o. Simultaneous Communication	1	2	3	4	5	6	7
p. Teaching Reading & Writing to Deaf & Hard-of-Hearing Learners	1	2	3	4	5	6	7
q. ASL storytelling		1	2	3	4	5	67
r. Principles of Reading to the Deaf	1	2	3	4	5	6	7

2. Please pick **5 items from the above `topics' & `skills' sections that you believe are the most important to your program goals:** (Write the letters in the space provided below)

_____ _____ _____ _____ _____

Please indicate **the level of agreement regarding the importance of each item to your program goals** by circling the appropriate response. For example, if most individuals in your program would agree that it is important for students in the program should achieve proficiency in ASL,' circle 7 on statement #3. ***('Goals' need not refer to current program practices but is rather a reflection of the `aspirations' of most individuals in the program whose primary responsibility is Deaf Education Teacher Preparation).***

	Disagree			Unsure			Agree
3. Pre-service teachers should achieve proficiency in:							
American Sign Language	1	2	3	4	5	6	7
Manually Coded English	1	2	3	4	5	6	7
Simultaneous Communication	1	2	3	4	5	6	7
4. Instruction in pre-service teachers' courses other than sign language classes should be conducted using:							
Spoken English (with interpreter, if necessary)	1	2	3	4	5	6	7
American Sign Language	1	2	3	4	5	6	7
Manually Coded English	1	2	3	4	5	6	7
Simultaneous Communication	1	2	3	4	5	6	7
5. Sign language instructors should use voice with signs to facilitate learning of sign language	1	2	3	4	5	6	7
6. Sign language instructors should be:							
deaf	1	2	3	4	5	6	7
hard-of-hearing	1	2	3	4	5	6	7
hearing	1	2	3	4	5	6	7
hearing, & with native-like ASL skills	1	2	3	4	5	6	7
Deaf with native ASL skills	1	2	3	4	5	6	7
American Sign Language Teaching Association (ASLTA) certified	1	2	3	4	5	6	7
skilled in teaching a second language	1	2	3	4	5	6	7
7. Sign language instructors should have academic preparation in:							
ASL linguistics	1	2	3	4	5	6	7
Spoken language linguistics	1	2	3	4	5	6	7
Second language teaching principles	1	2	3	4	5	6	7
ASL literature	1	2	3	4	5	6	7
Deaf Culture	1	2	3	4	5	6	7

	Disagree			Not Sure			Agree
8. If you had a course on Deaf Culture would you prefer that the instructor be:							

Audiologically deaf	1	2	3	4	5	6	7
Audiologically hard-of-hearing	1	2	3	4	5	6	7
Hearing	1	2	3	4	5	6	7
Culturally Deaf	1	2	3	4	5	6	7
Academically prepared in Deaf culture	1	2	3	4	5	6	7

9. Upon admission to your program, pre-service teachers of deaf/hard-of-hearing students must demonstrate:

Beginning level proficiency in:

Manually Coded English	1	2	3	4	5	6	7
Simultaneous Communication	1	2	3	4	5	6	7
American Sign Language	1	2	3	4	5	6	7
Written English	1	2	3	4	5	6	7
Spoken English	1	2	3	4	5	6	7
Introductory level knowledge in Deaf Culture	1	2	3	4	5	6	7

10. Upon exiting your program, pre-service teachers of deaf/hard-of-hearing students must demonstrate:

Intermediate to advanced level proficiency in:

Manually Coded English	1	2	3	4	5	6	7
Simultaneous Communication	1	2	3	4	5	6	7
American Sign Language	1	2	3	4	5	6	7
Written English	1	2	3	4	5	6	7
Spoken English	1	2	3	4	5	6	7
Advanced level knowledge in Deaf Culture	1	2	3	4	5	6	7

11. Pre-service teachers of deaf/hard-of-hearing students should demonstrate knowledge of:

a. American Sign Language Acquisition	1	2	3	4	5	6	7
b. Language Acquisition/Learning Theory & its Pedagogical Implications	1	2	3	4	5	6	7
c. Second Language Acquisition/Learning Theory & its Pedagogical Implications	1	2	3	4	5	6	7
d. Theories of Child and Adult Language Learning & its Pedagogical Implications	1	2	3	4	5	6	7
e. Second Language Pedagogy that Focuses on the integration of Language & Content	1	2	3	4	5	6	7
f. Assessment, Diagnosis, & Evaluation Procedures in the Areas of:							
ASL Acquisition	1	2	3	4	5	6	7
Written English	1	2	3	4	5	6	7
Spoken English	1	2	3	4	5	6	7
g. ASL Role in English Literacy Development	1	2	3	4	5	6	7
h. English Phonetics in Reading	1	2	3	4	5	6	7

