The paper presents core competencies which are appropriate across service delivery models and across disciplines for training personnel in early intervention. Part I provides a historic perspective on practices, child development research, the federal role, children served, family involvement, and the need for early intervention. Part II contains the competencies. Premises for each competency category are set forth first, then competencies are listed for each of the five following categories: child development (including typical and atypical child development), family involvement, program implementation, assessment, and administration. An appendix presents results of a survey sent to 181 staff members in the 49 Handicapped Children's Early Education Projects as part of the research for the paper's preparation. (MC)
Basic Competencies for Personnel in Early Intervention Programs:
Guidelines for Development

WESTAR Series Paper #14
Prepared by
INTER-ACT
The National Committee for Services to Very Young Children with Special Needs and Their Families

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Shirley Zeitlin
Chairperson
INTER-ACT Monograph Task Force
This paper is the second in a series of publications researched and written by members of INTER-ACT: The National Committee for Services to Very Young Children with Special Needs and Their Families. INTER-ACT was founded in November, 1978 by professionals with extensive experience in developing and directing model demonstration programs for very young children with special needs and their families. These children include not only those with one or more identifiable handicap, but also those at risk for development of a handicap unless they receive special services during the first years of life.

The membership consists of recognized leaders in the field, including representatives from both public and private agencies such as university medical centers, colleges, public education agencies, community mental health centers, Easter Seal Societies and Cerebral Palsy Programs. All of these programs have received funding from federal agencies such as the U.S. Department of Education, Special Education Programs, Developmental Disabilities, Maternal and Child Health, and the Administration for Children, Youth and Families/Head Start.

In June, 1981 INTER-ACT, in cooperation with WESTAR, published a paper entitled Early Intervention for Children With Special Needs and Their Families: Findings and Recommendations (Garland, Stone, Swanson, & Woodruff, 1980). The purpose of that paper was to document the importance and efficacy of comprehensive early intervention services; to serve as a resource for a variety of organizations at all levels and for professionals and laypersons in this field; and to advocate support for high quality public services for children with special needs and their families.

In this second paper INTER-ACT hopes to stimulate discussion on another important area in early childhood/special education—the development of guidelines for training personnel in early intervention. The initial intent of INTER-ACT was to write a comprehensive document that not only addressed general personnel competencies—which were defined as those that all individuals regardless of training, background, or type of service delivery model needed to be effective interventionists—but also contained specific competencies unique to role, discipline and intervention setting. Upon re-examination of the task, it seemed more appropriate and realistic to identify only the core competencies that were appropriate across service-delivery models and across disciplines. It was decided that these competencies could be adapted to meet varied and individual professional and agency needs. To achieve this goal, the task force examined the literature in the field and the competencies that had been developed by many intervention and training programs and state education departments. A survey of personnel in early intervention programs was implemented to collect additional data.

A systematic national effort to identify the necessary competencies for early interventionists has never before been undertaken. Some attempts have been made at the state level, e.g., Teacher Preparation and Licensing, to establish a credential for Early Childhood/Special Education. Efforts have also been made within colleges and universities that have personnel preparation programs. As yet, however, no national guidelines exist. This paper is intended as a first step toward developing them.
INTRODUCTION

Over the last decade a variety of effective intervention strategies for very young children with special developmental needs have been developed and implemented (Assael & Waldstein, 1982; Gilderman, Taylor-Hershel, Prestridge, & Anderson, 1981). As the efficacy of early intervention has been demonstrated, the number of early childhood intervention programs and centers increased dramatically. However, no corresponding effort has been made to establish a standard set of competencies that all professionals who work with these children and their families should have. Recent research in child development and the demonstrated efficacy of early intervention programs now make possible the formulation of such professional standards.

Degree programs in early childhood intervention are a recent phenomenon. The personnel in early intervention programs reflect the newness and diversity of the field. Professionals who now work in the field include physicians, educators, social workers, nutritionists, psychologists, and many others; they have worked in settings such as hospitals, allied health facilities, social service organizations, and schools. They generally received specialized training in a specific area such as occupational therapy, education, psychology, or pediatrics, supplemented by additional course work, on-the-job training, and interactions with other professionals in workshops and conferences (Moore, 1981; Swee, 1981). Their preparation typically did not include training in the application of their own professional specialty specifically to handicapped children aged three and under, nor did it give them the multidisciplinary expertise necessary to meet the broad range of needs of these children and their families.

In the absence of well-developed professional preparation programs for interventionists and administrators of early childhood programs specific to children under age three, programs have developed according to various philosophies. As these philosophies are tested and refined, an increasing body of knowledge is available on which to base professional training.

Twenty-two states have certificates for teachers of preschool handicapped. Most of these certificates are non-categorical. In these teacher training programs, the requirements for certification are based either on course credits (ranging from 18 to 34 credits) or on competencies, and in almost all cases require an existing instructional certificate. A few states require an additional credential for specific handicapping conditions, e.g., deafness or visual impairment. No state, however, has certification specifically for teachers who work with children under three. Most states require mastery of specific areas of study, either through course work or demonstration of competency. The areas most frequently mentioned are normal and atypical child development, parent and family involvement, overview of special education, assessment, programs and methods for intervention, problems relating to specific areas of development—especially language and motor development, and some type of practicum or field experience.

