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ABSTRACT

Part of a volume which explores current issues in service delivery to infants and toddlers (ages birth to 3) with handicapping conditions, this chapter describes the history of the Handicapped Children's Early Education Program (HCEEP) and provides information on exemplary program components based on written responses to a survey of 67 HCEEP projects funded from 1981 through 1986. Data are provided on the following topics: program administration, characteristics of children and families served, service delivery options, staffing patterns, philosophical orientation of programs, assessment procedures, family involvement models, and program evaluation. Descriptions of 12 of these model programs follow, chosen to represent a cross-section of philosophical orientations, program goals and objectives, populations served, service delivery options, intervention strategies, and demographic regions, as well as distinctiveness or uniqueness of services to children and families. A discussion of findings notes that program practices are not always consistent with the stated philosophical model and that a need for training staff to work with families is indicated. (JW)

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Model Programs for Infants and Toddlers with Handicaps

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Educators may acquire valuable information by examining exemplary program models.

❑ Since the late 1960s, programs for young children with handicaps have proliferated. As part of this movement, numerous programs for infants and toddlers have been developed. This trend has gained impetus from the passage of Public Law 99-457, the Education of the Handicapped Act Amendments of 1986, with its emphasis on the planning and development of services for infants and toddlers. As new programs are developed, educators may acquire valuable information in the initial planning and development stages by carefully examining the components of exemplary models that have been developed for infants with handicaps.

Peterson (1987) defined a model program as "a program for children in which its content and operational strategies are clearly conceptualized and defined in a manner that assures internal consistency and coherence"(p. 371). Typically, an early intervention model consists of a clearly conceptualized philosophical or theoretical orientation, a set of program goals and objectives, an identified population of children and families, well-qualified staff and provisions for team functioning and staff development, specified service delivery options, established intervention procedures (i.e., assessment, curriculum, materials, and instructional strategies), a model for family involvement, and rigorous program evaluation (Filler, 1983; Peterson, 1987; Sheehan & Gradel, 1983).

National efforts have stimulated development of model programs.

A variety of national efforts have stimulated the development of model programs. The passage of Public Law 90-538, the Handicapped Children's Early Education Assistance Act, in 1968, had the greatest impact on the development of programs for young children with handicaps. This act established the Handicapped Children's Early Education Program (HCEEP), a seed money program designed to assist in developing and demonstrating exemplary services for handicapped children ages birth to 8 years and their families (DeWeerd & Cole, 1976). During 1968-1969, with the assistance of an advisory board, the central staff of the Bureau of Education for the Handicapped (BEH) developed procedures for implementing the legislation. Grants were awarded to projects to develop what became known as First Chance or HCEEP demonstration projects. Over a 3-year funding cycle, the projects were charged with developing and evaluating exemplary practices that could be replicated by other sites. All funded demonstration projects were required to continue the model by local and/or state funding after termination of the 3-year period. Initially, 24 demonstration projects primarily serving children ages 3 to 8 were funded in July, 1969, at the level of one million dollars. From 1969 through 1987, a total of over 500 demonstration projects were funded to serve ages 0 to 8. Of these, at least 200 were demonstration models for the age 0 to 2 population.

Grants were awarded to develop HCEEP demonstration projects.

At least 200 were models for 0–2 population.

Demonstration projects must include the following features to be funded according to the requirements of the federal government:

1. Exemplary services to children that would enhance cognitive, language, motor, and social/emotional development.
2. Professional and nonprofessional staff development.
3. Parent involvement.
4. Collaboration with appropriate agencies, including public school districts.
5. Dissemination of information and materials related to model practices.
6. Program evaluation. (DeWeerd, 1979).

Although the original intent was to fund demonstration projects for a 3-year cycle and then terminate funds, allowing other projects to receive funding, it soon became evident to BEH that the exemplary practices developed by projects should be made available to other interested sites. Thus, in the summer of 1972, P.L. 90-538 funds were made available to projects that had completed the 3-year demonstration cycle and wished to apply for outreach projects to assist other sites in replicating the demonstration model. Adopting or adapting a model whose effectiveness has been demonstrated may prove more desirable for sites with similar needs, populations, and philosophical commitments than developing a model of their own for the following reasons:

- It is costly to develop a model. Over the 3-year cycle of a demonstration site, the government has funded the development and demonstration of models at a cost ranging from $300,000 to $400,000. When a model meets the needs of a site and has been approved by the Office of Special Education Programs for outreach, it can be replicated within a year at another site at a fraction of the cost of developing a new model.
- Some demonstration projects have been evaluated rigorously and have proved worthy of replication. Some even have evidence that the model can be transported to another site and obtain comparable results. If a site has needs that can be met by a demonstrated exemplary program, financial resources, time, and effort can be saved by adopting or adapting the proven model.
- Outreach project staff can be invaluable in conducting inservice training of the replication site staff and can serve as consultants in coping with problems of providing services to infants and their parents.
- Even when the demonstration models are not funded for outreach, the staff are obligated to continue to demonstrate their models and in most cases they are willing to provide some technical services to sites that wish to replicate their models.

A model can be replicated within a year.

Knowledge of federally funded exemplary programs may prove helpful to sites desiring to improve their programs and/or to those initiating programs and seeking an appropriate model to replicate. This chapter, therefore, provides comprehensive information regarding model components based on a survey of HCEEP projects serving infants and toddlers with handicaps and their families. First, survey results of HCEEP demonstration projects that serve children age birth to 2 years and their families are discussed. Second, 12 of these projects are highlighted to provide a more detailed description of program components. Finally, the chapter discusses the implications of the survey for the development and implementation of programs for infants and toddlers with handicaps.

METHOD

☐ The sample for this study was drawn from the 144 HCEEP projects funded from 1981 through 1986 that were included in the annual HCEEP directories compiled by TADS (Technical Assistance Development System) and that reported serving children age birth to 2 years. Both demonstration and outreach projects were contacted; however, outreach projects were asked to report only on their demonstration models.

HCEEP projects have specific guidelines for program development and implementation.

Several factors influenced the selection of HCEEP projects as exemplary models. First HCEEP projects have specific guidelines for program development and implementation. Second, the projects are monitored and evaluated on an ongoing basis. Finally, research suggests that HCEEP projects continue the model demonstration services beyond the federal funding period (Swan, 1980).

Procedures

❑ A questionnaire was mailed to each of the 144 HCEEP projects. The questionnaire, which contains a variety of checklists, Likert scales, and open-ended questions, was designed to obtain comprehensive information regarding the model program. A review of the literature suggested common components of exemplary models and thus influenced the selection of survey questions. Some items were adapted from a needs assessment questionnaire developed for the Illinois Early Childhood State Plan Project (McCollum, 1985). Projects that did not respond to the initial mailing received a second questionnaire, and some sites called to explain why they could not complete the questionnaire. Factors addressed by the survey included agencies involved in administering the program and cooperatively providing services; characteristics of the children served; characteristics of the families served; service delivery options; staffing patterns (including staff development); program facility; a description of the services to children and families (i.e., program philosophy, program goals and objectives, assessment procedures, curriculum, instructional materials, instructional strategies); and program evaluation. (A copy of the questionnaire may be obtained from the first author.)

SURVEY RESULTS

Forty-six percent provide services to infants and toddlers.

❑ Of the 144 projects canvassed, 79 (55%) responded to the initial mailing and another 17 (12%) responded to the second mailing, resulting in 96 returns (67%). Sixty-seven (46%) of the respondents provided services to infants and toddlers with handicaps. Twenty-nine (21%) of the projects are no longer in existence or do not provide services to children from birth to age 2. It is assumed that the programs most active in providing services to young children responded to the survey. The response rate was relatively high when compared with similar surveys (Karnes, Linnemeyer, & Myles, 1983; Karnes, Linnemeyer, & Shwedel, 1981; Trohanis, Cox, & Meyer, 1982).

Results are based on self-reported data.

The following information is a synthesis of the data reported by the 67 projects providing services to infants and toddlers with handicaps and their families. It must be emphasized that the results are based on self-reported data from the written questionnaire.

Program Administration

❑ The most common fiscal agencies for programs are universities (31%), public schools (21%), and private agencies (19%). Other agencies/programs that administer the infant/toddler projects are listed in Table 1. All of the model projects indicated that they work collaboratively with other appropriate agencies in providing services to children. The agencies most likely to be involved are public schools, universities, state departments of education, state departments of mental health and mental retardation, and local agencies such as county health departments and social services. Programs tend to be located in large cities with populations over 50,000 (40%), but 11% are located in cities with populations of 25,000 to 50,000, 15% in small towns with populations of 2,500 to 25,000, 9% in rural areas, and 25% in areas that are a combination of other types.

Programs tend to be located in large cities.

Characteristics of Children Served

☐ The majority of programs that returned the survey serve children who are at risk for developmental delays (80%), as well as those who have diagnosed handicaps (94%) or developmental delays (92%). Table 2 contains a breakdown by category of the children served in the 67 programs. Services for infants begin at or fairly soon after birth. In all of the programs the children served spread relatively equally across all age ranges: birth to 6 months (18%), 7 to 12 months (18%), 1 to 2 years (30%), and 2 to 3 years (34%). Programs serve an average of 33 children, for a total of 2,125 children in the 67 programs responding. The majority of children are male (61%). Most are Caucasian (57%), with 27% Black, 10% Hispanic, 3% Native American, and 1% Oriental. The remaining 2% are from a variety of cultural and ethnic backgrounds.

Services for infants begin at or fairly soon after birth.

Characteristics of Families Served

☐ The majority of families served are two-parent families (43%); the second largest group represented are single-parent families with the mothers as heads of household (30%). Some children (12%) live in extended families. Another 9% live in foster homes. Only 0.36% live in single-parent families with the father as head of household. Table 3 shows percentages of each type of family structure represented for the 67 projects. Based on income and education levels, the majority of families could be categorized as of lower socioeconomic status (SES). Most of the families (81%) earn less than $20,000 per year, while 43% of the total earn less than $10,000 per year. Of the fathers represented, 65% have a high school education or less; of the mothers, 79% have a high school education or less. Several of the parents have completed only the elementary grades—12% of the mothers and 13% of the fathers.

The majority of families could be categorized as of lower socioeconomic status.

Service Delivery Options

☐ Infant and toddler programs may differ according to the setting in which services occur. Services are usually provided in one of two environments, the child's home or a center such as a school or hospital. Karnes and Zehrbach (1977) described intervention models as representing one of four combinations of these two settings: (a) home participation only, (b) home participation followed by center participation, (c) combination home and center participation, and (d) center participation only. Several factors may affect the service delivery option chosen for a program: geographic location (e.g., rural, urban), the recipient of direct services (e.g., child, parent, or both), program goals and objectives, age of the child who receives services, and the person(s) providing services.

Services are usually provided in the child's home or a center.

