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AUTHOR Dell, Amy Glasser
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ABSTRACT

Fifty-one surveys designed to gather qualitative information on preschool programs in North Dakota were completed and returned by preschool teachers. Questionnaires focused on five major topics: population served, staff, parent involvement, program curriculum, and teacher and program needs. Results indicate that many teachers served fewer than 10 students; the majority of preschool programs did not include nonhandicapped students; few programs served children below age 3; support staff was providing services directly to children more frequently than through teacher consultation; speech/language therapy was the most frequently cited support service; parents were involved in their child's education; and a behavioral teaching style was much in evidence. (CL)

THE NATURE OF PROGRAMS SERVING PRESCHOOL HANDICAPPED CHILDREN IN NORTH DAKOTA

Amy Glasser Dell

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Amy Glasser Dell

Bureau of Educational Research and Services

University of North Dakota

Grand Forks, North Dakota

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I would like to thank the following people for their assistance in the preparation of this monograph: David Kuschner, Richard Landry, Linda Reiten, Larry Smiley, and Cecelia Traugh.

AGD

FOREWORD

The Bureau of Educational Research and Services has, for several summers, provided financial assistance to support faculty research activities. This monograph represents the results of one of those research activities.

Dr. Amy Glasser Dell was the recipient of a small sum of money to assist in conducting this study, which has attempted to identify and report about the nature of programs for preschool handicapped children in North Dakota.

Programs involving handicapped children have grown rapidly in recent years. The addition of programs dealing with preschool children has caused an even greater increase in relatively new programs. Several questions are posed in the study, and much data is provided in attempts to respond to them.

The Bureau is happy to have been able to assist in the conduct of this study, and is even more pleased to be able to provide this written report of the findings.

Larry L. Smiley, Director
Bureau of Educational Research and Services

Introduction

Since the passage of Public Law 94-142, interest in serving preschool handicapped children in the state of North Dakota has been increasing steadily. Literature pointing to the effectiveness of early intervention (e.g., as summarized in Tjossem, 1976 and Farran, et al., 1980) has contributed to this interest, while federal and state incentive grants have helped make services to preschool children a reality. Presently over 35 programs in the state are providing educational services to handicapped children under the age of six, and several more are expected to develop in the near future. Due to the newness of the field, however, very little information is available on the kinds of services being provided. While administrative information on funding sources, budgets, incidences of handicapping conditions, and requirements for teachers has been compiled, educational issues such as program structure and curriculum have not yet received close attention.

The purpose of this study is to examine the nature of preschool handicapped programs in North Dakota with particular focus on curriculum and instruction. The research was designed to address the following questions:

- Who is/are providing educational services to preschool handicapped children?
- How are these services being delivered?
- What teaching approaches are used in these programs?
- Which assessment and curriculum materials are used?

- Are parents involved in the delivery of services, and if so what is the nature of their involvement?

- Are handicapped preschoolers being served in self-contained programs or are they integrated with their nonhandicapped peers?

- Do the programs serving preschool handicapped in this state reflect the directions of the field as expressed in the literature?

This monograph will begin with a summary of the trends and concerns in the field of early childhood-special education as expressed in the literature. The second section will describe the procedures used in this study including the survey instrument and the population of respondents. The data will be summarized in the third section and interpreted in the fourth. Emphasis will be placed on interpreting the results in light of the state of the art in the country as revealed by the review of the literature in chapter 1.

I. CURRENT TRENDS IN EARLY CHILDHOOD EDUCATION FOR THE HANDICAPPED

The Handicapped Children's Early Education Program (HCEEP), founded in 1969 following the passage of P.L.91-230, Title VI (the Handicapped Children's Early Education Act), has resulted in the establishment of several model preschool programs around the country. Demonstration projects such as the Portage Project (Shearer and Shearer, 1976), the Read Project (Baker and Heifetz, 1976), UNISTAPS (Northcott, 1972), the Rutland Center (Wood, 1975), and the Down's Syndrome Programs at the University of Washington (Hayden and Haring, 1976) have explored a wide range of services and teaching approaches in their efforts to provide early intervention to handicapped children. Despite the variety of these programs, several common threads run through them. In this section, the major components of these demonstration projects will be presented.