There are neither certification, licensing procedures, nor professional training programs specifically for any other types of professional personnel who serve the birth-to-three child with special developmental needs.

In assembling the competencies necessary for both specialists and generalists who work with young children, INTER-ACT reviewed these state certification requirements and elicited cooperation from a variety of trained and experienced professionals who work with young children and their families. INTER-ACT surveyed a number of training programs for these professionals and has selected those core competencies on which there is wide agreement. In addition, a survey was sent to all HCEEP programs serving the birth to three population,
soliciting information from all project personnel regarding their education, experience and additional training needs. A sample of the questionnaire and a summary of its results can be found in the Appendix. The INTER-ACT task force which prepared this publication believes that the rapid growth of intervention programs and the increasing number of early interventionists who are being trained makes development of national transdisciplinary standards urgent. It is INTER-ACT's intent that the competencies outlined in this paper may be useful in the following ways:

1. Professional educators in the disciplines involved in early intervention programs can compare the competencies included in their training programs to this list and, when appropriate, make revisions.
2. Colleges which have or are developing programs for early interventionists can use these competencies as guidelines in curriculum development and evaluation.
3. Early intervention programs can use these competencies for staff development.
4. Professional societies and state certification agencies can refine and apply these competencies as standards for credentials.

INTER-ACT views this list not as a final statement, but rather as a basis for dialog, evaluation, expansion and re-evaluation. This monograph is a first step in a process that will require the continuing efforts of professionals working in a variety of settings. Evaluation and further development of these guidelines will occur through staff development activities within programs and training centers, through meetings both within and among disciplines, and through additional papers which explore the functions and responsibilities of early childhood intervention specialists. As professionals apply, extend and refine these competencies, they will produce integrated national standards on which the emerging discipline of early intervention will be based. Refinement will also include determination of the competencies specific to a service delivery model or to the specialties within a particular discipline.

This monograph is divided into two parts. Part I provides a brief historical perspective on attitudes toward and services for the young child with special developmental needs. Part II contains the core personnel competencies needed by all early interventionists, regardless of their particular emphasis.
PART I
HISTORICAL PERSPECTIVES

The state of the art in infant intervention has been influenced by simultaneous developments in a number of disciplines. Advances in medicine, expanding knowledge in child development, social changes and the increasing role of the federal government in supporting and regulating education has led to a new conception of infants and their ability to learn at an early age and to the establishment of many intervention programs for infants who are handicapped or at risk. In part, the inclusion of this age group into the service delivery system is due to our expanded awareness and refined levels of knowledge about the abilities and needs of both normal and handicapped infants and to the recognition of infancy as a crucial period in child development. As Hayden (1978) points out:

Early childhood education is usually considered to be education of children from birth to 9 years. This definition may raise questions about when learning begins. There is a considerable body of knowledge that suggests that learning begins at birth (Akers, 1972), if not before (Salk, 1975). This presents some challenging implications worthy of study by parents, professionals and paraprofessionals interested in working with infants and young children. (p. 28)

In the past, psychologists and educators have viewed infants as helpless little beings unable to process environmental stimuli because of inadequately developed vision and hearing. For instance, psychologist William James (1890) described the world of an infant as "a blooming, buzzing mass of confusion." The concept of an infant as competent and able to learn from the first moments of life did not emerge until recently, when refined methods of study and technological advances enabled us to decode infant behavior. Researchers found infant behavior to be sophisticated and purposeful. This new knowledge caused professionals to begin to view early learning as important and provided a basis for early intervention. Also critical was the increased awareness of the significant role of the environment and parent-child interaction in the development of both normal and handicapped infants. Their importance has been clinically verified through a variety of programs and procedures for assessing and influencing infant behavior.

Changes in Hospital Practices

Before the role of the environment and the magnitude of early learning were identified as important aspects of child development, professionals were concerned mainly with the biological needs of infants. This concern was medically based and focused on issues related to infant mortality rates and health care delivery.

At the end of the nineteenth century, physicians began to examine causes for high infant mortality and to develop the specialty of pediatrics. In this era, newborn infants were kept with their mothers, usually in large maternity wards. The risk of infection, especially for the premature infant or the infant at risk for biological or environmental reasons, was great; and without antibiotics there was little hope for successful treatment of infection. One of the first important changes in hospital practices was to isolate newborns from adults in nurseries. This minimized the risk of infection, and infant mortality fell.
Premature infants first received care in a special premature "station" in 1922 when Sarah Morris Hospital in Chicago established a unit with specially trained nurses and incubators to regulate the infants' body temperatures. The first city-wide program for preterm infants was developed in Chicago in 1934. A model preterm program was developed in Colorado in 1947 (Clifford & Davidson, 1954), and intensive care units for biologically at-risk infants were established through the country by 1970. The success of these units in decreasing infant mortality can be seen in the survival rates of preterm infants with birth weights of less than 1000 grams. In 1950, New York City reported survival rates for this population to be 9%; currently preterm nurseries report survival rates of newborns between 500 and 1000 grams to be 62% (James, 1981).