Table 1. Agency Administering the Program

Agency	Percentage of Programs Administered by the Agency
University	31
Public school district	21
Private agencies	19
Department of mental health/mental retardation	10
Hospitals	6
Residential schools	4
Association of Retarded Citizens	3
State Department of Education	1.5
United Cerebral Palsy	1.5
Regional health district	1.5
Parent/child center	1.5

Note. Based on 67 projects.

Table 2. Handicapping Conditions of Children Served

Handicapping Condition	Percentage Served
Orthopedically/physically impaired	8
Mentally retarded	14
Health impaired	7
Emotionally disturbed	1
Autistic	1
Speech/language impaired	12
Hearing impaired	2
Deaf	0.33
Visually impaired	2
Blind	1
Deaf-blind	0.28
Multihandicapped	13
Delayed, no specific diagnosis	13
At risk for delay	26
Neurologically impaired	1

Note. Based on a total of 2,125 infants and toddlers in 67 programs.

Table 3. Family Structure

Family Structure	Percentage Served
Two-parent family	48
Single-parent family (mother as head of house)	30
Single-parent family (father as head of house)	0.36
Extended family	12
Foster placement	9
Residential hospital placement	0.18
Unknown	0.76

Note. Based on a total of 2,190 families in 67 programs. The number of families served is larger than the number of children served, because some projects (e.g., Supporting Extended Family Members [SEFAM] provide services directly to family members other than the child).

The majority of respondents to this survey (70%) indicated the availability of the home-plus-center option, while 13% offer home-based only, 12% center-based only, and 5% other. However, respondents reported that the majority of children (52%) are actually served in centers, while 27% are served at home, 15% in the home-plus-center option, and 6% other. The discrepancy between the availability of options and the typical patterns of service seems to be related to the type of intervention services and who is receiving them. The primary focus of many programs is to provide direct services to the child in the home setting. These programs, however, may also provide services for the parent (e.g., support groups) on a regular basis in a center. Table 4 compares availability of options with the typical pattern of services.

The majority are actually served in a center.

The frequency of services also varies across programs. Many programs allow for flexibility in the amount of time per session and the number of sessions per week or month based on the needs of the child and the family. The most typical length of a session is 1 to 2 hours (59%), with the next most typical options being 27% half day, 11% full day, and 3% less than 1 hour. Services are most typically provided 1 to 2 days per week (52%); however, frequency of sessions does vary, with 27% of the programs offering services 3 to 5 days per week, 15% every 2 weeks, and 6% once a month.

Services are most typically provided 1 to 2 days per week.

Staffing Patterns

☐ To maintain high-quality services for children and their families, qualified staff are essential. The number and type of staff vary across programs depending on the programs' goals and objectives, services provided, service delivery approaches, the number of children served, their ages and handicapping conditions, and the needs of the families (Peterson, 1987). Peterson has suggested that the level of training and

8

Table 4. Service Delivery Options

Service Delivery Options	Availability of Option	Typical Pattern of Service
Home	12%	27%
Center	13%	52%
Home plus center	70%	15%
Other (e.g., daycare homes)	5%	6%

expertise required of the staff may be related to a program's philosophical orientation and the curriculum and instructional strategies employed. Because of the budgetary constraints of many infant and toddler programs, as well as the scarcity of experienced, trained personnel to work with infants and toddlers with handicaps, many programs must plan and implement staff development activities on an ongoing basis.

Respondents to the survey employ and contract with a wide range of professionals. Table 5 provides a list of roles for which the programs employ or contract for staff and the educational levels of those staff. The services of administrators/project directors and coordinators, infant interventionists, physical therapists, occupational therapists, speech therapists, psychologists, paraprofessionals, and volunteers are available to the majority of programs. Many also have the services of nurses, social workers, and family interventionists. It is interesting to note that all professional staff with the exception of two have BS degrees or higher. The survey results show that the infant interventionists provide the majority of services to the child and the family.

Infant interventionists provide the majority of services to the child and the family.

The majority of projects (71%) indicate that some efforts at teaming occur with weekly team meetings being held. Another 8% indicate that teaming is not practiced and one person is responsible for implementing services. Several of the projects (21%), however, provided no information about team practices. Only 22% of those responding to this item identified a teaming model. A transdisciplinary model is used by 11%, interdisciplinary by 9%, and multidisciplinary by 2%. Most of the projects (54%) conduct formal needs assessments and formulate staff development plans. Some (20%) report that staff are involved in regular staff development activities (e.g., local workshops, state conferences) but do not indicate how needs are determined. Others (9%) indicate that staff development activities are planned informally, and 17% provide no information about staff development.

Services to Children

☐ The theoretical or philosophical orientation of the programs for children fall into five categories. Fourteen percent of the projects, however, failed to identify a philosophical orientation. Those which were identified are:

- The child development approach focuses on normal development and assumes that children learn when they are developmentally ready.

Table 5. Model Program Staff.

Staff	Employed by Program	Contracted by Program	Education High School	 BS	 MS	 PhD
Administrator	68	2		6	35	24
Coordinator	48	3		6	28	8
Psychologist	27	11			18	13
Physical therapist	26.2	25		21	20	3
Occupational therapist	31	11		18	15	2
Infant interventionist	100	2	2	46	49	
Speech therapist	44.2	7		6	37	
Social worker	19	4		3	13	
Nurse	21	3		10	6	
Physician	4	18				4
Paraprofessional	62	2	36	11	10	
Volunteer	73	1	56	18		
Teacher	18			9	9	
Family interventionist	28	2	1	13	18	
Evaluation consultant	3	2				4
Child care specialist		1		1		
Respite care provider	1		1			
Dissemination coordinator	1		1			
Concept specialist	1				1	
Vision specialist	1				1	
Nutritionist	1	2			1	
Neurologist		1				1
Psychiatrist		1				1
Editor/writer		1			1	
Counselor		1			1	
Early childhood specialist	1				1	
Consultant	1				1	
Educational diagnostician	1				1	
Infant psychometrist	1				1	
Cultural anthropologist		1				1
Audiologist		1			1	
Computer programmer/ specialist	4				3	1

Note. Figures are for 67 programs. Educational level was not available for some programs.

Typically, the interests of the child and the age-appropriateness of skills are given paramount consideration. The philosophies of 33% of the projects are based on this approach. Six projects specifically mention Piaget, and two cite Erickson.

- The behavioral philosophy adopts the principles of behavior modification and precision teaching. Skills are sequenced, and target behaviors are specified. Slightly over 10% of the projects adopt this approach.
- Developmental learning is a combination of the child development philosophy and the behavioral philosophy. Twenty-five, or 38%, of the projects state that this is the theoretical basis for their programs.
- The medical model was cited only once. This model concentrates on medical diagnosis and therapeutic intervention with the child.
- The transactional model is a dyadic model in which the behavior of each individual—child or adult—influences the behavior of the other partner. The primary intervention is typically with the adult, who is taught to observe and interpret the infant's behavior and respond

appropriately to the infant's cues in a dyadic situation. Two programs (3%) use this approach.

Assessment Procedures

☐ Assessment procedures vary across programs. Seventy-two instruments were listed as being used for assessment. Only six of these were cited as being used for screening. Three programs stated that they screen but provided no information about instruments or procedures. Over 50% of the programs rely on referrals and seem not to have well-developed screening programs. Seventeen (25%) of the 67 programs gave no information regarding screening.

Nine programs (13%) refer children to other agencies for diagnosis. For those programs that do conduct diagnostic assessment, 26 instruments were reported. The most frequently used is the Bayley Scales of Infant Development (Bayley, 1969) (9 programs or 13%). The next most frequently used are those developed by the programs (8 programs or 12%). Fourteen programs (21%) gave no information about how the children are diagnosed.

Bayley Scales of Infant Development are used most frequently.

Of the 59 instruments used for ongoing assessment, the Bayley Scales of Infant Development (Bayley, 1969) are used most frequently (approximately 25% of the programs). The Hawaii Early Learning Profile (Furono, Inatsuka, Allman, & Zelsloft, 1979), the Denver Developmental Screening Test (Frankenburg, 1973), the Early Intervention Developmental Profile (D'Eugenio & Rogers, 1975), the Early Learning Accomplishment Profile (Glover, Preminger, & Sanford, 1978), and the Uzgiris-Hunt Scales for Ordinal Development (Uzgiris & Hunt, 1975) were each listed by six to nine of the programs. All other tests cited are used in fewer than six of the programs, and the majority of these were listed as being used in only one or two programs.

Over 70% of the respondents reported that they develop an IEP (individualized education program) for the child. The remainder provided no information.

A variety of curricula are used with the infants to implement IEPs.

A variety of curricula are used with the infants to implement IEPs. Over 60% of the respondents stated that an organized curriculum is used. No information was provided by the other 40%. One-fourth use a project-developed curriculum. Among the projects using a published curriculum, the most popular is the Hawaii Early Learning Program (16%) (Furono et al., 1979); next is the Portage Curriculum (6%) (Bluma, Shearer, Frohman, & Hilliarn, 1976). The Oregon Project curricular approach is used by three programs (4%). The remainder of the projects use curricula cited by no more than two projects each, most by only one.

Approximately 65% of the respondents stated that the staff member most frequently responsible for direct services to the child is the infant interventionist, sometimes referred to as the teacher. Others providing direct services to a much lesser degree are speech and language specialists, occupational therapists, physical therapists, paraprofessionals, social workers, parents, and psychologists. Five percent of the respondents provided no information on this subject.

Thirty-five percent keep logs or anecdotal records.

Approximately 35% of the projects keep logs or anecdotal records on the child. Thirteen percent reported using behavioral reporting techniques. Only 13% of the programs stated that they keep records of case conferences, and only 3% reported keeping attendance records. Three percent computerize their record-keeping system, but only 1.5% use videotapes to record behavior. Nine percent of the programs reported records on pre- and postassessment.

In response to the question, "Are deliberate plans and procedures developed to facilitate transition?", over 65% indicated "Yes," 15% stated "No," and 15% provided no information.

Family Involvement

☐ To receive funding as an HCEEP demonstration program, projects must include a parent involvement component. Thus, parent or family involvement is an important aspect of the projects surveyed. Many (70%) view both the parents and the child as the primary recipients of services. These are the programs that provide home or home and center services to help parents gain skills as the child's primary teachers or to improve parent-child interaction skills, thus enhancing the child's development. Other programs (22%), however, design services primarily for the parents. For example, the Training in Parenting Skills (TIPS) project has developed televised programs for parent education. Of the other projects (e.g., Supporting Extended Family Members), 8% involve fathers, siblings, and grandparents. Whether projects view the primary recipient of services as the child, the parent, or both, the majority (89%) do provide some type of service for both the child and the parent.

Many view both parents and child as primary recipients of services.