12. Please pick **5 items from the above list that you believe are the most important to your program goals:** (Write the letters in the space provided below)

_____ _____ _____ _____ _____

Professional Belief Statements	Disagree			Unsure			Agree
13. Teachers of deaf/hard-of-hearing students should use the following in the classroom:							
ASL	1	2	3	4	5	6	7
Simultaneous communication	1	2	3	4	5	6	7
Manually Coded English (w/o voice)		1	2	3	4	5	67
Use ASL only to teach concepts	1	2	3	4	5	6	7
14. Deaf/hard-of-hearing children:							
are members of ASL (or other native sign language) linguistic & Deaf cultural minority groups	1	2	3	4	5	6	7
should study ASL as a formal language	1	2	3	4	5	6	7
15. Deaf/hard-of-hearing children should demonstrate knowledge in:							
Deaf Culture	1	2	3	4	5	6	7
Mainstream hearing American Culture	1	2	3	4	5	6	7
16. Deaf/hard-of-hearing children should be proficient in:							
Simultaneous Communication	1	2	3	4	5	6	7
ASL	1	2	3	4	5	6	7
Written English	1	2	3	4	5	6	7
Spoken English	1	2	3	4	5	6	7
17. Communicative competence is a result of being proficient in:							
ASL	1	2	3	4	5	6	7
English	1	2	3	4	5	6	7

Please answer the following:

18. In designing and evaluating your deaf/hard-of-hearing teacher preparation curriculum, input should be solicited from:

- _____
- _____
- _____
- _____
- _____
- _____

Thank You

Appendix D

Dear :

In (date), you were interested enough to take the time to respond to a survey regarding teacher education in deaf education. The survey, part of my dissertation research, was an attempt to gather data to determine how teacher educators view the deaf and hard of hearing graduate level teacher preparation curriculum. The particular focus was on areas of literacy, language and communication, with a look at how these compete for time in the overall curriculum.

Unfortunately I did not heed the "finish your dissertation before starting a job" advice and am only now returning to my study. I remain a doctoral candidate at the University of Cincinnati. Having come so far and being so close to the end of my work, I am trying in earnest to complete the research. Once again I look to you for support in this process.

Following both a qualitative and quantitative analysis of the survey, 9 participants were randomly selected to participate in in-depth interviews. You are one of the professionals who was selected. I am interested in better understanding your responses on the survey and in talking with you about the program materials that you sent me. Teacher preparation programs in the field of deaf and hard of hearing education vary according to size, nature of the populations they serve, philosophical foundations, market and a host of other ways. Your program was selected as part of a stratified sample, and I seek your expertise, experience and insights as a teacher educator, to help me understand and accurately represent curricular priorities and the realities of the field.

I am aware that as a teacher educator you assist multiple students with their research and may understandably have difficulty recalling the specific survey to which I am referring. Enclosed is a copy of the survey and your responses indicated. To avoid scheduling and other conflicts, we can communicate and share ideas via e-mail. This will also allow you to talk at a time that's best for you rather than be tied down to a scheduled time on TTY. I do not anticipate more than 5 e-mail exchanges.

Enclosed also is a copy of a consent form regarding your participation. Please sign and return this to me in the enclosed, self-addressed envelope or fax this to me at (phone #) by (date). I will contact you via e-mail as soon as I receive this form back from you. To avoid potential delays in the mail from delaying our work together, I would appreciate if you would also communicate your decision to me via e-mail.

I sincerely appreciate your consideration of my request. I look forward to talking with you further.

Sincerely,

Sally Ann Zwicker

Appendix E

Informed Consent Form

1. I understand that this study involves research, the purpose of which is to examine the toles of communicative competence, language proficiency, knowledge of literacy learning, cultural proficiency, and knowledge of second language learning principles in teacher preparation programs that prepare preservice teachers to teach deaf and hard of hearing learners. Each subject will be ihterviewed one to five times. Following a domain analysis, emerging themes will be described. Data from the surveys and program materials will be subjected to a content analysis.