Children who are under the age of eight and are handicapped or at-risk comprise the population being served by the model preschools. Some programs, the High/Scope Preschool (Banet, 1979) and the preschool program at the Institute for Rehabilitation Medicine of New York University Medical Center (Gordon and Schwartz, 1976), for example, serve only children from age three to six. Others, such as the National Collaborative Infant Project (Haynes, 1976) and the Meeting Street School Parent Program for Developmental Management (PPDM: Denhoff and Hyman, 1976), focus their attention

on infants and toddlers. Many demonstration projects start children as soon as they are identified, often at birth or in early infancy, and serve children through the preschool years. Model programs which serve the zero to six population include the Portage Project, the preschool program at the Bill Wilkerson Hearing and Speech Center (Horton, 1976), Bricker and Bricker's Infant, Toddler and Preschool Project (1976), Project SKI*HI of Logan, Utah (for hearing impaired children) and the Model Preschool Center at the University of Washington in Seattle.

The staff at most of these programs consists of teachers and a variety of support personnel. Many programs utilize a multidisciplinary or transdisciplinary approach (Allen et al., 1978), in which a team of professionals, each from a different discipline, work together to provide comprehensive services to each child. A few programs have experimented with unconventional staffing patterns such as utilizing high school students and other paraprofessionals. The group which represents the largest previously unused resource is the one comprised of parents. Parents work is part of the team in almost every demonstration project; in fact, parent involvement is one of the requirements of HCEEP. The rationale for involving parents in early education programs for the handicapped is summarized by Shearer and Shearer (1977). Levitt and Cohen (1975) illustrate the variety of roles which parents have fulfilled in early intervention programs. The Portage Project and the National Collaborative Infant Project, for example, rely on parents to serve as the primary teachers of their young children. Other programs, such as the Down's Syndrome Program (preschool level), encourage parents to carry on work at home which complements the

services their children are receiving at a center. In addition, several programs attempt to provide support services and/or parent education classes for parents. Lillie and Trohanis (1976) provide an excellent summary of the scope of model parent programs. They describe "four dimensions" of parent programs: providing emotional support for parents, exchanging information, developing parent participation, and facilitating positive parent-child interactions.

The service delivery systems utilized by the demonstration projects usually involve instruction in children's homes and/or a preschool center. (In addition, several provide technical assistance and consultative services, and a small number provide prenatal care). Some provide only a home-based program (e.g., the Portage Project); others provide only a center-based program (e.g., the Rutland Center); and still others provide some combination of home and center (e.g., the PEECH Project--Precise Early Education of Children with Handicaps, a program at the University of Illinois, Champaign-Urbana). In general, most of the programs which emphasize home programming are either in rural areas and/or involve infants and toddlers.

One of the most striking differences among the model programs lies in their approach to teaching. Karnes and Zehrbach (1977) identify six theoretical approaches evident in the model preschool programs but add that "they do not usually exist in a pure or simple form:

> Open Education; precision teaching with a heavy emphasis on language development; precision teaching based on developmental guidelines in the areas of gross and fine motor development, self help and social skills and cognitive language development; behavior modification; cognitive development instruction based on the work of Piaget; and the creation of a learning environment, with

> a particular emphasis on the physical aspects of that environment (pp. 21-22).

Anastasiow (1978) categorizes the differing theoretical approaches into four types: the normal developmental model, which is derived from preschools for normal children; the behavioral model, which stems primarily from the experimental analysis of behavior; the cognitive developmental model, which "translates Piagetian development principles into strategies for classroom programs," and the cognitive learning model, which "combines Piagetian and/or cognitive theory with the experimental analysis of behavior" (p. 89).