Traditionally, family involvement models have been based on the individual (e.g., parent counseling) or the dyad (e.g., parent-mediated interventions such as behavior management). Programs typically offer services for parents rather than the entire family, with the mother as the primary recipient. Families are complex, interdependent systems, however; what happens to one member affects all others (Bailey et al., 1986; Turnbull & Turnbull, 1986). A family systems approach to family involvement considers each family as unique, with its own needs and skills. Such an approach further suggests that for some families noninvolvement in the program may result in more time for the parents to be effectively involved with the children and other family members (MacMillan & Turnbull, 1983). Thus, in planning programs based on a family systems model, projects must assess the needs of families, develop family plans with goals and objectives based on the identified needs, select strategies or services based on these goals and objectives, and use appropriate evaluation techniques.

Programs typically offer services for parents rather than the entire family.

The majority of respondents (38%) indicated that they adhere to a family systems model in designing services to families. Many programs, however, continue to focus on individual parent models: parent training (28%), parent support (10%), behavioral approaches (4%), and psychosocial models (1%). Another 3% of the programs use parent-interaction models. It is interesting that 16% of the projects provided no information regarding their philosophical orientation for designing parent involvement services.

Respondents adhere to a family systems model.

Most of the projects surveyed (65%) conduct some type of family needs assessment. Of the remaining projects, 10% do not conduct needs assessments and 25% did not respond to this item. Procedures for assessing family needs include interviews, questionnaires/checklists, and videotapes. There is no consistency across projects, however, in the procedures used or in the type of information collected. Only 11 (16%) of the 67 projects conduct parent interviews, and only 1.5% use videotapes for assessment purposes. Forty-one different questionnaires/checklists

Most projects conduct family needs assessment.

are used by the projects, but only two of those are used by as many as three projects, with another four inventories used by up to two projects. Some of the questionnaires are standardized instruments, but most of the needs assessments are project-developed.

Although 65% of the projects assess family needs, only 50% develop family plans or incorporate family goals and objectives into the child's IEP. Of the remaining projects, 19% do not develop family plans and 31% did not respond to this item. One might ask, Why assess family needs if family goals and objectives are not developed? For what purpose is the needs assessment information being used?

Why assess family needs if family goals and objectives are not developed?

Most of the projects (79%) reported that they provide some kind of structured service to families. The remaining projects did not respond to this item. In a review of the literature, Welsh and Odum (1981) identified the following six components or kinds of service that are typically included in programs:

1. Social and emotional support.
2. Advocacy.
3. Decision making.
4. Family education/training.
5. Teaching by family members.
6. Communication.

With the exception of decision making, each of these was represented in the responses to the survey. The majority of projects, however, reported that they develop IEPs for children. If family members are involved in the development of those IEPs, then decision making can be included as a family involvement strategy. The most commonly available service is parent education/training through group sessions (37%), followed by program newsletters (28%) and social/emotional support activities through individual sessions (12%) and group sessions (11%). Table 6 lists all the types of services being provided.

The most commonly available service is parent education/training through group sessions.

Only 28% of the projects use a curriculum in the family involvement component. Most (57%) provided no information related to this issue, and 15% admitted that they use no curriculum. Of those that do use a structured curriculum, the majority are project-developed (58%).

In 32% of the projects, the entire team assists with the family involvement component. In 33% of the projects, the person responsible for family services varies depending on project design and family needs. Professionals who are typically involved in these projects include parent/infant specialists, social workers, program coordinators, case managers, and psychologists. Many of the projects (35%) failed to respond to this item.

Program Evaluation

☐ Most of the projects (70%) conduct structured evaluations of their programs based on goals and objectives. These projects did not specify their evaluation models. Outside evaluators are involved in 6% of the projects (no evaluation model specified), while 2% are monitored by outside agencies (e.g., Department of Mental Health/Mental Retardation). The Discrepancy Evaluation Model (Yavorsky, 1978) is used by 2% of the projects, and a single-subject research design by 2%. Only one project is involved in longitudinal research. Another 2% reported that they do not

Only one project is involved in longitudinal research.

Table 6. Family Involvement Services

Services/Strategies	Percentage of Programs Offering Service
Social/Emotional Support Services	
Parental support	
Individual sessions	12
Group sessions	11
Social activities	5
Information about or referral to other agencies	3
Parent-to-parent activities	3
Advocacy Activities	
Parent advisory committees	3
Parent education training	
Parent group sessions	37
Home visits	9
Classroom observations	5
Individual packets	3
Parent-child interaction sessions	3
Lending library	1.5
Fathers' workshops	1.5
Grandparents' workshops	1.5
Siblings' workshops	1.5
Family Members as Teachers	
Home	8
Center	6
Communication	
Newsletters	28
Local media articles	1.5
Progress reports	1.5
Daily notes	1.5
Telephone contacts	1.5

evaluate program effectiveness, and 17% provided no information about program evaluation.

DESCRIPTIONS OF MODEL PROGRAMS

☐ Twelve projects that responded to the survey are described here. The 12 were selected to represent a cross section of philosophical orientations, program goals and objectives, populations served, service delivery options, intervention strategies, and demographic regions (large city, small town, rural area). Another criterion for selection was the distinctiveness or "uniqueness" of services to children and families. Still another was that the answers to the survey were specific enough to allow an accurate description to be written. To determine the accuracy of program descriptions, the initial draft was mailed to each of the 12 projects.

These descriptions should provide sufficient information for readers to select models that may be appropriate for the areas in which they provide services. More detailed information about assessment instruments, products developed, or commercially used instructional materials also can be obtained from the project offices.

DEVELOPMENTAL EDUCATION-BIRTH THROUGH TWO (DEBT PROJECT)

Program has been funded through local tax dollars since 1977.

☐ The Developmental Education-Birth Through Two (DEBT) Project is a program of the Lubbock Independent School District, Lubbock, Texas, a city of more than 50,000. The program is unique in that it has been fully funded through Lubbock Independent School District's local tax dollars since 1977 and thus is an integral part of the school system. All appropriate local, regional, and state health, education, and social service agencies participate in service delivery. Approximately 40 agencies involved with young children with handicaps and their families participate in collaborative planning and sharing each month.

Characteristics of Children Served

Majority of children have multiple handicaps.

☐ The DEBT project serves children between the ages birth through 2 years with a variety of handicapping conditions: (a) orthopedically impaired, 12%; (b) mentally retarded, 4%; (c) health impaired, 16%; (d) speech and language impaired, 18%; (e) visually impaired, 2%; (f) multiply handicapped, 30%; and (g) developmentally delayed with no specific diagnosis, 18%. Thus, the majority of children served have multiple handicaps, with the next two largest groups of children having speech and language impairments or developmental delays with no known cause. The project serves children from a variety of cultural and ethnic groups: (a) 18% Black, (b) 39% Caucasian, (c) 42% Hispanic, and (d) 1% American Indian. Of the children served, 59% are males and 41% are females.

Characteristics of Families Served

Majority of families fall into lower or lower middle SES levels.

☐ The majority of children served by the DEBT project (55%) are members of two-parent families. The remainder live primarily in single-parent families with the mothers as heads of household (17%) or in extended families (19%). Some of the children (7%) live in foster homes. None of the children live in single-parent families with the fathers as head of household. Based on education and income levels, the majority of the families would fall into lower or lower middle SES levels. Twenty-eight percent of the fathers and 25% of the mothers have completed elementary or junior high school only; 50% of the fathers and 56% of the mothers have completed high school; and 13% of the fathers and 19% of the mothers have completed an undergraduate college degree. Information was not available for 8% of the fathers. The breakdown for income levels is as follows: (a) below $10,000, 22%; (b) $10,000-$15,000, 19%; (c) $15,000-$20,000, 20%; (d) $20,000-$25,000, 31%; (e) $25,000-$50,000, 7%; and (f) above $50,000, 1%.

Service Delivery Options

☐ The DEBT project provides services through a combination home and center-based option. The majority of services, however, are provided in the home setting, where intervention occurs for approximately 1 to 2 hours, 1 to 2 days per week. Intervention sessions focus on both the parent and the child. Therapy sessions (e.g., occupational therapy, physical therapy) may occur in the center, depending on individual children's needs.

Staffing Patterns

☐ The DEBT project employs a variety of professionals and paraprofessionals to provide services to children aged birth through 2 and their families. Efforts are made to function as a modified transdisciplinary team. The recommendations of team members are jointly shared and incorporated into the IEP. Program staff includes one administrator, six infant interventionists, one family interventionist, one speech therapist, two paraprofessionals, one bus driver, one educational diagnostician, and five volunteers. Specialized services are provided contractually. This includes assistance from one psychologist, three physical therapists, one occupational therapist, one speech therapist, and one social worker. The infant interventionist spends the greatest amount of time with the child and the family. Other services, with the exception of the psychologist and the social worker, are readily available as needs are identified.

Efforts are made to function as a modified transdisciplinary team.

All of the persons working with the project, with the exception of the bus driver and the paraprofessionals, have BS degrees or higher. Needs for staff development are determined through periodic individual and group surveys. The project administrator is then responsible for planning appropriate activities, including weekly staff meetings and staff sharing, use of community experts, workshops, and literature reviews.

Services for Children

☐ The DEBT project is a developmentally based combination home and center intervention model. Primary services to children are provided through weekly home visits. Center-based activities include weekly play groups and therapy sessions (e.g., occupational therapy, speech therapy).

Primary services are provided through weekly home visits.

Children are carefully screened and provided with a diagnostic evaluation before being placed in the program. The Denver Developmental Screening Test (Frankenburg, 1973) is the primary screening instrument used. Diagnostic assessment instruments include the Koontz Child Development Scale (Koontz, 1974), the Vineland Social Maturity Scale (Doll, 1965), the Bayley Scales of Infant Development (Bayley, 1969), and the Receptive-Expressive Emergent Language Scale (REEL) (Bzoch & League, 1978). Other assessment instruments or procedures are used depending on individual children's needs. For example, the Hawaii Early Learning Program (HELP) (Furono et al., 1979) is used for program planning.

Implementation of the IEP is monitored through daily and weekly records.

Each child has an IEP with long-term 3 months and weekly objectives in each developmental area identified as needing intervention. A variety of commercial and teacher-made curricula and materials are used to implement the IEPs. These include the Koontz Child Developmental Program (Koontz, 1974), Hawaii Early Learning Program (HELP) (Furono et al., 1979), Teaching Research Curriculum (Fredericks, 1976), and Teaching Down Syndrome Children (Hanson, 1977). Implementation of the IEP is monitored through daily and weekly records. Daily logs document all services provided including time and cost factors. Anecdotal notes regarding the weekly plans and programs are also recorded.

Family Involvement

The infant interventionist is primarily responsible for assisting parents with teaching skills.

☐ Parents are an integral part of the DEBT project. The combination home- and center-based model is designed to help parents become effective teachers of their children, find appropriate community resources, and share and explore their feelings with other parents. Through the weekly home visits, parents acquire the skills they need in working with their children. The DEBT project has also been instrumental in establishing a nonprofit center, a Parent Cottage, which provides a homelike environment where parents can meet weekly for sharing and learning. The infant interventionist is primarily responsible for assisting the parents with teaching skills. However, if a child is receiving any type of therapy (e.g., physical therapy, speech/language therapy), that therapist also teaches the parent how to continue the therapy in the home. The family interventionist (parenting consultant) facilitates group meetings.