New Research in Child Development

Because the nineteenth century professional and layperson believed infants had limited learning capacities, intervention approaches were fragmented. Those working with infants and young children with special developmental needs or at-risk did not take a global perspective on the infants' physical, psycho-social, cognitive and emotional needs. In the twentieth century there has been an increasing interest in the holistic development and welfare of children.

Early in this century, there was new emphasis on the development of the child. This led to the founding of several important research and training institutions. In 1911 Arnold Gesell founded the Clinic for Child Development at Yale. In 1912 the U.S. Children's Bureau was created by Congress "to investigate and report upon all matters pertaining to the welfare of children and child life among all classes of our people" (Kaufman, 1981, p. 46). While the training of educational interventionists for infants was far in the future, the groundwork was laid in 1914 with the establishment in Michigan of a teacher training program in special education. Kanner (1973) notes that child guidance clinics had been established by 1930; they created innovations which would affect infant programming—such as interdisciplinary collaboration and attention to the effects of interpersonal relationships and adult attitudes on child behavior.

Jean Piaget's work (1952) greatly influenced current conceptions about infant learning. He analyzed the growth of the child's intellectual structures and researchers have found that handicapped infants progress through the same stages, although often at a different rate. Child development authorities like Gesell (1940) and Piaget brought increased attention to the infant by demonstrating that the first five or six years of life are those in which there is the greatest potential for growth in physical, cognitive, affective and linguistic skills. This, in turn, supported the need to address all aspects of the handicapped child's development at the earliest possible time. Behaviorists like Skinner (1953) provided a technology for arranging the child's environment to increase and enhance the child's development.

The Role of Government

Before the implications and effects of these theories and techniques could be felt by a large number of children, involvement of the government in the funding of children's programs was necessary. The first significant federal legislation to provide funding for care of the at-risk newborn with special needs was the Social Security Act of 1935, which established some support for maternal and child health. The first publicly supported programs for preschool
children came with the establishment of the Head Start Program in 1965. In 1972, Head Start's services to the economically disadvantaged were extended by a congressional mandate to ensure that 10% of the enrollment would be available to handicapped children. The Head Start program not only highlighted the importance of the early years of childhood, it also fostered the development of other innovative approaches to early intervention. In 1968, with the Handicapped Children's Early Education Assistance Act, the government launched another program created to develop model programs which could be replicated. Handicapped Children's Early Education Program (HCEEP) model programs funded under this act serve handicapped children from birth to age five.

P.L. 94-142, enacted by the federal government in 1975, mandates that states develop plans for educating the handicapped between ages 6 and 21. It does not mandate services for the birth to 5 population; however, some states have chosen to include this younger age group among those who can receive educational services. A number of states have passed legislation mandating services to all younger handicapped children. Others permit admission of children with certain types of handicapping conditions as young as age 3, but do not require school districts to admit very young handicapped children to special education programs. Overall, there is enormous inconsistency in both the age of children served and the types of services provided throughout the country to this population.

The Children Served

Before the early 1960s, a child's intellectual growth was commonly thought to be influenced by internal genetic factors that were resistant to change. As a result, services were given primarily to children who were intellectually intact but who had sensory or motor impairments. Several researchers challenged this practice, suggesting that the environment also plays a large role in a child's development (Bloom, 1964; Hunt, 1961). With this broader perspective, over time, services were offered to children with intellectual deficits, those who were environmentally or medically at risk for later delays, and children who were more severely handicapped. Two other factors also contributed to the increasing number of children served by early intervention programs: the decrease in mortality among sick or handicapped preterm infants and the early identification of those who are at risk. Presently, three categories of children have been identified who would benefit from early intervention programs:

1. **The disabled, handicapped or developmentally delayed young child.** These children include those with congenital disorders, sensory or motor impairments, neurological dysfunctions, or significant delays in one or more of the major areas of functioning (cognitive, communication, social-emotional, and gross and fine motor development). These atypical developmental patterns create special developmental needs which may continue throughout the child's lifetime.

2. **The medically at-risk young child.** These children include those for whom early health factors are known to be a potential threat to developmental outcome. The most numerous of these are the newborn infants receiving intensive care, both those who are significantly premature and those who are small for gestational age. Other categories of medical risk include phenylketonuria (PKU), malnutrition, hypothyroidism, and galactosemia.
Many of these medical risk factors are of concern not only because they may have adverse developmental impact on the infant, but also because they pose unique stresses for the emerging parent-infant relationship which may result in secondary developmental impairments.

3. **The environmentally at-risk young child.** These children include those for whom the postnatal physical and/or social environments are a potential threat to developmental outcome. They include abused and neglected infants, infants of parents with mental illness or developmental disabilities and young children from adverse physical environments.