In addition to developing viable processes for early intervention, these model programs have demonstrated the value of two major trends in the field--the use of program-related assessment procedures and the integration of handicapped preschoolers with their nonhandicapped peers. Conventional standardized tests have never been satisfactory with young handicapped children. With few exceptions (the Bayley Scales of Infant Development being one), most of the popular norm-referenced tests are culturally biased, inappropriate for use with handicapped children, and/or unrelated to preschoolers' educational programs. Hein (1979) provides a concise criticism of standardized tests as they relate to young children, and Vincent, et al. (1980) point out the particular problems with kindergarten screening tests.

Recent efforts have focused on alternative procedures to the assessment of young handicapped children. Gunnoe (1979) advocates greater use of informal assessment; Hein (1979) concurs: "Observation in the natural setting is the basis for understanding chil-

dren." Bricker and Carlson (1980) recommend an "assessment linked intervention." Their list of criteria for such assessment instruments include:

> The evaluation instrument should reflect the curriculum content of the intervention effort; and
>
> The evaluation instrument should have enough flexibility to allow for use with a wide range of handicapped children (p. 46).

Several recently developed tests which meet these criteria and/or utilize informal observation procedures are worth noting. These include Uzgiris and Hunt's Ordinal Scales of Infant Psychological Development (1975), an evaluation for children birth to 2 (developmental age) based on Piaget's principles of sensorimotor development; the Developmental Therapy Objectives Rating Form (DTORF; Wood, 1975), a developmental checklist which follows the psychodynamic curriculum developed at the Rutland Center; Brigance's Inventory of Early Development; and the Learning Accomplishment Profile-Diagnostic Edition, a comprehensive criterion-referenced test developed at the Chapel Hill Outreach Project.

Haeussermann's Developmental Potential of Preschool Children (1958), although an older procedure, meets Bricker and Carlson's criteria and is particularly informative with physically handicapped children.

The second trend in the field of early intervention precipitated by the demonstration projects is the integration of handicapped preschoolers with their nonhandicapped peers. A list of model preschool programs which are mainstreamed include the Experimental Preschool of the National Children's Center (Guralnick, 1978, the Rutland Center Preschool Program (Wood, 1975), the High

Scope Preschool (Ispa and Matz, 197), UNISTAPS (Northcott, 1978), and Bricker and Bricker's Infant, Toddler and Preschool Project (1976). All of these programs recognize the unique contribution which peer relationships make to young children's cognitive and social development (Johnson and Johnson, 1980). Social interactions are seen as being at least as valuable as "academic" aspects of the preschool curriculum.

> Peer relations are not luxuries in human development... They contribute to the acquisition of basic social and communicative skills in a manner that interactions with adults cannot or will not produce (Hartup, 1978, p. 28).

The literature, previously ambivalent, is now beginning to show empirical support for mainstreaming, particularly at the preschool level. True integration of handicapped preschoolers with nonhandicapped children has been shown to be effective in several recent studies (Dunlop, et al., 1980; Peterson, et al, 1977; Peterson and Haralick, 1977; and Kennedy, et al., 1976). In addition, Bricker (1978) provides an excellent summary of the rationale for mainstreaming preschool children, dividing the numerous arguments into social-ethical, legal-legislative, and psychological-educational issues.

In addition to the issues discussed above in relation to the demonstration preschool projects, recent literature points to a number of trends which are occurring in the area of curriculum and instruction. Social and emotional development are no longer secondary concerns in the field of preschool handicapped education. Rather, these areas of child development have become the focus of serious study and attention. Johnson and his colleagues (1980) summarize the research on infants' smiles and laughter, fears and anxieties, and surprise reactions and conclude that affective de-

velopment is closely tied in with cognitive development. They then discuss the implications of this for the assessment and education of severely handicapped children. Elkind (1979) relates academic achievement to emotional attachment in young children and stresses the importance of recognizing children's "personal curriculum needs" in addition to their needs in developmental and school curricula. Developmental Therapy, a curriculum for emotionally disturbed children aged 2 to 14 which was developed at the Rutland Center in Georgia (Wood, 1975), focuses on teaching children to express their needs and feelings, cooperate in group efforts, and function independently of their teachers. Knoblock and Barnes (1979) describe a preschool program which is based on the model and which integrates severely emotionally disturbed children with nondisabled children. The "partner" relationships which develop between the disturbed children and the nondisabled children are seen as critical for the success of their intervention.