Family needs are determined through formal and informal observation, interviews, and completion of a project-developed survey. Goals and objectives for the family are then incorporated into the child's IEP. Daily records of all direct services are maintained. These include services rendered, time spent, staff involved, and costs.

Program Evaluation

☐ Both formative and summative program evaluation data are collected. A variety of information is considered in determining overall program effectiveness: cost, child progress, case studies of children and families, and the ability of individual families to function.

SUPPORTING EXTENDED FAMILY MEMBERS (SEFAM)

Services are provided to traditionally underserved family members.

☐ The SEFAM project is unique in that it does not provide direct services to children. Instead, services are provided to traditionally underserved family members through three project components. The Fathers Program is designed to provide fathers of handicapped children ages birth to 5 years with information and peer support through a twice-monthly program facilitated by a professional-parent team. The Siblings Program consists of quarterly meetings at which siblings between the ages of 7 and 12 have opportunities to meet other siblings, develop friendships in the context of social activities, meet with group leaders to discuss their concerns, and learn more about their siblings' handicaps. The Grandparents Program also consists of quarterly meetings that provide grandparents of children with handicaps opportunities to access peer support and obtain answers to their questions about their grandchildren's handicaps.

The SEFAM project was initially administered by the University of Washington, Seattle, but is now administered by three agencies. Merrywood School for the Handicapped, Bellevue, Washington, administers the Fathers Program, while the Grandparents Program is administered by the Advocates for Retarded Citizens of King County, Washington. The Siblings Program continues to be offered through the University of Washington. These programs are offered in an urban area (population more than 50,000).

The SEFAM programs supplement, rather than supplant, direct service programs for children with handicaps and their families; therefore, staff do not formally coordinate with other agency staff. An important component of all three programs, however, is the information component, in which SEFAM staff provide family members with information on community resources for the child and the family. Staff routinely refer families to intervention programs for their children and to auxiliary services (e.g., respite care or recreational programs) that would benefit the family system.

Characteristics of Families Served

☐ Families are recruited for the local programs through announcements sent to developmental disabilities centers and hospitals, as well as through newspaper announcements. The family members served by this project are primarily from middle-class, Caucasian, two-parent families. Sixty-one percent of the fathers and mothers have undergraduate college degrees; 22% of the fathers and 6% of the mothers have graduate degrees; 6% of the fathers and 11% of the mothers have only high school educations. The handicapped children in these families have a variety of handicapping conditions: (a) 61% Down syndrome, (b) 11% cerebral palsy, (c) 6% multiply handicapped, and (d) 22% other conditions or syndromes (e.g., hydrocephalus). The majority (56%) of the children with handicaps are male.

Family members are primarily from middle-class, Caucasian, two-parent families.

Service Delivery Options

☐ Meetings for each of the three components are held at a center. The Fathers Program meets for 1 to 2 hours every 2 weeks. Both the Siblings and the Grandparents Programs meet once every 3 months.

Staffing Patterns

☐ Project staff include two coordinators, one for the Fathers Program and one for the Grandparents Program. The Fathers Program also provides outreach services. The outreach component has an administrator and contracts with professionals to fill the roles of evaluator, editor/writer, and programmer. The editor/writer and programmer have master's degrees; the evaluator has a PhD. Other professionals such as psychologists and physical therapists are often called upon to assist with or present at meetings.

Family Involvement

❑ The SEFAM project is based on a family sustems orientation. By serving traditionally underserved members of the child's family (i.e., fathers, siblings, and grandparents), the project staff believe that they can indirectly benefit the handicapped child by making more informed and supported caregivers available, both while the child is young and as the child grows and develops.

The assessment of the family members' needs occurs through administration of the Beck Depression Inventory (Beck & Beamesdorfer, 1974), Inventory of Parents' Experiences (Crnic, Greenberg, Ragozin, & Robinson, 1982), Questionnaire on Resources and Stress (Holroyd, 1974), Family Environment Scale (Moos, 1974), and Parent Role Scale (Gallagher, Cross, & Scharfman, 1981). Family plans are not developed.

Needs are met through scheduled meetings and newsletters.

Family members' needs are met through regularly scheduled meetings and newsletters. The Fathers Program meets twice a month at Merrywood School. *Focus on Fathers*, a newsletter, is published quarterly. Sibling workshops are held quarterly by the Association for Retarded Citizens of King County, who also publish a quarterly newsletter, *Especially Grandparents*. Curricular materials for each component have been developed: *The Fathers Program* (Meyer, Vadasy, & Fewell, 1984), *Sibshops* (Meyer, Vadasy, & Fewell, 1985), and *Grandparent Workshops* (Meyer & Vadasy, 1986).

The SEFAM staff at the University of Washington continue to consult with community staff and assist in the local demonstration programs. This assistance takes the form of help in fundraising, program evaluation, and dissemination.

Program Evaluation

Fathers Program is rigorously evaluated.

❑ The Fathers Program is rigorously evaluated. All of the participating fathers and their wives participate in a longitudinal, field-initiated research study of the impact of program involvement on both parents. Variables investigated are the effects on stress and depression, access to and satisfaction with social supports, family role orientation and satisfaction, and parents' problem-solving skills.

EARLY CHILDHOOD DAY CARE MODEL PROJECT

Purpose is to integrate handicapped into regular day-care settings.

❑ The Early Childhood Day Care Model Project is a program of the Region XIX Education Service Center in El Paso, Texas. The primary purpose of the project is to integrate handicapped infants and toddlers into regular day-care settings. This project, which serves a large city area (500,000+ population), works cooperatively with the Texas Education Agency, Early Childhood Intervention, the El Paso Rehabilitation Center, Life Management, physicians, and other agencies and individuals providing referral and childfind services. Agencies such as Early Childhood Intervention refer handicapped children and their families who need childcare services or an environment for the child that promotes socialization skills.

Characteristics of Children Served

☐ The majority of children involved in the project (64%) are 2 to 3 years of age. All are over 7 months of age. The children represent a variety of handicapping conditions: (a) multihandicapped with cerebral palsy, 58%, (b) health impaired, 19%, (c) speech/language impaired, 8%, (d) developmentally delayed with no known cause, 8%, and (e) visually impaired, 7%. Fifty-four percent of these children are considered moderately handicapped, while another 35% are severely handicapped. The majority of the children served are males (54%). A variety of cultural and ethnic backgrounds are represented: (a) 46% Hispanic, (b) 46% Caucasian, (c) 4% Black, and (d) 4% Oriental.

54% are moderately handicapped, 35% severely handicapped.

Characteristics of Families Served

☐ The parents' incomes and educational levels place most of the families represented in a lower SES. All of the mothers and fathers are high school graduates, with the exception of one father who has an undergraduate college degree. The income levels are as follows: (a) below $10,000, 38%; (b) $10,000-$15,000, 12%; (c) $15,000-$20,000, 27%; (d) $20,000-$25,000, 15%; and (e) $25,000-$50,000, 8%. Most of the families served (60%) are two-parent families.

Service Delivery Options

☐ Children served by the Early Childhood Daycare Model Project are placed in center-based day-care facilities. The majority of children attend the day-care program for 1 to 2 hours 1 to 2 days per week. Attendance, however, ranges from 2 hours 1 day per week to full-day sessions 5 days per week.

Staffing Patterns

☐ The project staff include an administrator, a coordinator, psychologists, and two paraprofessionals. All staff have a minimum of a BS degree, with the exception of one of the paraprofessionals, who is a high school graduate. The staff meet on a regular basis to share information about individual cases and obtain input from team members. Staff attend staff development workshops throughout the year. In addition, any day-care staff who desire additional training are given community college credit to attend workshops at least three times a year.

Staff meet on a regular basis.

Services for Children

☐ The primary goals of the Early Childhood Day Care Model Project are to identify day-care centers willing to accept children with handicaps, to identify families with handicapped children that desire day-care services, and to enroll infants and toddlers in the day-care programs. Children are initially referred to the project by community agencies and physicians, who conduct screenings.

Children are initially referred by community agencies and physicians.

Each child has an IPP (individual program plan) which stresses socialization skills. Curricular and instructional materials vary depending on what is used in the day-care setting. Each child receives direct services from the project paraprofessionals and therapists (e.g., physical therapist). The case manager maintains contact with the center as well as the family.

Family Involvement

☐ Through participation in this project, family members receive some respite from care of the child, and regular work schedules can be maintained. Family needs are determined through initial intake forms and consultation. Records from the referring agencies may also provide information about family structure and family needs. Formal family plans are not developed; however, goals and objectives are determined in the initial consultation.

All parents are invited to support group sessions. Training seminars are also provided. In addition, individual consultations are held on a regular basis with each family. All personal contacts, as well as letters and phone calls, are documented.

Program Evaluation

☐ Program effectiveness is determined primarily by measuring the attitudes of day-care center staff in accepting children with handicaps and the parents' attitudes about leaving their children in the day-care setting.

TUESDAY'S CHILD

Designed for families with increasing conflict in parent/child relationship.

☐ Tuesday's Child was developed in 1980 as the Early Intervention Project at Children's Memorial Hospital in Chicago and became a separate, not-for-profit organization in June 1984. It is designed for families who experience increasing conflict in the parent/child relationship. In these families, day-to-day interactions over going to bed, eating meals, or getting dressed may turn into terrible struggles between the parent and young child. Tuesday's Child offers an intensive parenting program designed to improve the parent/child relationship and offset future problems. It also has a Child Center that provides a carefully planned social and educational environment for the enrolled children. In the Child Center, staff members can observe the child to identify developmental disabilities and can work individually to enhance each child's developmental functioning. A close liaison is maintained with the Chicago Public Schools' early childhood program and suburban early childhood programs.

Characteristics of Children and Families Served

Parents come because of difficulty in managing their children's behavior.

☐ Tuesday's Child serves families with children ages 18 months through 5 years. Parents come to the program because of difficulty in managing their children's behavior. Approximately 45% of the children with behavior problems have concomitant handicapping conditions. These cover a broad range and include hyperactivity/ADD, developmental delays, language problems, pervasive developmental disorders, health problems, and early signs of learning disability. The majority of the children served are male (82%). The family structure is primarily two-parent (89%) and Caucasian (86%).

Service Delivery Options

☐ Tuesday's Child is a center-based model. Parents attend the parenting program twice each week for 2 and 1/2 hours. Children are in the Child Center while their parents are in the parenting program. Children may also attend additional 2 and 1/2 hour sessions in the Child Center. A special 2 and 1/2 hour program for working families is conducted on Saturday.