Overlap and interrelation among these developmental problems are common. For example, the disabled or medically at-risk child may also be at environmental risk if parents are unable to understand or cope with those special needs. The premature infant with persisting developmental delays may at some point be diagnosed as disabled.

The degree of risk caused by various disabilities and the combination of factors which increase risk are not known. In most studies of infants at-risk because of biological factors, social factors also have played a significant role in the infants' outcome (Parmelee, Beckwith, Cohen, & Sigman, 1981). The effect seems to be interactive; an unsupportive environment exacerbates biological risk. A supportive environment may lessen the effects of moderate handicaps and maximize the development of infants with such major problems as blindness, cerebral palsy, and mental retardation. Clearly, adverse environments can interfere with normal development (Tarjan, 1977).

**The Importance of Family Involvement**

At no time in life is the influence of the family more critical than during infancy. Early researchers such as Spitz (1946) and Bowlby (1951) have convincingly demonstrated that the quality of interaction between mother and child has a dramatic effect on the infant's development. Studies show that the interaction between parent and infant affects not only the immediate skill development of the child, but also his or her later development (Yarrow, Ruberstein, & Pederson, 1975; Yarrow, Ruberstein, Pederson, & Jankowski, 1972). More recent studies document the influence of the infant's behavior on this relationship (Brody & Axelrad, 1978; Clark-Stewart, 1978).

Historically, however, most parents either have been entirely excluded from participation in the treatment and education of their young disabled child or have been passive recipients of professional advice. In neither situation has there been much attention given to the needs and concerns of the family.

This is now changing. The Handicapped Children's Early Education Program (HCEEP) requires that program personnel attempt to involve parents in their child's program (PL 90-538, SEC 623). In the last 10 years, interventionists have focused increasingly both on the needs of the family and on the value of families as members of the team providing service to their children. Presently, many professionals from all disciplines realize that to effect lasting change in young children with special developmental needs, or in any child, it is necessary to involve significant family members. In a review of longitudinal child studies, Schaefer (1972) concludes that continued, long-term family involvement is necessary in order to maintain child gains and, consequently, family gains.
The need for professionals in the field of early intervention who have a diversity of skills is generating a new profession—that of the Early Childhood Interventionist. It has been found that although the skills of numerous disciplines are needed to work closely with both the infant and the family, the interaction between the professional and the patient's family is more successful when a single or a few professionals assess the child's and family's needs and implement the intervention program. In some cases, an existing staff member has been designated to perform these functions—the primary nurse in some hospital settings, for example. In other cases it has become the responsibility of an Early Childhood Interventionist, a new member of the service-providing team.

The Early Childhood Interventionist's duties may include counseling the family, coordinating and transmitting to parents information and skills from the various disciplines involved, documenting progress, evaluating intervention effects and integrating the efforts of the team. These new professionals work with children who have physical and sensory impairments, intellectual deficits and other at-risk conditions. They are able to intervene in a variety of settings with both children and their families and to work cooperatively with professionals from other fields in designing, implementing and evaluating optimal services. They must be familiar with many relevant disciplines so they can identify additional services the child and family may need and to integrate the delivery of services to a child (Allen, 1978; McDermott & Atina, 1972; Meier, 1976).

Many professionals are already functioning in this role with backgrounds in a variety of disciplines—physical therapy, nursing, social work, psychology, nursing and education. Like other professionals working with handicapped or at-risk infants, they have had to acquire a range of knowledge and skills outside their original area of expertise.

The competencies listed in Part II of this book address the diversity of skills needed for effective early intervention. For most professionals these skills are acquired over time through academic education, field experiences, on-the-job training, conferences, readings and relevant life experiences.
PART II

COMPETENCIES FOR THE EARLY INTERVENTIONIST

The following competencies serve as a resource and guide for early interventionists as well as for persons involved at administrative, university and policy-making levels with services to young children with special needs and their families. How these competencies are used will depend on the needs of the user. State agencies might use them as a basis for credentialing, or for setting regulations and standards for program staff. Colleges might use them as a basis for competency-based programs in early intervention or infant-toddler training. Direct service programs might use them for in-service training, self-assessment or evaluation.

INTER-ACT has chosen to state these competencies in general terms and not to specify methods of measurement or to assign specific levels of competence. As a staff development tool for early interventionists, the competencies cannot be applied at the same level for all staff members or in all settings. For some staff, such as paraprofessionals, a level of awareness of many of these competencies would be sufficient, whereas others might need more in-depth knowledge, and still others need not only knowledge but also demonstrated ability. Each of the competencies are preceded by the phrase "demonstrates a knowledge of" or "demonstrates an ability to," depending on the nature of the competency. The users of these lists must decide the extent of the knowledge or ability that is required of a particular staff member in a particular setting.

The competencies are divided into five categories: child development, family involvement, program implementation, assessment and administration. The contents of each category are based on the premises outlined below.