Researchers in the area of language intervention also identify social and emotional development as major concerns. In their description of an intervention approach for communicatively handicapped infants and young children, Bricker and Carlson (1980) write: "We are convinced that the development of social/affective forms of behavior deserve our explicit attention" (p. 37). Mahoney and Weller (1980), in their article "An Ecological Approach to Language Intervention," stress the importance of "who does the language training" and "the people present during language training". They underscore the notion that "social communication is the core component of language intervention" (p. 30).

This shift in emphasis of curricular content is paralleled by a shift in teaching approaches. Bricker and Carlson (1981, p. xxx) discuss the kinds of changes which need to take place.

> ...Sensorimotor, affective, & early language behavior are closely related & often inseparable. This premise has implications for intervention programs. Most importantly, it suggests that an intervention approach with young children might be most logically and effectively formulated by the coordination of training targets across related domains of behavior rather than by developing isolated training that focuses on single behavioral domains... It is believed that many interventionists proceed in this fashion implicitly. There are still teachers, however, who compartmentalize their instructions, and thus fail to encourage and reinforce language production outside the intervention session.

Schiefelbusch (1980) focuses on a change in theoretical approaches: "There is a discernible trend toward combining cognitive and behavioral approaches to language learning" (p. 10), and Anastasiow (1979) identifies the cognitive-learning model of Bricker and Guralnick as the direction in which preschool handicapped programs need to go. In a recent article (1981), he elaborates on this trend.

> A major shift has occurred in psychology in the past four years...The shift is from behaviorism or stimulus-response theories of learning to positions that are more cognitive in orientation...The trend is to draw upon the cognitive...and perceptual...theorists' ideas or hypotheses of how humans function and learn, and to use behavioral principles in organizing and arranging the learning environment...
>
> ...Early childhood education programs need to be more closely built on this more complex view of learning and development. Bricker's (1978), Guralnick's (1978) and other cognitive learning programs will be used as models for a new generation of early childhood programs...Teachers need to understand that handicapped children have more in common with normal children in terms of basic needs than is currently believed, particularly in the areas of emotional development and the need for creative play...(p. 277-278).

Play has long been an emphasis of early childhood programs,

but it is only recently that its value in the education of handicapped children has been recognized. The importance of play and its complement, the manipulative environment, are discussed by Kamii and DeVries (1977) and Chance (1979). Banet (1979) describes how these are incorporated into a preschool program which integrates handicapped children. He points out the close relationship between active learning and the remediation of language impairments.

> For children with language delays or impairments, the active concrete experiences provide a context and a reason to talk with others. In the course of such experiences, peers can act as both models and sources of reinforcement. Asking other children for materials or equipment or describing what one has accomplished to the teacher are ideal ways for the child to utilize the language he is learning. This is language that is purposeful, social, and generalizable outside the classroom (p. 200).

Bricker and Carlson (1981) agree with this position and add:

> It is discouraging to view program after program in which language intervention is conceived and executed as two daily 30 minute training sessions...A more effective format is to superimpose the language instruction over the many training activities that occur daily in the child's life (p. 43).

The trend, then, appears to be a convergence of the developmental concerns of early childhood education with the technological know-how of special education.

> Behaviorism (task analysis or applied behavior analysis) will be used as a technology of program construction and implementation while cognitive theories will be used as the theoretical basis to account for and describe human behavior. (Anastasiow, 1981, p. 277).

Simplistic views of teaching by reinforcement and punishment are fast becoming obsolete in the field of preschool handicapped education. The active role of the handicapped child in the learning process and the inter-relationship of all aspects of the curriculum are replacing behavioral perceptions of the child as a passive

learner in a curriculum which was highly segmented. It is expected that as research on early development of handicapped and nonhandicapped children grows, these trends will emerge as the state-of-the-art in early intervention.