Staffing Patterns

☐ Tuesday's Child has the following staff: a psychologist (executive director), an MA-level early childhood specialist (program director), two MA-level Child Center teachers, and one 3/4-time BA-level Child Center teacher. The center also has about 40 volunteers each year, many from area universities and colleges. Diagnostic evaluations are completed contractually. Parents who have participated in the program must also serve as paraprofessional trainers for other parents. Child Center teachers provide services to children, while the early childhood specialist, the psychologist, and the paraprofessional trainers have the greatest contact with parents. The Child Center staff have weekly planning meetings. The program director also meets weekly with volunteer Child Center staff.

Parents must also serve as trainers for other parents.

Services for Children

☐ Tuesday's Child is a behaviorally oriented program based on social learning theory. Families are initially screened in a 1 and 1/2 hour interview with a professional staff member while the child is observed in the Child Center program. Parent/child interaction is assessed at each visit to the center using a 10-second interval recording system. The child is observed in the Child Center by the program director and teacher to detect potential developmental problems. If developmental disabilities are suspected, a formal diagnostic evaluation is conducted using instruments appropriate for the individual child.

The child's IEP focuses on social skills, with skill acquisition in other developmental areas considered secondary. Three major areas are identified for each child: compliance with teacher requests, time on task in individual and group activities, and interaction at an age-appropriate level with peers. The curriculum and instructional strategies are based on social learning theory. No specific commercial curricula are used. Teachers meet weekly to record observations on each child's attainment of objectives.

Teachers meet weekly.

Transition into public school programs is facilitated by the staff. The program director makes telephone contact with the school district and frequently attends staffings. The results of diagnostic evaluations are available to the school districts. Many of the children, however, are able to make the transition to regular community preschools without staff involvement.

Family Involvement

☐ The parent component of Tuesday's Child is also based on social learning theory. Each paraprofessional trainer interviews an incoming parent on the child's behavior at home, using the Strengths/Needs

Inventory (Lavigne, 1984). Each parent lists objectives for changing the child's behavior at home. A supervising staff member prioritizes and approves these objectives. The parent then implements the objectives at home. Behavior management strategies are applied and data are collected.

Each parent meets weekly with a paraprofessional and in a parent group.

Each parent meets weekly with a paraprofessional and also participates in a weekly parent group. An important part of parent training is a 20-minute parent/child play session conducted at each visit. In this session, the parent instructs the child to play with a particular toy. The parent issues a new instruction every 2 minutes. During these play sessions, the parent has the opportunity to practice the application of differential social reinforcement under the supervision of a trainer. The parent thus receives feedback and encouragement for attempts to practice use of new child management strategies. The psychologist supervises the paraprofessionals and conducts the majority of parent groups (75%); the early childhood specialist conducts the remainder of the parent groups. After parents complete the training with their child, they are required to serve as instructors for new participants. Parents are also active in disseminating the project (e.g., through a speaker's bureau) and in fundraising activities.

Records of child and parent progress are maintained regularly.

Records of child and parent progress are maintained regularly. Parent/child interactions in specially designed play sessions are graphed. In addition, objectives listed on the Strength/Needs Inventory are monitored and checked off when completed.

Program Evaluation

☐ Observational data from parent-child interactions are used in a single-subject applied behavior analysis design to demonstrate the impact of the program for each parent-child dyad. An evaluation of Tuesday's Child from 1980 to 1983 was recently conducted with the help of an outside evaluator. Results are not yet available.

ADOLESCENT-INFANT DEVELOPMENT PROGRAM

The aim is to assist adolescents in understanding their roles as parents.

☐ The aim of the Adolescent-Infant Development Program is to assist adolescents in understanding their roles as parents by enhancing their understanding of child development and helping them integrate family functions into everyday life. Funded as an HCEEP demonstration project from 1983-1986, the program is now administered by the Howard University Hospital, Department of Pediatrics. Collaborative efforts are maintained with the Washington, D.C., public schools and the Child Development Center of Howard University.

Characteristics of Children and Families Served

☐ Most of the families served by this program could be characterized as lower SES, as indicated by income and education. Most of the parents are high school students, but the program has also begun to serve younger parents, including those in junior high and elementary school. The incomes are all less than $20,000 per year, with the majority falling below $10,000 or between $10,000 and $15,000. The families represent cultural and ethnic minorities. Most are single parent, Black families with the mothers as heads of household. Only a small number are two-parent or extended families. The typical infant is less than a year old, male, and at risk for developmental delays.

Most are single parent Black families.

Service Delivery Options

☐ The service delivery model varies depending on the needs of the parent and child. A combination home-and-clinical model seems prevalent, although most families are served via home visits. The time spent with the parent and child also varies depending on individual needs. Visits range from a half hour to a full day in length and may occur only once every 2 months or as frequently as 5 days a week. The typical pattern, however, seems to be 1 to 2 hours, 1 to 2 days a week.

Most are served via home visits.

Staffing Patterns

☐ Program staff include a half-time administrator, a coordinator, an infant interventionist, a social worker, and an administrative assistant/ dissemination coordinator. All staff except the administrative assistant have an MS degree or higher. The infant interventionist and the social worker are the primary family contacts.

Services for Children

☐ The Adolescent-Infant Development Program is developmentally based and adheres to the theoretical models of Piaget and Erikson. Children are initially assessed with the Brazelton Neonatal Behavioral Assessment Scales (Brazelton, 1973) and the Bayley Scales of Infant Development (Bayley, 1969). Other diagnostic evaluations are obtained from other clinics/resources as needed. The Education for Multi-Handicapped Infants (EMI) (Elder, 1975) is used for programming purposes. IEPs are developed, and the Education for Multi-Handicapped Infants is used along with other curricula to implement IEPs.

Family Involvement

☐ The family component of the Adolescent-Infant Development Program focuses on direct social services. After the birth of the child, the parent's needs are assessed using the Iowa Parenting Skills Needs Checklist. Several strategies are then employed to meet parents' needs. Parents may attend group meetings; they may become involved as volunteers in the center program; they may be provided with informational sheets; and they may learn appropriate games or activities for use with their children.

Program Evaluation

☐ Program effectiveness is measured by the accomplishment of program objectives in quantifiable terms by specifically set criteria. Cost-effectiveness data are also collected.

PROJECT LINKING INFANTS IN NEED WITH COMPREHENSIVE SERVICES (LINCS)

☐ Project LINCS was developed by faculty of the University of Missouri at Columbia. The project is currently administered by the Missouri Department of Mental Health (the Regional Center for the Developmentally Disabled) and the Missouri Department of Health (the community health units). The University of Missouri has a LINCS Outreach Project. The administrative office for the project is in the Central Missouri Regional Center, Columbia, Missouri, Department of Mental Health.

The heart is interagency collaboration.

At the heart of the LINCS program and model is interagency collaboration. The program is designed to provide a systematic process for linking the expertise of regional service centers with community agency personnel who have direct and systematic access to children and families. The project is specific to rural areas where access to services and the unique characteristics of the child and the family require an adapted service delivery model. Using a team approach, regional personnel train designated community agency personnel to assist parents in providing developmental stimulation or implementing specific home-based intervention programs. Initial training is followed by systematic case management contacts and technical assistance. Emphasis on these latter aspects increases the effectiveness of case findings and direct intervention and decreases the professional isolation often characteristic of human service personnel in rural areas.

The focus of the intervention is the general development of children who are at risk for developmental delays or disabilities or who have developmental delays or specific handicapping conditions. The unique features of this model are two: (a) a process for establishing and maintaining regional-community linkage for service delivery in rural areas and (b) consideration of rural/community issues.

Characteristics of Children and Families Served

Project serves birth to 3 in a rural area.

☐ The project serves children from birth to 3 years of age in a rural area of fewer than 2,500 people. The children served are primarily mildly and moderately mentally retarded, but other handicaps are included. The children are predominantly Caucasian; only one is Black. The largest number of children fall into the 2- to 3-year age group. A large percentage of the children come from low-income homes.

Service Delivery Options

☐ The service is delivered in the home, and the length of sessions for children and parents is approximately 1 hour. Most children and their parents are seen at home for 1 hour once or twice a month.

Staffing Patterns

☐ Regional service center personnel use a teaming model to integrate and enhance the expertise of direct service providers in the community. Staff development is the responsibility of the regional service center, and these activities are determined by the regional service center staffing patterns. The staff includes a psychologist, a physical therapist, an occupational therapist, an infant interventionist, a speech therapist, a physician, a nurse, a social worker, and paraprofessionals. All are employed by the regional center, with the exception of the physician and the nurse, who are jointly employed by the regional center and a community agency. A community agency provides the paraprofessionals. The two staff members who are readily available are the nurse and the social service agency paraprofessional. The nurse is the key infant interventionist.

Services to Children and Families

☐ Regional service centers provide inservice training to community agencies concerning case finding strategies, eligibility criteria, referral processes, and screening. The community agency identifies someone to work with families of infants, and the Regional Service Center provides the training. There are no set instruments for developmental assessment; the nature of the population and the choice of instruments are the responsibility of the regional service center. A multidisciplinary evaluation is conducted by regional service center personnel.

In theoretical orientation, the model is ecological and Piagetian. Individualized programs are developed and maintained by the regional service center. A project-developed activity manual and resource guide are used to develop an individualized plan.

Model is ecological and Piagetian.

Family involvement varies depending on the needs of the family and the community agency upon whose caseload they appear. Strategies to involve parents include parent groups, direct teaching of their infants, and work on newsletters.

The regional service center is responsible for transition. It is a case management function of the center to link with the receiving agency.

Program Evaluation

☐ The effectiveness of the program depends on the linkage of regional service centers and community agencies to provide service delivery. The following variables are evaluated with the Concern-Based Appraisal Model:

1. Community agencies' use of critical components on specific intervention strategries referred to as the "Levels of Use" instrument (LOU), which assesses the patterns or areas of concern (SOC), level of skill acquisition, and maintenance in new areas of programming.
2. Agency administration satisfaction with the model and the linkage.
3. A community system—the degree to which interagency coordination occurs and linkages of service networks expand.

PROGRAM FOR CHILDREN WITH DOWN SYNDROME AND OTHER DEVELOPMENTAL DELAYS

☐ The agency that administers the program for children ages birth to 18 months with Down syndrome and other developmental delays is the Child Development Center located at Sumner, Washington. Other agencies that participate in the delivery of services are the Sumner School District, Division of Developmental Disabilities, Pierce County Health Services, Bureau of Developmental Disabilities, First Christian Church of Sumner, and the Model Preschool Outreach Program, University of Washington. In addition, a close working relationship is maintained with other local public schools and the Association for Retarded Citizens. Referrals to other public agencies such as the Child Development Mental Retardation Center and Children's Hospital and private sources are made when appropriate.

The goal of this birth-to-3 program is to facilitate the development of young children with developmental delays by providing educational programming with the support of physical, occupational, and speech therapy services and to provide support and training to families.

Toddler program is center based.