Child Development. Any early interventionist, regardless of program, population, or method, must have a strong base of knowledge in both the typical developmental patterns of young children and in atypical aspects or deviations from typical development due to handicapping conditions or risk factors. This knowledge must be both general and specific, covering the full range and variation of development as well as the effects of particular treatment strategies. It must cover all developmental areas—although an individual practitioner may clearly have greater expertise in one or another area.

Early intervention specialists must regard young children with special developmental needs as unique individuals who have much in common with other young children and who also have their own particular strengths, difficulties and interests. They must communicate this regard and respect for the child to that child, the family, significant others, and the professional community.

Family Involvement. Similar respect must be extended to the child's family. Except in unusual circumstances, parents are the most influential persons in their children's life and are in the best position to determine their future. It is therefore important that families be involved in every aspect of programming. To encourage this involvement and to support and enhance the family's role in the children's development, interventionists must communicate that they value family members as people and see their developments and accomplishments as goals worth striving for.
Program Implementation. Program implementation may be the most publicly visible function of the interventionist, but it does not stand alone. Its effectiveness depends, in large part, on mastery of the other four competency areas. It requires counseling skills, sensitivity to child and family needs, familiarity with various types of evaluation and program philosophies, and knowledge of current research.

Assessment. All early intervention practitioners must be competent in the interpretation of assessment processes, including both formal protocols and informal procedures. Although each representative discipline (e.g., Occupational Therapy, Physical Therapy, Speech Pathology, Education, Allied Health, Psychology, Social Work) brings to the assessment process its own well-developed devices to assess the child, there are purposes and components common to all disciplines. These include eligibility determination, planning of intervention strategies, child progress evaluation and the assessment of parent needs and coping capabilities.

Administration. Infant-family programs are often small, community-based programs which cannot support a full-time administrative position. Partial administrative functions are sometimes carried out by program staff whose major role is provision of services to families and children. Program staff in infant programs, particularly home-based infant programs, frequently have a great deal of autonomy as well as added responsibility for overall program operation and management. Competencies related to program philosophy, evaluation, community involvement, dissemination, staff selection and training, fiscal management, legal and professional conduct and interpersonal management are all important for the infant interventionist. Although the complete range of administrative functions may not be expected of all infant educators, the skills are important enough to include in the accompanying competencies since their absence may seriously detract from the accomplishment of program objectives.
Typical Child Development

Demonstrates knowledge of:

1. Pre and perinatal development
   a. proper care and delivery
   b. effects of genetics, environment, maternal health and nutrition, and other factors on the developing fetus

2. Development in the early years
   a. the individual nature and variability of typical development
   b. sequences of development and the interrelationship among developmental areas
   c. the development of the nervous system and its influence on behavior
   d. sensory and motor development and their influence on later cognitive, perceptual, and language skills
   e. the development of receptive and expressive communicative competence
   f. the development of perceptual learning and skills
   g. motivation and initiation and their developmental significance
   h. the development of cognitive skills such as problem-solving, concept formation, memory, learning, imitation, and attention
   i. the development of play behavior
   j. socialization and social development
   k. emotional development
   l. the development of self-help skills and adaptive behaviors
   m. the health and nutritional needs of the young child
   n. physical maturation of the young child

3. Interaction between the environment and the developing child
   a. social and physical environments and their influences on the developing child
b. the changing environmental needs of the developing child
c. the influence of the child on physical and social environments

4. Interactions among familial, cultural, social, and physical environments that enhance a child's development

5. Theory and research in typical child development
   a. major theories of child development
   b. relevant research in developmental processes

Atypical Child Development

Demonstrates knowledge of:

1. Pre and perinatal developmental risk
   a. the effects of risk factors such as family history or behavior, medical complications, and gestational age
   b. etiology, diagnosis, and characteristics of handicapping conditions evidenced at birth

2. Handicapping and at-risk conditions and their effects on early development
   a. etiology, diagnosis, and characteristics of handicapping conditions that develop after birth
   b. impact of medical risk factors on the child's growth and development
   c. characteristics of children with special needs that result from familial, cultural, or social factors
   d. etiology and characteristics of developmental variations and their effects on the young child
   e. similarities in behavior and development between typical and atypical children
   f. specific implications of the child's special developmental needs for the development of social-emotional, communicative, sensory, motor, language, cognitive, and perceptual, self-help/adaptive skills
   g. health and nutritional needs of the child

3. Interactions among the familial, cultural, social, and physical environments that prevent the child from achieving maximum growth and development
4. Theory and research in atypical child development
   a. major theories of the development of children with special developmental needs
   b. relevant research on the development of children with special developmental needs
FAMILY INVOLVEMENT

Demonstrates ability to:

1. Understand the family
   a. elicit the family's priorities for the child and for themselves, recognize and address the effects of various individual characteristics on the growth and development of the child and the family
   b. understand how a child with special needs affects parents, siblings, the extended family, and the community