II. PROCEDURES

A survey instrument was developed to gather qualitative information on programs in North Dakota which served handicapped children under the age of seven during the 1980-1981 school year. The questionnaire was, of necessity, extensive; it was judged that a shorter form would not provide the kind of detail needed to reach the goals of the study. Most of the questions were written in multiple choice format. Many choices were provided and a category of "other" was included with each question in order to encourage the recording of precise information. Selected issues were investigated using open-ended questions. Appendix A contains a copy of the survey.

The limitations of studying preschool programs with only written information as data (Day, 1977) was noted, but neither funds nor time were available for travel around the state which would be necessary for observations of each program in operation. Consequently, the real data in this study consists of respondents' perceptions of their programs. It is hoped that the extensive nature of the survey instrument and the careful wording of questions compensate in part for the lack of objective observations.

Five major topics were covered by the questionnaire: the population being served, the teaching staff, parent involvement, program curriculum, and teacher and program needs. The first topic, student population, was included to gain a picture of the kinds of children being taught by the respondents, not for the purposes of

estimating the number of children served in the state. The questions on teaching staff focused on the teachers themselves--their number in each program and their prior teaching experience, and on the support personnel--the nature and frequency of their participation in the programs studied. Two questions inquired about the administrative staff. The questions on parent involvement delved into the nature of teacher-parent contacts, teachers' roles in parent training, and teachers' expectations of parents, as well as the simpler issues of the amount of time teachers spent wi· parents and parents spent working with their children.

The fourth topic, program curriculum, was the most complex. Several different kinds of questions were asked in order to provide a variety of data on which to base a picture of the teaching approaches used. Items on the interview form developed by Goodlad, Klein, and Novotney for their study of preschools in the United States (1973) were used as a model and adapted for the purposes of this study. Areas examined which relate to curriculum were service delivery systems (for example, home based vs. center based programs), room arrangements of preschool centers, the use and accessibility of toys and materials, assessment instruments used, respondents' perceptions of their curricular approach and the emphases of their curriculum, curriculum kits and materials used, the use of field trips, and the categorizing of activities into those which were primarily teacher-directed and those which encouraged children's choices.

The final topic, teacher and program needs, probed respondents' opinions of their program's space, their time with children and parents, the teaching staff, the administration and supervision

of their program, and their own training needs. In addition, the opportunities for respondents' interactions with other professionals in the field was studied.

Survey forms were sent in late September 1980 to all practicing teachers of preschool handicapped children in the state of North Dakota. The newness of the field coupled with the relatively low population of this rural state permitted this inclusiveness. Teachers were identified with the aid of the annual directory published by the Department of Public Instruction (Special Education Personnel in North Dakota: 1980) and through telephone conversations with professionals around the state. Included were public school teachers, special needs coordinators from Headstart programs, personnel from infant stimulation programs operated by community mental health centers, teachers in programs administered by the Department of Institutions (e.g., Grafton State School and the North Dakota School for the Deaf), and preschool teachers in two private schools. In addition, surveys were sent to the teachers in two programs for deaf-blind students since these programs served children seven years and under. Survey forms were not sent to personnel in agencies such as speech clinics and out-patient physical therapy clinics which provide therapeutic services to all ages. A total of 87 survey instruments was mailed. Appendix B lists all of the programs in the state which were sent questionnaires, and Appendix C contains a map of the state to show their geographic distribution. The data was coded and computerized using the Statistical Package for the Social Sciences (SPSS). Information which could not be quantified, such as answers to open-ended questions, was compiled by hand and combined with the computerized results.

III. RESULTS

Fifty-one of the 87 surveys mailed were returned (59%). When the return rate is examined in terms of the percentage of programs which are actually represented, the figure is considerably higher (82%). A small number of respondents completed the questionnaire for their entire program, while the majority included information on their class or case-load only. In addition, a few surveys were inadvertently sent to individuals who were no longer with a program. The make-up of the respondents was as follows: Thirty-five respondents (69%) were at the time of the survey employed by public schools. They represent 18 public school programs. Only two public school programs are not included in these results. Five out of the state's eight Headstart programs are represented (one respondent from each), as are two out of four infant stimulation programs (three respondents). Four respondents representing four separate programs were teaching in programs at state institutions; two were teaching in private schools, and one was providing services through a mental health center. In summary, the 51 respondents represent 32 out of 39 programs from around the state.