The toddler program (18 months to 3 years) is center-based, with a strong parent involvement component. Programs at all levels implement the systematic process of instruction, including assessment; establishing goals and objectives; planning a program that allows the child to succeed; implementing the program; and evaluating the program's daily data collection, quarterly IEP updates, and annual pre- and postdata analysis. The curriculum includes instruction in gross and fine motor, cognitive, communication, and social and self-help skill areas. Home programs emphasize activities that can be incorporated into the families' daily routines.

Characteristics are mainstreaming and quality of systematic intervention.

The distinguishing characteristics of this model are the mainstreaming of preschoolers with handicaps with children who do not have handicaps and the quality of systematic intervention with both children and their families. The project also has a hands-on training program that encourages persons from the community, students, and parents to volunteer in the project. The Parent Trainer and Coordinator have developed an innovative method of training that does not intimidate but encourages willing volunteers and trainees.

Characteristics of Children and Families Served

☐ This project serves small towns with populations under 25,000. The children served are at risk for developmental delays or disabilities, have developmental disabilities, or are diagnosed as having disabilities or handicapping conditions. Of the 39 children currently receiving services, 37 are diagnosed as mentally retarded, 1 as health impaired, and 1 as blind. The children's ages range from 0-6 months (2) to 2-3 years (18). Fourteen of the children are between ages 1 and 2, and 5 are between the ages of 7 and 12 months. All are Caucasian. Twenty-two are female and 17 male.

The great majority of the children (31) are from two-parent families. Only 4 are from single-parent families with the mothers as heads of household, and 4 are in foster homes.

Service Delivery Options

Parents have a choice during infant period.

☐ The infant program (birth to 18 months) serves infants and their parents, with the therapist and teacher working individually with infants and parents. Parents have a choice of a home- or center-based program during the infant period. Sessions are 1 to 2 hours in length, and parent and infant are seen one to two times a week. The early preschool (18 months to 3 years) is center-based, with a strong parent involvement component. It meets 4 days a week; sessions are half a day in length.

Staffing Patterns

☐ The project employs an administrator, a parent coordinator, a psychologist, a physical therapist, two occupational therapists, a speech therapist, teachers, and a concepts therapist. Volunteers are also used. Four of the staff have master's degrees; the psychologist has a PhD. Teaming is facilitated by monthly meetings of teachers, parents, and support staff. Classroom staff interact daily with support staff.

Classroom staff interact daily with support staff.

The director is responsible for staff development, and a needs assessment is conducted informally at weekly staff meetings. Staff attend workshops and conferences and consultants are brought in to meet their needs. The Model Preschool Outreach Staff also provide inservice training.

Services for Children

☐ Programs at all levels implement the systematic process of instruction, including assessment, establishing goals and objectives, planning a program that allows the child to succeed, implementing the program, and evaluating the child through daily data collection, quarterly IEP updates, and annual pre- and postdata analysis. The curriculum includes instruction in gross and fine motor, cognitive, communication, and social and self-help skill areas.

Objectives are obtained from the Classroom Assessment of Developmental Skills (Oelwein, Fewell, & Pruess, in press), supplemented with the Brigance Diagnostic Inventory of Early Development (Brigance, 1978). The program uses a developmental approach in all skill areas. Plans for specific intervention strategies are developed jointly by parents, teachers, and support staff, based on specific needs of the child and the family. Learning activities are designed to use the child's natural environment and daily routine at home and school. These activities span the stages of learning—acquisition, practice to proficiency, and transfer and generalization. Positive adult-child interaction is emphasized, using techniques of "turn-taking."

Learning activities use natural environment and daily routine.

Individualized education programs (IEPs) are developed on a yearly basis, with quarterly updates in which all team members, including the parents, participate. Additional teaming is facilitated through monthly meetings of teachers, parents, and support staff. Classroom staff interact with support staff on a daily basis.

The Alpern Boll Developmental Profile (Alpern & Boll, 1972) is the screening instrument used, and referrals come from physicians, the Department of Developmental Disabilities, public schools, parents, and therapists. Instruments used in assessment and diagnostic evaluation are the Classroom Assessment of Developmental Skills (Oelwein et al., in press), Battelle Developmental Inventory (Newborg, Stock, Wnek, Guibaldi, & Svinicki, 1984), Bayley Scales of Infant Development (Bayley, 1969), Peabody Developmental Motor Scales (Folio & Fewell, 1983), and the Sequenced Inventory of Communication Development (Hedrick, Prather, & Tobin, 1984).

Services to Parents

Occupational therapist and teachers are primary staff working with parents.

☐ Parents are involved in a number of ways through newsletters, direct teaching, and monthly parent workshops. The occupational therapist and teachers are the primary staff working with parents of infants. A parent coordinator is responsible for parent meetings and workshops and for training volunteers. The Child Development Center staff maintains a close working relationship with the local public schools, the Division of Developmental Disabilities, the Association for Retarded Citizens, and the Model Preschool Outreach staff of the University of Washington to facilitate transition. In addition, referrals to other public agencies (e.g., Child Development and Mental Retardation Center, Children's Hospital) and to private sources are made when appropriate.

Program Evaluation

☐ Annual monitoring of the program and collection of data are conducted by the Division of Developmental Disabilities and Pierce County Social and Health Services. Data from the Classroom Assessment of Developmental Skills (Oelwein et al., in press) are reported to outreach staff, and complete analyses of individual and group gains are provided.

MACOMB 0-3 RURAL PROJECT

☐ The Macomb 0-3 Rural Project was administered during its development stage by Western Illinois University at Macomb. The McDonough County Rehabilitation Center and the Fulton County Rehabilitation Center now serve as continuants for direct services and demonstration of the model. The foci of the model are (a) providing an effective education/remediation program for optimal development of handicapped infants in rural areas and (b) helping parents who live in rural areas acquire skills and knowledge to become more effective in dealing with their children. The program serves rural communities with populations of less than 50,000.

Only rural model approved by JDR panel.

This model was one of the first rural federally funded birth-to-3 programs and is the only rural 0-3 model approved by the Joint Dissemination Review Panel at the federal level. This panel reviews the project according to a set of criteria and determines whether or not it is worthy of being nationally disseminated.

Characteristics of Children Served

Most are developmentally delayed.

☐ The children served are those at risk for developmental delays or disabilities, those who have developmental delays, and those diagnosed as having disabilities or specific handicapping conditions. Of the children served, most are developmentally delayed with no specific diagnosis (38%). The second largest category comprises children with speech and language impairments (21%). Others included in the program are children who are orthopedically/physically impaired (2%), mentally retarded (9%), health impaired (15%), visually impaired (2%), multihandicapped (4%), and at risk for delays (9%). Nine percent of the children are 12 months old or younger, 49% are between 1 and 2 years of age, and 42% are between 2 and 3 years of age. The majority of the children (98%) are Caucasian;

the other 2% are Black. Sixty-four percent of the children are male, 36% female.

Characteristics of Families Served

☐ A high proportion of the families (66%) are classified as having low incomes, below $10,000. Only 2% of the families have incomes above $50,000. Of the remaining families, 11% have incomes between $25,000 and $50,000, 2% between $20,000 and $25,000, 13% between $15,000 and $20,000, and 6% between $10,000 and $15,000.

The majority of the fathers (63%) and mothers (60%) have high school educations. However, 30% of the fathers and 33% of the mothers have attended undergraduate school. The other 7% have only an elementary education.

Service Delivery Options

☐ The delivery system is home plus center. Both parent and child are provided services for 1/2 hour to 1 hour per session. On the average, children and parents are seen once a week.

Staffing Patterns

☐ Each of the two demonstration sites is staffed by an administrator (MS), a coordinator (BS), three infant interventionists (BS), a social worker employed by the program, a psychologist, two physical therapists (BS), an occupational therapist, a nurse (PhD), a counselor, and a nutritionist. Of the ancillary staff members, the occupational therapist, physical therapist, parent/infant specialist, speech therapist, and social worker are readily available. The others are available, but not readily. No volunteers or paraprofessionals work in the program. Compared with other staff, the parent/infant specialist spends the greatest amount of time with the infant and the family.

The specialist spends the greatest amount of time with the infant and family.

The flexibility of the team working with infants and parents permits shifting of responsibilities. Communication among team members is important to the success of the program. A needs assessment is conducted with staff through the use of a questionnaire, and professional growth goals are defined and activities provided accordingly.

Services to Children

☐ Referrals come to the project from doctors, hospitals, the Department of Children and Family Services, the Public Health Department, school personnel, mental health centers, and the general citizenry. All children referred to the project receive screening and diagnostic services. Screenings are also conducted periodically in conjunction with community organizations.

The standardized instruments used in developmental assessment are the Receptive-Expressive Emergent Language Scale (REEL) (Bzoch & League, 1978) and the Alpern-Boll Developmental Profile (Alpern & Boll, 1972). In addition, information from the physician and the occupational therapist is obtained the first month the infant receives services. The child's hearing and vision are evaluated by an audiologist and a vision specialist.

Theoretical orientation is Piagetian.

The theoretical orientation of the model is Piagetian. The goals emphasize gross motor, fine motor, cognitive, social, communication, and self-care skills. After 4 weeks of attendance in the program and observation by the parent/infant educator, goals and objectives for the child are determined, taking the parents' concerns into consideration. A core curriculum developed by the project is then implemented.

The core curriculum is based on four sets of principles: (a) general principles of growth and development, (b) selected Piagetian principles related to the sensorimotor and preoperational periods, (c) principles related to language development, and (d) specific therapy techniques for handicapping conditions. The instructional materials used are the Macomb 0-3 Core Curriculum and Have Wagon: Will Travel, the materials used in the sharing centers for parents. The Computer-Oriented Record-Keeping Enabler (CORE) allows the staff to store goals and objectives for the IEPs. The parent-infant educators, also called child development specialists, are responsible for intervention with the infant.

Family Involvement

The parent is the primary change agent.

☐ The basic assumption of the model, so far as the family component is concerned, is that the parent is the primary change agent and that the parent's cooperation and enthusiasm are essential to the success of the program. The project follows a plan for parents similar to the IEP for the child. These plans delineate strengths and needs, the major outcomes expected, criteria, procedures and times for determining success, specific intervention services, and a timeline for services.

Caseworker and social worker are responsible for working with families.

Families are involved in the program through support groups, monthly newsletters, and participation as aides to teachers. The caseworker and social worker are primarily responsible for working with families. They function as consultants, parent/family educators, case managers, counselors, and advocates.

Transition Activities

☐ The Outreach Macomb 0-3 Project participates in local agency activities; provides inservice training; and coordinates efforts among local preschools, public school programs, and Head Start on transition to other programs. The receiving teacher makes observational visits to each child's early childhood program. The early intervention program shares information with the receiving teachers during team meetings and at individual conferences. Written reports are also provided to ensure the child's smooth transition to the next level. The program is evaluated by measuring child progress, parent participation, and staff and parent satisfaction.

MULTI-AGENCY PROJECT FOR PRESCHOOLERS (MAPPS) (0-5)

☐ The MAPPS Project is located at the Developmental Center for Handicapped Persons on the campus of Utah State University. The project works with agencies including rural preschools for the developmentally delayed, Head Start programs, the Navajo Reservation, Air Force

Family Support Centers, and high school programs for adolescent mothers and their infants.

