This paper describes five programs of early intervention for children with hearing impairments and their families. Programs are described according to their mission, services, and unique contribution to the field of early intervention. First, essential components of all programs are identified. These are evaluation, audiological management, parent support and education, and one-to-one work with the child. Philosophical controversies in the field over the best ways to teach deaf children language are briefly addressed. The five programs described are: (1) Infant Hearing Resource in Portland, Oregon, which focuses on reducing the effects of hearing loss in the child and increasing the parents' knowledge about deafness; (2) the SKI*HI program, a widely adopted comprehensive, home-based support model designed to be used with children and families through interagency coordination in Utah; (3) the Thayer-Lindsley Family-Centered Nursery (Boston, Massachusetts) which focuses on empowering parents by identifying and resolving emotional issues surrounding the diagnosis of hearing loss in their child; (4) the Visiting Infant and Parent Program (Northampton, Massachusetts), which is a comprehensive evaluation and short-term intervention program; and (5) the Hearing, Speech and Deafness Center: Parent-Infant Program which is implementing a bilingual/bicultural philosophy in which English and American Sign Language are equally valued and deaf adults are involved on a variety of levels. Addresses, telephone numbers, and individuals to contact are listed for each program. (Contains 15 references.) (DB)
Model Programs of Early Education for Hearing-Impaired Children and Their Families.

Gatty, Janice C.
The goal of an early intervention program is to ensure that the development of the child and the quality of life in the family is the best that it can be. The purpose of this presentation is to describe five different programs of early intervention for hearing-impaired children and their families, in the United States, which address this goal. All programs share some features. Each has features which make it unique. The programs will be described according to their mission, services, and unique contribution to the field of early intervention.

Essential Components

Each of the programs to be described shares some features. These features are essential to all effective programs of intervention and will be discussed briefly. They are: evaluation, audiological management, parent support and education, and one-to-one work with the child.

Evaluation: In order to establish goals and objectives for the child and family, programs must be able to evaluate children for their capacities to develop in all areas: hearing, speech, language, cognition, motor, social, and emotional development. Some programs have their own team of interdisciplinary specialists. Others affiliate with agencies specializing in comprehensive evaluation.

Audiological management: Early intervention programs serving hearing-impaired children need to provide parents with services to monitor hearing status and options to provide hearing aids and
information about auditory development. It works best when these services are on-site and easily accessible to parents and teachers. Parents may place different values on auditory development depending on their child's performance in this area.

Parent support and education: The state of the parents' emotional well-being directly affects the kind of environment they can provide for their family. The emotional reaction of hearing parents, to a diagnosis of hearing loss, is well-documented (Luterman, 1979, 1984; Kampfe, 1989). Professionals in programs of early intervention must be prepared to listen and support parents until they acquire more experience with hearing impairment and can begin to answer their own questions about their child's future. Listening to the emotional reactions of parents and providing them with information as well as introducing them to other deaf people is an important component in an early intervention program. The programs described here, use individual counseling sessions, support groups, and the participation of deaf adults in their programs, to address emotional and educational needs of parents.

One-to-one work: The primary impact on the child's development is through interaction with the parents. It is through direct interaction with the child, however, that the teacher can give feedback to the parent about the best way to interact with the child to promote growth. One-to-one work with a hearing-impaired infant (0-3 years of age) usually includes play activities to enhance cognitive, social and emotional development which provide the foundation for and opportunity to develop language. These activities can be both demonstrative, as well as, diagnostic in purpose.
In summary essential components of early intervention programs include: (1) evaluation, (2) audiological management, (3) parent support and education, and (4) one-to-one work with the child. These components, to a greater or lesser degree, are included in the programs described in this paper.