2. Establish and maintain relations with the family
   a. successfully initiate first contacts with families, even when they have not sought interaction
   b. explain to parents the role of the interventionist in working with the child and family
   c. form and maintain satisfactory working relationships with infants, toddlers, and families
   d. work with culturally different families in a non-biased and non-value-laden way
   e. communicate respect for the values, ideas, suggestions, and priorities of the family
   f. organize and encourage parent involvement in all phases of the program
   g. address areas of disagreement with families honestly in a supportive and non-value-laden way
   h. facilitate family decision-making concerning the needs of the child without imposing personal biases or supplanting family authority
   i. translate and interpret technical information (e.g., test results) to families in understandable language

3. Assess issues within family programs
   a. discern whether a problem requires intervention or not
   b. help families identify their needs and strengths
   c. help parents identify and acknowledge their concerns about their own needs, their child with special needs and/or other children
d. engage parents in evaluating their child's progress and skill acquisition 

e. help families evaluate their progress, set new goals, and devise strategies and criteria for evaluating future progress

4. Meet family needs

a. help families integrate the child's specialized routines into normal family activities

b. create stimulating programs that draw on the child's strengths and that are consistent with the family's lifestyle

c. encourage the family to rely appropriately on informal as well as formal support systems

d. facilitate effective group support for parents' and siblings' education

e. plan intervention strategies congruent with the parents' style of learning

f. enhance parental competence, confidence, and self-esteem

g. decrease or increase intervention time when appropriate

h. support the family's increasing independence

i. successfully terminate relationships with families when appropriate

5. Encourage the child's development through family programs

a. explain the effects of various handicapping conditions on development

b. explain to parents the nature of child development and sequences of skill acquisition

c. discuss with parents the various medical, educational, and therapeutic techniques for special needs children

d. involve families in developing goals for the child and strategies to meet them

e. help families increase behaviors that positively affect the child's development and decrease behaviors that negatively affect it

6. Help families use support systems

a. help families identify and use state, federal, and community resources available to them

b. act as an advocate for families and help them acquire advocacy skills
Demosntrates knowledge of:

7. Theory and research
   a. major theories of family development and functioning
   b. relevant research on the family's role in the development of the very young child
   c. major theories of the family's role in the development of the child with special needs
   d. relevant research on the family's role in the development of the child with special needs
PROGRAM IMPLEMENTATION

Demonstrates knowledge of:

1. Research in the area of program intervention
   a. current trends and practices in medical intervention with young children with special needs, including newborn care
   b. current trends and practices in therapeutic, habilitative, and educational intervention for young children with special needs and their families
   c. current trends and practices in evaluating programs for young children with special needs and their families

2. The planning of intervention programs for children and families
   a. curricular materials, both internally and commercially prepared
   b. theories and principles of motivation and learning

Demonstrates the ability to:

   c. write measurable short- and long-term objectives for children in all areas of concern that specify the desired behaviors and the conditions and criteria for meeting them
   
   d. write measurable short- and long-term objectives for families in all areas of concern that specify the desired behaviors and the conditions and criteria for meeting them
   
   e. select and specify instructional procedures which are appropriate to the child and family based on:
      1. infant developmental needs and strengths
      2. family needs, strengths, and culture
      3. program type and intervention goals
   
   f. select and specify materials and activities appropriate to the specific short-term objective, sequence step, and instructional procedures
   
   g. select and specify motivational and instructional procedures
   
   h. provide opportunities for children and their families to have normalizing activities
   
   i. prepare children and families to function successfully in future program placements
3. Implement intervention programs for children and families
   a. communicate effectively with each individual regardless of age, race, religion, sex, exceptionality, lifestyle, or social or educational background
   b. implement the instructional procedures with children and families
   c. implement measurement procedures for child and family behavior
   d. modify the instructional plan based on the data obtained from the measurement procedures
   e. involve the family actively in implementing the child's program
   f. structure, modify and use the physical and social environment to encourage optimal infant development, and family growth and well-being
   g. work within variable settings based on the needs of the child and family

4. Evaluate intervention programs for children and families
   a. measure child and family behavior and gain
   b. analyze performance data using formal and informal procedures
   c. develop and implement a plan for ongoing and periodic assessment of child and family performance
   d. periodically evaluate family satisfaction with services provided
   e. involve the family actively in evaluating the child and family program
ASSESSMENT

Demonstrates the ability to:

1. Use assessment practices appropriate to the child with special developmental needs
   a. determine the status of the child for assessment purposes (e.g., is the child sick, frightened, or in need of a longer warm-up time?)
   b. determine optimal use of the physical setting (e.g., is the child appropriately positioned and comfortable with the parents nearby?)
   c. include the primary caregivers in the assessment process and be sensitive to their emotional state
   d. be sensitive to cultural and environmental differences of the assessed child
   e. structure and/or limit interactions with the child (e.g., if the child is throwing objects, remove those and move on to other parts of the test)
   f. exhibit professional behavior and attitudes by observing confidentiality, reporting objectively, and qualifying subjective judgments