Population being Served

Table 1 summarizes the data from question one, "How many children are you currently serving?" The mean number of children per respondent was 12.5. If the variable of population is viewed as an indicator of the size of a program, it can be seen that there

was a fairly even distribution (36%, 36% and 29%) between programs which were small (serving less than 10 children), medium (serving 10 to 18 children), and large (serving more than 19 children). The second survey question regarding the population being served was addressed to the degree of the children's handicapping conditions. These results are summarized in Table 2. Only a small percentage of respondents were serving more than 11 children of any one degree of handicapping condition at the time of this study (10%, 18%, 4% for mildly, moderately and severely handicapped respectively). Much more frequent was the category of one to five. Mildly handicapped and moderately handicapped children were found in the greatest number of respondents' programs (a total of 76% each). Severely handicapped children were found in 56% of respondents' programs; the reverse of this indicates that 42% of the preschool handicapped teachers who responded to the survey were not serving youngsters with severe handicaps. In addition, most respondents who did serve severely handicapped children were serving fewer than five (42%). Only 18% were serving more than six severely handicapped children.

TABLE 1

PERCENTAGE OF RESPONDENTS INDICATING

NUMBER OF CHILDREN SERVED

Number of Children Served	Percent of Respondents
1-5	16
6-9	20
10-18	36
19 +	29

TABLE 2

PERCENTAGE OF RESPONDENTS INDICATING

NUMBERS OF CHILDREN IN PROGRAMS BY THE DEGREE OF

THEIR HANDICAPPING CONDITIONS

Degree of Handicapping Conditions	Number Of Children Served By Responders 0	1-5	6-10	11+
Mildly Handicapped	22%	36%	32%	10%
Moderately Handicapped	22%	55%	16%	8%
Severely Handicapped	42%	42%	14%	4%
Not Handicapped	84%	4%	2%	10%

The largest figure in Table 2, 84%, represents the percentage of respondents whose programs for preschool handicapped children were self-contained, that is, they did not include children who were not handicapped. Of the 16% who were working in mainstreamed programs, four were Headstart personnel and three were from public school programs.

The population being served by respondents was also examined in terms of categories of handicapping conditions. Table 3 presents the percentages of respondents serving fewer than five, six-to-ten, and 11 or more of the specified handicapping conditions. A general pattern emerges. The highest percentages fall in the zero and one-to-five range. The number of teachers serving six-to-ten children of a handicapping condition was comparatively low; lower still were those serving 11 or more of one handicapping condition. More than half of the teachers surveyed were not serving children whose primary handicapping condition was a visual impair-

TABLE 3

PERCENTAGE OF RESPONDENTS INDICATING

NUMBER OF CHILDREN IN PROGRAMS BY

THE CATEOGRY OF THEIR HANDICAPPING CONDITION

	Number of Children Served			
	0	1-5	6-10	11+
Physically Handicapped	33%	55%	6%	6%
Visually Impaired	69%	28%	0	2%
Hearing Impaired	66%	26%	4%	2%
Developmentally Delayed	27%	44%	16%	8%
Speech & Language Problems	29%	40%	6%	24%
Behavior Problems	51%	46%	0	0
Multiply Handicapped (combinations of above)	41%	36%	14%	8%

ment (69%), hearing impairment (66%) or behavior problem (51%). The only handicapping condition which was found in great quantity in any one program was speech and language problems (24% indicated that they serve 11 or more children with this handicap). Table 4 contains the mean number of children per respondents' programs having each of the handicapping conditions listed.