**Philosophical Controversies**

Within our profession, there continues to be great philosophical controversy over the best way for deaf children to learn about the world and to learn language. Many children who wear hearing aids do not hear spoken language well enough to develop it spontaneously. Language accessibility is affected directly by the degree of the hearing impairment. Practitioners have strong beliefs and opinions about the way language and deafness should be presented to the child and ideological differences permeate educational programs at all levels. There is no simple, straightforward solution to this methodological dilemma. Currently there are a variety of approaches used to teach deaf children language. There are several oral approaches which use only spoken language and are designed to teach English language to children for whom hearing may not be the primary modality for language acquisition. In addition, there are several manually coded systems which can be used simultaneously with spoken English language. With the exception of Cued Speech, these sign systems can also function independently to convey linguistic meaning. Finally, there is American Sign Language (ASL), a rich and complete language used by the Deaf community, the symbols and rules of which are fully accessible through vision. Because ASL has its own morphology and syntax it cannot be used simultaneously with spoken English language. All of these approaches are
successful with some hearing-impaired children.

In early intervention programs, the issue of language modality is usually introduced to the parents as part of the Parent Education component. It is introduced to the child during one-to-one work which focuses on communication skills. The use of language systems in the programs featured here, will be discussed as part of the program description. The five programs to be described are:

1. the Hearing Infant Resource Program,
2. the SKI*HI Program,
3. the Thayer-Lindsley Family-Centered Nursery,
4. the Visiting Infant and Parent Program, and,
5. the Hearing, Speech and Deafness Center: Parent-Infant Program.

**PROGRAM DESCRIPTIONS**

**Infant Hearing Resource**

Infant Hearing Resource (IHR) was founded in 1971 by Nancy Rushmer and Valerie Schuyler as a private, non-profit agency to serve families and their young children with hearing loss, birth to four years of age. It is now a department of the Portland Center for Hearing and Speech in Portland, Oregon. The mission of IHR is: (1) to provide family-centered approaches to families with hearing-impaired infants and toddlers; (2) to increase knowledge and skills of professionals serving this population; and (3) to promote attitudes and procedures throughout the state to lead to early identification of hearing loss.

Programming is designed to reduce the effects of hearing loss in the child and increase the parents' knowledge about deafness. Audiological evaluation and management is provided on site. One-
to-one work with children is done at the Center and at home. Parents participate in support groups. The language curriculum is designed to enhance communication and development of language used in the home. Parents can choose an oral approach or a Signed English approach with an emphasis on oral language. Parents attend Signed English classes offered by IHR; elements of ASL may be introduced in class particularly if the teacher is deaf. The goal for parents is to develop an effective way to communicate with their child.

IHR has contributed greatly to training professionals in the area of parent-infant work both by practicum and dissemination of printed materials. In collaboration with Lewis and Clark College, IHR trains teachers to work with hearing-impaired infants and their families. IHR has also published a Parent-Infant Communication Curriculum (1985) which is available for purchase and is used in the United States and abroad. Schuyler and Rushmer have also written a text, Parent-Infant Habilitation (1987), which is used to train teachers. In addition, there is a series of training videotapes which can be used by parents (Early Intervention Series I, 1993) and a series of training tapes to be used by professionals (Early Intervention Series II, 1994).

This program provides direct service best, to families in urban or populated areas. The videotapes and printed materials, however, allow some aspects of the curriculum to be implemented in more rural areas.

The SKI*HI Program

The SKI*HI program began in 1972 as a state-based demonstration model of early intervention in Utah. In 1975, it became the national model program of the United States Office of
Education's Handicapped Children's Early Education Program, now the Early Education Program for Children with Disabilities (EEPCD). For 20 years an Outreach Model has been funded to develop, refine and disseminate a program of early intervention to be used with young hearing-impaired children and their families in communities throughout the country. The Outreach Model has been adopted and used by 250 agencies in the U.S. and Canada. Four thousand (4000) infants, toddler and preschoolers are served annually.