2. Select and administer assessment instruments appropriately
   a. observe the child nonjudgmentally
   b. identify a variety of assessment instruments and their purposes
   c. select appropriate instruments or procedures for each purpose
   d. administer assessment instruments in a manner that assures reliable and valid results and assess results appropriately
   e. identify and administer informal assessment procedures
   f. adapt assessment materials for children with qualifying factors such as handicapping conditions or cultural differences without violating assessment protocol
   g. determine optimal time for accurate and complete data collection

3. Interpret and report test results
   a. differentiate between normal and atypical growth and development
   b. differentiate between assessment items and the skills that items represent
c. interpret assessment results appropriately

d. integrate assessment results with other information

e. use assessment results to formulate goals and objectives

f. recognize limitations of assessment measures (e.g., not scoring a cerebral palsy child low in adaptive areas when he/she cannot grasp or manipulate the toys due to a motor impairment)

g. report assessment results in a manner that the family and others understand and that supports the child and family

h. discern from the assessment whether additional consultation and assessment are needed
ADMINISTRATION

Demonstrates ability to:

1. Articulate program philosophy and goals
   a. identify eligible clients
   b. identify the roles of the manager and staff in the program
   c. implement team approaches

2. Follow legal and professional guidelines
   a. modify program to meet current federal and state laws and regulations regarding early childhood intervention requirements, including legal mandates, constraints, and training
   b. modify program according to current practices in early childhood intervention
   c. formulate and follow a professional code of ethics and assume associated responsibilities

3. Select, train, and evaluate staff
   a. develop criteria and procedures for staff selection
   b. determine staff development needs
   c. establish, implement, and evaluate a staff development program
   d. develop, implement, and evaluate procedures for staff evaluation

4. Develop personal strengths and interpersonal communication
   a. establish priorities, organize tasks, meet deadlines, and manage time
   b. be flexible and adaptive (that is, cope adaptively)
   c. assess and maximize one's own personal strengths; assess personal weaknesses and develop methods to compensate for them
   e. communicate effectively, in speech and writing with colleagues, administrators, families, and community members
   f. provide support to colleagues
5. Involve the community
   a. determine community resources
   b. establish interagency cooperation
   c. develop public awareness of program

6. Manage fiscal responsibilities
   a. establish budget requirements for program operation
   b. identify and secure funding resources

7. Evaluate program
   a. develop, implement, and assess procedures for evaluating program components
   b. prepare reports
   c. identify target audiences for evaluation data and provide data to them
   d. disseminate evaluation findings

8. Disseminate procedures
   a. identify target audiences for dissemination
   b. identify and prepare materials and procedures for target audiences
   c. disseminate materials and procedures to target audiences
APPENDIX

Survey Results

As part of their research in preparing this document, the INTER-ACT Training and Personnel Preparation Task Force prepared and distributed the following survey. It was designed to gather information regarding the experience, education and desired further training of program staff working in the area of early childhood intervention. The survey, along with a cover letter explaining its purpose, was sent out to all 49 HCEEP projects which serve the birth to 36 month population, and project directors were asked to distribute a copy of the questionnaire to members of their staff.

A total of 181 completed questionnaires were returned. The following results were obtained:

I. Profession

<table>
<thead>
<tr>
<th>Profession</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse</td>
<td>4</td>
</tr>
<tr>
<td>Physician</td>
<td>0</td>
</tr>
<tr>
<td>Psychologist</td>
<td>15</td>
</tr>
<tr>
<td>Social Worker</td>
<td>7</td>
</tr>
<tr>
<td>Speech Pathologist/Therapist</td>
<td>25</td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td>13</td>
</tr>
<tr>
<td>Physical Therapist</td>
<td>10</td>
</tr>
<tr>
<td>Early Childhood Educator/Developmental Specialist</td>
<td>79</td>
</tr>
<tr>
<td>Paraprofessional</td>
<td>9</td>
</tr>
<tr>
<td>Other¹</td>
<td>37</td>
</tr>
</tbody>
</table>

II. Program Setting

<table>
<thead>
<tr>
<th>Program Setting</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>70</td>
</tr>
<tr>
<td>Rural</td>
<td>34</td>
</tr>
<tr>
<td>Hospital</td>
<td>41</td>
</tr>
<tr>
<td>Center Based</td>
<td>84</td>
</tr>
<tr>
<td>Home Based</td>
<td>67</td>
</tr>
<tr>
<td>Community Agency</td>
<td>38</td>
</tr>
<tr>
<td>Public School</td>
<td>15</td>
</tr>
<tr>
<td>University</td>
<td>30</td>
</tr>
</tbody>
</table>

1. Those responding "Other" noted the following professional occupations: Teacher, 18; Teacher Aide, 2; Student, 3; Administrator, 3; Parent Educator, 2; Educational Specialist, 9.