The theoretical orientation of the program is developmental and behavioral. For each child an individualized program is developed and the method of delivery is based on the individual needs of the child and the family. The focus of the MAPPS Project is to provide parents, caretakers, and teachers of children age 0 to 5 years with assessment and appropriate intervention curriculum materials for use in the areas of their deficits.

Theoretical orientation is developmental and behavioral.

Characteristics of Children Served

☐ The 0-2 population served represents a wide variety of handicapping conditions, as well as those at risk for developmental delays or disabilities. Approximately 21% of the children who are served by the project are from 0 to 6 months of age, 21% are from 7 to 12 months, another 21% are from 1 to 2 years, and 37% are from 2 to 3 years. Because the MAPPS Project works with a wide variety of agencies, the gender and ethnic backgrounds of the children represent the local populations in which these agencies exist and vary from year to year. Of the children served, approximately 60% are Caucasian, 20% are Navajo, and the remainder are Black or Hispanic. The total number of children served by agencies currently using the MAPPS model is approximately 500. The majority of children served (63%) are male.

Service Delivery Options

☐ Parents may choose to have their infants served in the home or in the center. Both parents and infants receive 1 to 2 hours of service per session, 1 to 2 days a week. The typical pattern of service for the large majority of clients is home plus center. At 2 1/2 years of age, most toddlers are served in the center and at home.

Typical pattern is home plus center.

Staffing Patterns

☐ The program's administrator and coordinator are both trained at the PhD level. Two psychologists, one physical therapist, two occupational therapists, one infant interventionist, a speech correctionist, a physician, a nurse, a social worker, and five paraprofessionals serve the program as well as volunteers. The professional staff readily available to parents and infants are the physical therapist, the speech therapist (MS), the infant interventionist (MS) and the volunteers. The person who spends the greatest amount of time with the infant is the infant interventionist. A transdisciplinary approach is used.

Staff development is ongoing. The director and coordinator take overall responsibility for planning activities based on an assessment of staff needs.

A transdisciplinary approach is used.

Services for Children and Families

☐ The theoretical orientation of the program is developmental learning (i.e., a combination of developmental and behavioral). Each infant has an individualized program, and the delivery system is based on the individual needs of the infants and their families.

The Battelle Developmental Inventory and Screening Instrument (Newborg et al., 1984), the Peabody Developmental Motor Scales (Folio & Fewell, 1983), the Bayley Scales of Infant Development (Bayley, 1969), the Sequenced Inventory of Communication Development (SICD) (Hedrick et al., 1984), and the Preschool Language Scale (PLS) (Zimmerman, Steiner, & Favatt, 1969) are used to assess the infants. Information from the physician, the occupational therapist, the physical therapist, and the speech therapist is used in the evaluation process. Assessment results are compiled for program planning for the children and for measuring program effectiveness. Assessments are administered yearly on a pre/post basis.

Assessments are administered yearly.

For children from birth to 3 years of age, the child's developmental level is assessed first. Next, the child's parents are trained to provide the intervention using the Curriculum and Monitoring System (CAMS) (Peterson & Sedjo, 1979) curriculum. Then, families are monitored by phone or in person on a weekly basis. MAPPS also mainstreams children who are developmentally delayed ages 3 to 5 into existing preschool and day-care programs. The project provides these programs with child assessment, teacher training, and curriculum materials.

The Curriculum and Monitoring System (CAMS) (Peterson & Sedjo, 1979), developed by the MAPPS Project, is the primary curriculum used. CAMS is a developmentally sequenced series of teaching objectives that cover skills normally developed from birth to 5 years of age. Each objective is task-analyzed and broken down into small steps. Teaching instructions and mastery levels are specified for each step of the program.

Transition Activities

☐ Attention is given to the transition of the child from one level to another. Appropriate team members participate in conferences with receiving teachers.

Program Evaluation

☐ Infants are tested on a pre/post basis. A parent attitude questionnaire is administered yearly; participating agencies complete a questionnaire to determine agency satisfaction.

THE COPING PROJECT (CHILDREN'S OPTIMAL PROGRESS IN NEURODEVELOPMENTAL GROWTH)

☐ The COPING Project, located at the Johnson Rehabilitation Institute of the John F. Kennedy Medical Center in Edison, New Jersey (a city with a population between 25,000 and 50,000), is designed to enhance the adaptive behaviors of children and families by reducing stressors and developing personal resources needed for effective coping. Intervention is personalized for each family based on their needs, stressors, and available coping resources. Services consist of a variety of educational and therapeutic activities for most families; some require supportive counseling. Programming is modified as family needs change over time.

Intervention is personalized for each family.

The COPING Project has developed two unique models: the COPING Process Model and the Personalized Learning Model. These models guide team assessment of child and family stressors and resources, team interaction and development of comprehensive service plans, family involvement in planning intervention goals and activities, intervention that addresses adaptive behaviors as well as developmental skills, and intervention that leads to the enhancement of family resources for effective coping.

Characteristics of Children Served

❑ Children admitted to the project are at risk for developing delays or disabilities, have developmental delays, or are diagnosed as having disabilities or specific handicapping conditions. The program serves approximately 135 children, 15% between 0 and 6 months of age, 22% between 7 and 12 months, 30% from 1 to 2 years, and 33% between 2 and 3 years. The population is predominantly Caucasian (67%), with 15% Black, 15% Hispanic, and 3% Oriental. Gender distribution is 41% female and 49% male. There is a wide range of handicapping conditions: delayed with no specific diagnosis (25%), orthopedically handicapped (17%), speech and language impaired (17%), mentally retarded (12%), multihandicapped (12%), health impaired (8%), emotionally disturbed (9%), at risk for delay (4%), autistic (4%), and visually impaired (4%).

There is a wide range of handicapping conditions.

Characteristics of Families Served

❑ Of the families served, 30% have incomes below $10,000 and 57% have incomes between $15,000 and $25,000. Only 13% have incomes above $30,000. The majority (74%) are two-parent families; 22% are single-parent families with the mothers as heads of household. The remaining children (4%) are members of extended families.

Majority are two-parent families.

Service Delivery Options

❑ The delivery systems are home, center, and home plus center. Parents and children are seen twice a week for 2-hour sessions.

Staffing Patterns

❑ The staff include an administrator (PhD), a coordinator (MS), a psychologist (PhD), 2.5 physical therapists (BS), 2.5 occupational therapists (BS and MS), 2 infant interventionists (MS), 2.5 speech therapists (MS), a physician (MD), a nurse (BS), and 2 social workers (MSW). All of these staff are readily available to the project. The speech pathologists, occupational therapists, physical therapists, and teachers spend the most time with the infant.

Services to Children

❑ In addition to informal developmental and clinical evaluation, the Early Coping Inventory (Zeitlin, Williamson, & Szczepanski, 1984), the Hawaii Early Learning Profile (HELP) (Furono et al., 1979), the Uzgiris/Hunt Scales of Ordinal Development (Uzgiris & Hunt, 1975), the Milani-Comparetti Motor Development Screening Test (Pearson, Rice, & Trembath, 1973), and the Developmental Hand Dysfunction (Erhardt, 1982) are used selectively.

Theoretical orientation is developmentally based.

The theoretical orientation of the program for children is developmentally based. The delivery is center-based with home visits. The major focus of the model is adaptive coping. Clinical frames of reference include neurodevelopmental therapy (NDT), sensory integration, and behavior management. Each child has an individualized education (service) program (IEP). Daily notes are taken on the child, and 6-month program reports are written. All team members who work with the child or family contribute information that is integrated into a comprehensive report by the case coordinator.

Family Involvement

☐ The family involvement component uses a family systems approach and a Coping Process Model. The instruments used to access needs are the Coping Inventory (Zeitlin, 1985), the Carolina Parent Support Scale (Bristol, 1983), the Belief Scale (Bristol, 1983), and the Definition Scale (Bristol & DeVellis, 1981).

Among the strategies used to involve parents are parent discussion groups, parent training sessions, individual conferences, counseling/psychotherapy, fathers' nights, topical workshops, and a parents' association. The social worker and the child's primary case coordinator have the major responsibility for working with the families.

Families are seen most frequently by the social worker and primary therapist.

Team members work with parents using the Coping Through Personalized Learning Model. Families are seen most frequently by the social worker and the child's primary therapist. The model consists of decision-making questions that structure team sharing during assessment; data analysis; and the development of goals, objectives, and intervention strategies.

A series of workshops has been designed to provide parents with information concerning the law; their roles, rights, and responsibilities; and the duties of the receiving program and the current IEP. Parent support groups address individual family concerns. Each child's educator writes a transition plan to be sent to the child's new program personnel.

THE FAMILY DAY CARE PROJECT

☐ The Family Day Care Project is housed in Ann Arbor, Michigan, and is administered by the Child Care Coordinating and Referral Service. Other agencies participating in the service delivery of the project are the Washtenaw Intermediate School District, Ann Arbor public schools, the Washtenaw Association for Retarded Citizens, and Eastern Michigan University. The service area is a university town with a population of about 150,000.

Focus is to train family day-care providers.

The focus of the project is to train family day-care providers to care for children with special needs. After training, children are placed with the providers and are supported by weekly or bimonthly visits from the special services coordinator (an early intervention specialist). Parents are counseled, when appropriate, on the necessity of a whole team approach—the school, the provider, the project, and the family—to maximize support and development of the child.

Training sessions for the providers are conducted using adult education models of parent training to deliver information on the care of children ages 0 to 3 with special needs.

Characteristics of Children and Families Served

❑ Children served are at risk for developmental delays or disabilities, have developmental delays, or have been diagnosed as having disabilities or specific handicapping conditions. Thirty children are enrolled. One third of the children (33%) are at risk for delays, 13% are health impaired, and 10% have sensory impairments. Other handicapping conditions represented include mental retardation, emotional disturbance, multiple handicaps, and developmental delays. Most of the children are mildly to moderately handicapped.

Most children are mildly to moderately handicapped.

Children range in age from 0-6 months (17%) to 2-3 years (67%). Ten percent are 7-12 months old, and 6% are 1-2 years old. The program is made up primarily of Caucasian children (83%); 13% are Black and 4% are Hispanic. The majority of the children are male (67%). Of the 30 children served, 22 are from two-parent families; the remainder are from single-parent families with the mothers as heads of the households.

Service Delivery Options

❑ Children are enrolled in family day-care homes. They spend varying hours and days per week in the day-care programs, depending upon the family's and child's needs.

Staffing Patterns

❑ An administrator (PhD), a coordinator (BS), and an early intervention specialist (MS) are employed by the project. The psychologist (MS) is contracted by the program. The intermediate school district supplies the services of a physical therapist, an occupational therapist, a speech therapist, and teacher consultants. All staff—both project staff and those provided by the school district—are readily available. The family day-care provider spends the greatest amount of time with the children. The early intervention specialist spends the most time with the family. Each staff member has a staff development plan, which may include taking classes, attending conferences, and attending inservice sessions.