The program consists of a comprehensive, home-based, support model designed to be used with children and families through interagency coordination. The curriculum has three components: direct service to the child and family, administrative, and support services. Direct service to the child and family is provided by a parent advisor and includes: hearing aid management, the development of a system of communication to be used by the child and parent at home, a program for developing auditory skills, and language and communication methods for families with hearing-impaired children (oral, cued speech, total communication and ASL). The administrative component addresses issues of early identification and includes: hearing screening, public awareness and referral, assessment, personnel in-service, interagency cooperation, supervision and evaluation. The support service component includes: clinical services, in-service, audioligic services and materials for families.

The SKI*HI program is a planned, systematic approach to meeting the needs of hearing-impaired infants and their families. SKI*HI trains parent advisors and administrators, designs and publishes curricula, and develops evaluation scales to implement
the model in urban or rural areas across the country.

Thayer-Lindsley Family-Centered Nursery

In 1965, David Luterman started the Thayer-Lindsley Family-Centered Nursery at Emerson College in Boston, Massachusetts for parents of newly diagnosed hearing-impaired children. In several accounts, Luterman (1979, 1984; Luterman & Ross, 1991) is frank about his own journey to understand the reaction of hearing parents to a diagnosis of childhood deafness, and its impact on their ability to parent effectively. The goal of the program is to empower parents by identifying and resolving emotional issues surrounding diagnosis of hearing loss in their child. The premise for the program is that fulfillment of basic human needs is essential for a human being to grow and develop fully. For many hearing parents, this means identifying and addressing feelings of loss, confusion, anger, depression or a sense of powerlessness which may be associated with the initial reaction to a diagnosis of hearing loss. For the children, this means addressing their developmental needs as children, first, before addressing the special needs that deafness may impose on development.

The Nursery Program serves hearing-impaired children from 18 months to three years of age. The children meet in a nursery group three mornings a week. During that time they also receive 20 minutes of individual work in communication with a specialist. At first the parents observe the children interacting with each other and the teacher in the group; later they participate as teachers in the classroom. In addition, the parents participate in a support group once a week. Parents of children younger than 18 months old, are seen individually with their child until they are old enough for the nursery.
Parents are offered oral and total communication approaches to use with their children. American Sign Language is not offered as a primary language for communicating with their young child. Deaf adults and older deaf children (and their parents) are invited periodically to meet with parents in the program. Special activities are planned to encourage participation of extended family members.

The Thayer-Lindsley Family-Centered Nursery Model best serves hearing-impaired children with hearing parents who live in urban areas.

**Visiting Infant and Parent Program**

The Visiting Infant and Parent (V.I.P.) Program is a comprehensive evaluation and short-term intervention program located at the Clarke School for the Deaf in Northampton, Massachusetts. It serves families with hearing-impaired children 0 to 4 years old. The residential school, located in a rural area, was founded in 1867. The V.I.P. program was started in 1984 to increase accessibility of resources to a larger geographic area. Families from all over the world participate in the V.I.P. program. They are housed on campus for several days while children participate in audiologic, psychological, speech and language evaluations. Parents observe all evaluations, and a substantial portion of their visit includes discussion of test results and the implications for their child's development. In addition, parents discuss questions about childhood deafness, observe classes of deaf students, eat meals in the dormitories, and meet with deaf adults. Parents leave with a better understanding of hearing loss, the effects it will have on the development of their child, and a list of recommendations for the
next phase of intervention.

Parents and children who use sign language come to the program. In general, parents are aware of the school's history of oral education and their questions concern their child's capacity to develop auditory skills and spoken language. The program does not evaluate children on their ability to use sign language although the use of gestures and signs is observed as an indicator of language and communicative capabilities.

**Hearing, Speech and Deafness Center: Parent-Infant Program**

The Hearing, Speech and Deafness Center has provided parent-infant services to young hearing-impaired children and their families since the 1950's. It began as an aural/oral program and later introduced Signed English as a way for parents to communicate with their children. In the last seven years efforts have been made to implement a bilingual/bicultural (bi/bi) philosophy in which English and American Sign Language are equally valued and Deaf adults are involved in the program on a variety of levels. The concept of a bilingual/bicultural environment has been implemented in classrooms for hearing children where English is taught as a second language. Recently that model has been applied to deaf education. The directors of the Hearing, Speech and Deafness Center agree that their program is not an established model program but rather an evolutionary program which is committed to incorporating the concept of bilingual/biculturalism at the early intervention level.