2. Settings were counted more than once. For instance, one given program could fall into all these categories: Urban, Hospital, Center Based, University.
III. Educational Background

High School: 36
Associate Degree: 6
B.A. or B.S.: 90
M.A. or M.S.: 60
M.Ed.: 32
Ph.D.: 13

IV. Parenting Experience

Yes  |  No
-----|-----
83   |  93 Have own children
12   | Parent of handicapped child

V. Past teaching experience

<table>
<thead>
<tr>
<th>Setting</th>
<th>Ages</th>
<th>Exceptionality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular classroom</td>
<td>76</td>
<td>Infant</td>
</tr>
<tr>
<td>Special Education</td>
<td>106</td>
<td>Preschool</td>
</tr>
<tr>
<td>Resource Room</td>
<td>22</td>
<td>Primary</td>
</tr>
<tr>
<td>Second-year grades</td>
<td>46</td>
<td>Moderate</td>
</tr>
<tr>
<td>High-school</td>
<td>34</td>
<td>Severe</td>
</tr>
<tr>
<td>Post-secondary</td>
<td>27</td>
<td>Learning disabled</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Behavior disabled</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Health impaired</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Communication disorders</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vision impaired</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hearing impaired</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Orthopedically impaired</td>
</tr>
</tbody>
</table>

VI. What kind of additional training would you find helpful (rank order first 3 in degree of usefulness)?

<table>
<thead>
<tr>
<th>Training</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Work</td>
<td>29</td>
<td>14</td>
<td>21</td>
</tr>
<tr>
<td>Workshops</td>
<td>20</td>
<td>30</td>
<td>26</td>
</tr>
<tr>
<td>Practical Training (on the job)</td>
<td>14</td>
<td>16</td>
<td>36</td>
</tr>
<tr>
<td>Internship</td>
<td>5</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Conferences</td>
<td>17</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>Seminars</td>
<td>14</td>
<td>24</td>
<td>8</td>
</tr>
<tr>
<td>In-service Training</td>
<td>21</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

3. Again, some respondents checked more than one response.

4. No response was given by five participants.
VIII. Do you think that you need additional training for working with infants?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>150</td>
<td>31</td>
</tr>
</tbody>
</table>

Out of 181 respondents, 150 or 83%, indicated that they needed additional training for working with infants. Thirty-five persons out of the 150 who perceived more training needs specifically requested additional training in neuromotor development of infants. (The second most frequently identified training need was in infant assessment.) Based on the large number of requests in this area, additional training in neuromotor development can be considered a high priority area.
INFANT EDUCATOR COMPETENCIES QUESTIONNAIRE

I. Staff Position: 
(list your job title)

II. Profession:
() Nurse
() Physician
() Psychologist
() Social Worker
() Speech Pathologist/Therapist
() Occupational Therapist
() Physical Therapist
() Early Childhood Educator/Developmental Specialist
() Paraprofessional
() Other:

III. Program Setting:
() Urban
() Rural
() Hospital
() Center Based
() Home Based
() Community Agency
() Public School
() University

IV. Educational Background:
() High School
() Associate Degree
() B.A.
() M.A.
() M.Ed.
() Ph.D.

Major area of study

Minor area

V. Parenting Experience:
Yes No
() () Have own children
() () Parent of handicapped child
VI. Past teaching experience:

<table>
<thead>
<tr>
<th>Setting</th>
<th>Ages</th>
<th>Exceptionality</th>
</tr>
</thead>
<tbody>
<tr>
<td>() Regular classroom</td>
<td>() infants</td>
<td>() mental retardation</td>
</tr>
<tr>
<td>() Special classroom</td>
<td>() preschool</td>
<td>() mild</td>
</tr>
<tr>
<td>() Resource Room</td>
<td>() primary</td>
<td>() moderate</td>
</tr>
<tr>
<td>()</td>
<td>() secondary grades</td>
<td>() severe</td>
</tr>
<tr>
<td>()</td>
<td>() high-school</td>
<td>() learning disabled</td>
</tr>
<tr>
<td>()</td>
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<td>() behavior disabled</td>
</tr>
<tr>
<td>()</td>
<td></td>
<td>() health impaired</td>
</tr>
<tr>
<td>()</td>
<td></td>
<td>() communication disorders</td>
</tr>
<tr>
<td>()</td>
<td></td>
<td>() vision impaired</td>
</tr>
<tr>
<td>()</td>
<td></td>
<td>() hearing impaired</td>
</tr>
<tr>
<td>()</td>
<td></td>
<td>() orthopedically impaired</td>
</tr>
</tbody>
</table>

VII. What kind of training did you have for working with infants?

() Course work  () self-taught
() On-the-job Training
() Workshops
() In-service Training
() Internship
() Conferences
() Seminars

VIII. What kind of additional training would you find helpful (rank order first 3 in degree of usefulness)?

() Course Work
() Workshops
() Practical Training (on the job)
() Internship
() Conferences
() Seminars
() In-service Training
() Other

IX. Do you think that you need additional training for working with infants?

Yes  No

If yes, what kind of training would you find most helpful?

X. Do you know of a degree program or professional preparation program specifically designed for infant educators?
REFERENCES


James, L.S. Outcome following newborn intensive care. Presentation to the Los Angeles Pediatric Society, January 1981.


Schaefer, E.S. Parents as educators: Evidence from cross sectional, longitudinal, and intervention research. Young Children, 1972, 27, 227-239.