The early intervention specialist spends the most time with the family.

Services to Children

❑ The Denver Developmental Screening Test (Frankenburg, 1973) is used for screening, and a large battery of other instruments is used by the school district for assessment.

The diagnostic evaluation of the child is conducted by the Washtenaw Intermediate School District or the Ann Arbor Public Schools. The day-care experience supports the work that the special education staff have proposed in their individualized education programs (IEPs). The children with handicaps are integrated into the family day-care home, and the home is provided with activities to achieve the goals delineated by each child's IEP. Logs are kept on the child by the special services coordinator.

Children with handicaps are integrated into the family day-care home.

Services to Families

❑ The Family Day Care Rating Scale (Harms & Clifford, 1984), an adapted version of *Attitudes of Educators Toward Exceptional Children*

(Haring, Stern, & Cruickshank, 1958), and the case study analysis are used to assess family needs. An early intervention specialist is responsible for working with the families.

The Family Day Care Project is a model based on collaboration among the school system, the family day-care providers, and the parents. Its goal is to deliver comprehensive services to working families who have children with special needs. Frequent meetings are held with staff from agencies serving the family, defining the roles of each agency in meeting the family's needs.

Transition Activities

Conferences are held with the receiving teacher.

☐ Conferences are held with the receiving teacher when a child is ready to be placed at the next level. Since family day care includes both before-and after-school care, many of the children continue in day care for several years.

Program Evaluation

☐ The effectiveness of the program is assessed by administering a pre/post attitudinal survey and by analyzing changes in scores on the Family Day Care Rating Scale (Harms & Clifford, 1984).

The project is disseminated through speeches at local, state, and national conferences and through newsletters and local media coverage.

The unique feature of this model is the coordination of day care with other childhood special education programs. Specialized day care is offered to families who otherwise would not have this service.

CHILDREN WITH HEARING IMPAIRMENTS IN MAINSTREAMED ENVIRONMENTS (CHIME)

The project has a working agreement with area hospitals and clinics.

☐ Project CHIME is administered by the Nassau County BOCES (Board of Cooperative Educational Services), whose administrative office is in Westbury, New York. The project has a working agreement with area hospitals and clinics. The focus of the project is the education and mainstreaming of 2- to 3-year-old Caucasian children who have hearing impairments with nonhandicapped children in neighborhood nursery schools. The communities served have populations of 25,000 or less.

Characteristics of Children and Families Served

☐ All of the children enrolled in the demonstration project are between the ages of 2 and 3 years. The majority (51%) are female. Most of the children (86%) are from two-parent families; only 14% are from single-parent families.

Service Delivery Options

☐ The children participating in the project attend the BOCES Program for Children with Hearing Impairments 5 days a week. Two to 3 mornings each week, they are mainstreamed with their nonhandicapped peers in local nursery schools within their home communities for sessions of approximately 1 to 2 hours.

Staffing Patterns

☐ The staff include a project director and a project coordinator. The latter works full time for CHIME. In addition, a psychologist, audiologist, and teacher/trainer, all trained at the master's level, are available to the project. Occupational and physical therapy services are also available as needed from the Program for the Hearing Impaired. All project staff work with both the children and their parents. The staff meet twice a month to discuss progress of the youngsters and any special needs that may require staff attention. The project director and coordinator are responsible for the staff meetings. Information about the availability of the program is disseminated through a project brochure and the agency newsletters of Nassau BOCES.

Staff meet twice a month to discuss progress of the youngsters.

Services for Children

☐ Screening and casefinding are conducted by a team that includes the administrator, the psychologist, the audiologist, and the teacher/trainer. The assessment instruments used to develop profiles of children involved in CHIME are the SKI-HI Language Development Scale (Watkins, 1979), the McCarthy Scales of Children's Abilities (McCarthy, 1972), and the *Meadow-Kendall Social Emotional Assessment Inventory for Deaf Students* (Meadow, Karchmer, Peterson, & Rudner, 1980). For diagnostic evaluation, the psychologist uses the Developmental Test of Visual Motor Integration (Beery & Buktenica, 1967), Early Learning Accomplishment Profile (E-LAP) (Glover et al., 1978), and Test for Auditory Comprehension of Language (TACL) (Carrow-Wolfolk, 1985).

Project CHIME is based on the theoretical assumption that very young children with hearing impairments need opportunities to learn and play while interacting with their hearing peers. Mainstreaming them, especially in structured settings, aids in their language development, provides important peer models, and helps develop cognitive and social skills.

Once a child is selected for the program and the parents agree to the mainstreaming experience, project staff visit the local nursery school where this will take place. The staff of the nursery program are trained to work with a child with a hearing impairment and in the use of special equipment such as the auditory trainer, a device that enhances communication between the teacher and the student. Training of staff is ongoing through periodic consultation services from the project.

Before the child is mainstreamed, this goal becomes part of the child's individualized education program (IEP). The IEP is developed in September and updated in January; final assessment of progress is made in June. Parents participate in the development of the IEP.

Once a child enters the mainstream program, progress is monitored on a weekly basis.

Project CHIME has developed an adapted curriculum to be used in mainstreaming by the participating nursery schools. The curriculum stresses language skills, comprehension, and auditory training. Once a child enters the mainstream program, progress is monitored on a weekly basis through case conferencing with staff members as necessary.

Family Involvement

☐ Parent education is an important part of the project. Workshops are held monthly, and minutes are kept. Parents receive extensive training to help them understand their children's development and needs, especially in relation to the hearing world. They also learn to work with their children at home so that the mainstreaming experience will be beneficial for both the parent and the child.

DISCUSSION OF FINDINGS AND IMPLICATIONS FOR PRACTICE

A variety of agencies take the lead in administering programs.

Procedures for cooperation and for determining which agency should serve as head are critically needed.

☐ At present, a variety of agencies take the lead in administering programs for infants and toddlers with handicaps. The fiscal agents for most of the programs responding to this survey are universities or public school districts. In that respect, the findings differ markedly from those of a survey conducted 5 years ago in which hospitals were one of the primary fiscal agents for the majority of respondent programs (Trohanis et al., 1982). This shift may indicate a difference in sample populations. It may also indicate an increased interest in the development of infant programs on the part of educational agencies. Whatever the reasons, procedures for cooperation and for determining which agency should serve as head are critically needed, especially with the passage of P.L. 99-457, which stipulates that states applying for program development funds in the area of birth-to-2 services must identify a lead agency and establish an interagency council.

Analysis of the survey data suggests that infant/toddler programs do not have consistent, well-defined procedures for identifying children with handicaps (i.e., casefinding and screening). The majority of children served by the projects are initially identified through referrals from other agencies. Further, most of the children are those with more readily identified moderate or severe handicaps. Children at risk for developing handicaps and those with milder handicaps seem underrepresented. This suggests the following:

Professionals tend to be more committed to remediation than to prevention.

1. Limited funding for birth through 2 programs may result in services for those with more severe handicaps.
2. Identification procedures are not adequately refined to identify children who are at risk or have milder handicaps.
3. Staff in birth through 2 programs may not be trained or have experience in identification and screening procedures, and thus rely primarily on referrals.
4. Parents of children with more severe handicaps may be more likely to demand services.
5. Professionals tend to be more committed to remediation than to prevention; thus, services may be withheld until delays become obvious.
6. Medical professionals are often reluctant to suggest that infants and toddlers are handicapped or at risk.

These concerns and problems may be reduced by: (a) developing stable funding sources with allocations sufficient to identify children at risk for developing handicaps, as well as those with moderate and severe handicaps; (b) developing preservice and inservice programs to train birth-to-2 staff in systematic casefinding and screening procedures; (c) stressing interagency collaboration in developing and implementing identification procedures; and (d) promoting awareness among parents, professionals, and other citizens as to the importance of intervention even with children who are at risk or who have mild handicaps.

At a time when the divorce rate and the number of pregnancies among unmarried teenagers are increasing in the United States, families served by the HCEEP infant/toddler projects tend to be two-parent families. This suggests that the more stable two-parent families may be the ones that seek services.

Professionals providing services in the surveyed programs tend to have at least a BS degree and come from a variety of disciplines. The data do not indicate, however, whether or not these professionals have specific training and experience in working with infants and toddlers who have handicaps. Personnel preparation programs in early childhood special education (ECSE), birth to 2 years, have only recently been developed and are limited in number. This suggests that many of the staff involved in these model projects may not have training in working with children in this age group. Inconsistencies noted in assessment procedures, the selection of assessment instruments, the selection of curricula, and involvement of families lend additional support to the notion that staff may not have formal training in providing birth-to-2 services.

Personnel preparation programs are limited in number.

Slightly more than half of the projects reported that staff development activities are based on identified needs, with little information about the intensity of such activities. Inservice training should be a high priority budget item in such programs. This is a relatively new field, with knowledge about infants and toddlers with handicaps and strategies for providing services increasing rapidly; thus, inservice must be ongoing and personnel preparation programs must be developed at the preservice level. In addition, research regarding best practices for both preservice and inservice education in ECSE (0-2) is needed, as well as research for best practices related to direct services for children.

Inservice should be a high priority budget item.

All the projects but one indicated a specific philosophical orientation, with developmental learning being the preferred model. Program practices, however, do not always seem consistent with the stated philosophical model. Several concerns can be addressed in the area of assessment:

Practices do not always seem consistent with the stated philosophical model.

1. Identification and screening procedures are not well defined.
2. The selection and use of assessment instruments appears inconsistent across projects.
3. In many programs, assessment instruments seem to be used for purposes other than those for which they were designed (e.g., diagnostic instruments used for ongoing assessment).
4. Few programs seem to link assessment with curriculum development.

Furthermore, criteria for selecting curricula are not evident. Many curricular programs are used, and often they do not match the assessment instruments. Record-keeping procedures also are not well delineated. The majority of programs (65%) do plan specific transitional activities, but none of them reported follow-up activities or evaluation strategies to determine whether transition is successful. These concerns underscore

Curricular programs often do not match assessment instruments.

the need for careful monitoring of programs, as well as the need for high-quality inservice and preservice training.

Most programs reported a family systems approach to working with families. They also reported conducting needs assessments and developing family plans. Staff skills and training in working with families via a family systems model may be questioned, however, since family involvement components do not seem to address the unique needs of individual families. Only 15% of the programs that conduct needs assessments do not develop family plans. Furthermore, a limited number of family involvement strategies seem to be implemented, with parent training and support groups and newsletters being the most popular. Only two programs specifically indicated that they provide services for siblings while only one addresses the needs of fathers and grandparents. As with other program components, the need for training to work with families is indicated. Successful implementation of a comprehensive family involvement program requires the commitment of professionals, many of whom are educated and experienced in working with children, but who may have little or no formal training to work with families.

Need for training to work with families is indicated.

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