Services include: weekly home visits; the child's weekly participation in a playgroup while parents participate in a support group; participation in ASL evening classes; one-to-one counseling with parents; and, provision of audiological services.
The educational team is made up hearing and Deaf adults and all professional staff and volunteers are able to carry on basic conversations with Deaf adults. The goal is for parents to feel comfortable communicating with Deaf adults and for children to develop in all areas to the best of their ability.

This approach relies on the accessibility of a population of deaf adults to function effectively. It is more difficult to replicate these services in rural areas. The directors acknowledge but are undaunted by the challenges, compromises and controversies in implementing a program which tries to incorporate the current political and social attitudes toward Deafness without limiting choices for the child's future.

**FINAL COMMENTS**

Deafness complicates development in children who grow up in a world where most people hear. "Profound childhood deafness is a cultural phenomenon in which social, emotional, linguistic and intellectual patterns and problems are inextricably bound (Schlesinger, 1978, p. 7)." The programs described here all respect the complexities that deafness imposes on the development of children with hearing parents. The approach to intervention in these programs is broad and comprehensive in an effort to help deaf children reach their developmental potential. These programs have a long-standing commitment to support and educate parents so that the quality of their family life is enhanced. Each program can claim that it has had a positive impact on the lives of many of its participants based on careful record keeping and long-term follow-up.
It is unlikely, however, that a single approach or method of intervention, communication, or education will ever be appropriate for all deaf children or their families. The interactive nature of deafness and development complicates management and education and makes efficacy studies difficult, if not impossible to design. Parents and professionals have different criteria for "success" in a child's development and for "quality of life". For this reason a variety of well-organized, diverse programs of early intervention must be maintained so that all hearing-impaired children and their families may be served well.

The greatest and most influential resource in an educational program is the people who work with the parents and children. Professionals who address communication and developmental issues with children; who acknowledge their own strengths and limitations; and, then proceed to interact with parents, based on that self-knowledge, make any early intervention program a "model" program.
REFERENCES


For more information about early intervention programs contact:

1. HEARING INFANT RESOURCE
Portland Center for Hearing & Speech
3515 SW Veterans Hospital Road
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2. SKI*HI PROGRAM
809 North 800 East
Utah State University
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Attention: Fran Payne
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3. THAYER-LINDSLEY FAMILY-CENTERED NURSERY
Emerson College
168 Beacon Street
Boston, Massachusetts 02116 U.S.A.

Attention: David Luterman
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4. VISITING INFANT and PARENT (V.I.P.) PROGRAM
The Clarke School for the Deaf
Round Hill Road
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Attention: Janice Gatty
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5. HEARING, SPEECH and DEAFNESS CENTER: PARENT-INFANT PROGRAM
400 S.W. 152nd Street
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MODEL PROGRAMS of EARLY EDUCATION for HEARING-IMPAIRED CHILDREN and THEIR FAMILIES

Janice C. Gatty, Ed.D.

(Symposium: Family Centered Programs of Early Intervention)

Five programs currently in operation in the United States will be described. They are: (1) the Hearing Infant Resource, (2) the SKI*HI program, (3) the Thayer Lindsley Family-Centered Nursery, (4) the Visiting Infant and Parent Program and, (5) the Hearing, Speech and Deafness Center: Parent-Infant Program. These are well-established programs which are not defined solely by a particular education or communication methodology. They have served as models for the development of new programs across the country. Factors which are shared by all programs and factors which are unique to each program will be presented and discussed. The feasibility of program replication will be addressed taking into account: program organization, the availability of resources, family and cultural values.