2. I understand that there will be no risks or discomfort in this study.

3. I understand that there will be no direct, personal or immediate benefit to me. However, I understand that this study will inform the preparation of teachers of deaf and hard of hearing learners.

4. I understand that there will be no alternative procedures or courses of treatment other than the ones proposed in item #1.

5. I understand that no exculpatory language will force me to waive or appear to waive any of my legal rights or releases or appears to release the investigator for negligence.

6. I understand that this research study will not involve risk or injury.

7. I understand that I will at all times be referred to by use of a pseudonym and all records will be maintained with confidentiality.

8. I understand that the nature of the data being collected is not personal or intrusive in any manner.

9. I understand that interviews will be conducted via e-mail and that e-mail correspondence will be printed out for data analysis.

10. The primary researcher will be:
Sally Ann Zwicker
(Address)

Questions may also be directed to the Chairperson:
Dr. Anne Bauer, Professor
University of Cincinnati

Phone: (513) 556-4537
E-mail: baueram@email.uc.edu

11. I understand that participation in this study is completely voluntary and refusal to participate will involve no penalty or loss of benefits to which I will be otherwise entitled. I understand that I may discontinue participation at any time without penalty or loss of benefits to which I am otherwise entitled.

12. I understand that should significant new findings develop during the course of the research that may relate to my willingness to continue participation, these will be provided to me.

13. I understand that findings of the study may be published and/or shared at professional meetings.

14. I, the undersigned have understood the above explanation and given consent to my voluntary participation in this research study.

_____ _____

Signature of Subject Date

_____ _____

Signature of Primary Investigator Date

Appendix F

Interview Questions

Sign Language Instruction

Rationale

1. Your program materials indicate that your program offers some sign language classes. Please explain the rationale behind this especially since your program is based on an oral philosophy.

Profile of Sign Language Instructors

1. Are sign language instructors required to participate in professional development activities related to second language teaching and learning? Describe.

2a. How many sign language instructors do you have? _____

2b. Of these, how many are:
_____Hearing
_____Deaf
_____Hard of Hearing
_____ASLTA certified
_____Completed or are working on degrees specifically in ASL teaching or second language teaching

Sign Language Instruction

3. How many sign language classes are your pre-service teachers required to take?

ASL _____ Other _____ : Please describe:

4. What is the duration of each sign language class? In other words, how many hours of sign language instruction do pre-service teachers have each week?

5. Are there required activities built into your sign language program that gives students exposure to sign language outside of class time? Describe.

6. Are pre-service teachers entering your program required to exhibit some basic competence in sign language? Explain your requirements.

7. Are pre-service teachers exiting your program required to exhibit competence in sign language? Explain your requirements.

8. Are pre-service teachers evaluated on a) their language proficiency b) communicative competence c) both? Please explain.

9. Who conducts the evaluations?

10. Are the evaluators trained in evaluating one's proficiency and/or communicative competence? Please explain.

11. Does your program have separate courses that teach the use of sign language in specific subject matter areas i.e. mathematics, science or is this incorporated in the regular sign language classes?

Fluency in English

1. How do you evaluate pre-service teachers' proficiency in written English?

2. Which of the following does your program tend to emphasize a) written English b) sign language c) Written English and sign language equally. Please explain.

3. What are your entry requirements to ensure that pre-service teachers entering your program exhibit basic competence in English?

4. What are your exit requirements to ensure that graduating teachers exhibit competence in English?

Cultural Aspect

1. Does your program teach a separate course on Deaf Culture? Please explain.

2. How does your program ensure that pre-service teachers have the opportunity to experience deaf culture?

3. How much time does your program require its pre-service teachers to spend participating in deaf cultural experiences?

4. How does your program ensure that pre-service teachers experience the diversity of the deaf/hard of hearing community?

5. How does your program evaluate pre-service teachers' knowledge/understanding of the cultural aspects of the deaf community?

First and Second Language Learning: Theory and Practice

1. How many courses do your students take that focuses on the theory of first and second language learning?

2. How does your program ensure/evaluate that its pre-service teachers are knowledgeable in first and second language learning practices?

Language/Mode of Communication used with pre-service teachers in general classroom instruction (besides American Sign Language Classes)

1. What language/mode of communication is used to teach classes in the general teacher education curriculum (i.e. classes besides sign language instruction) a) sign language b) spoken English c) spoken English and sign language simultaneously?