The multiple handicaps described by respondents varied widely and included such combinations as developmental delay/speech and language problem, physical handicap/mental retardation, Down's Syndrome/visual impairment/hearing impairment, deaf/blind, and hydrocephalus. A small number of respondents added other handicapping conditions such as poor fine-motor coordination (3 children), enzyme deficiency (1), emotional adjustment (3), Cri du Chat Syndrome

TABLE 4

MEAN NUMBER OF CHILDREN PER

HANDICAPPING CONDITION

Conditions	Mean*
Developmentally Delayed	5.6
Speech and Language Problems	5.4
Multiply Handicapped	3.1
Physically Handicapped	2.6
Hearing Impaired	1.1
Behavior Problems	0.9
Visually Impaired	0.7

*Rounded off to the nearest .1

(1) and post trauma physical impairment (3).

The ages of the children in the programs surveyed was the next area of inquiry. Figure 1 summarizes the results of this question. There is a clear increase in the number of children served by preschool handicapped programs as their ages increase from infancy to age 5½ and a clear decrease as their ages increase from 5½ to seven. The age group 5-5½ was served by the greatest number of respondents' (73%). The second largest age groups in respondents' programs were 5½-6 (59%), 4-4½ (59%), and 5-5½ (57%). The number of programs serving children under the age of three was extremely low, with 20% of respondents serving toddlers (1½-3 years), 14% serving infants between the ages of six to 18 months, and 6% (three programs) serving children from birth to six months. Of this youngest group, it is worth noting that each of these three pro-

grams served two or fewer infants when this survey was completed. In fact, for the total infant and toddler age group (birth to three years), only four respondents indicated that they served more than three to five children. A similar decrease in the number of children served is apparent at the older end of the scale. Of the 49% of respondents who were serving six to seven year olds, 42% were serving fewer than five. Similarly, of the 14% who served children age 7 and above, only 4% served more than five.

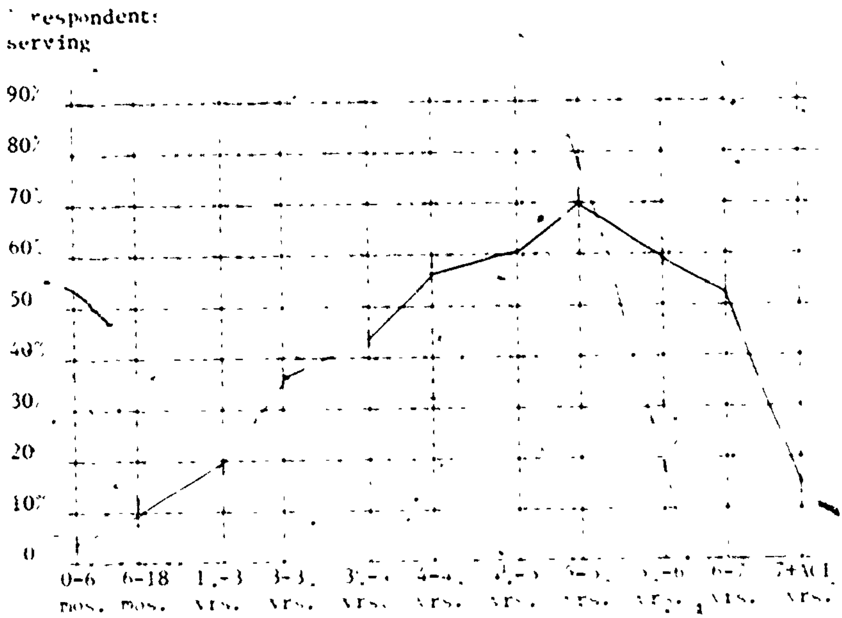


Figure 1: Ages Of Children Served

Table 3 presents the data on respondents' expectations regarding their students' educational placements one year from the time of the survey. It is interesting to note that the smallest percentages fell at the two extremes of completely mainstreamed placement, such as regular Preschool Day Care ([illegible] total) and

Kindergarten (20% total), and self-contained placements, such as Primary TMH (16% total), Severely/Multiply Handicapped (12% total), Emotionally Disturbed (6% total), and Learning Disabilities (6% total). The most common future placement was the Preschool Handicapped Program: 54% indicated that one to five of their students would be placed in such a program, and 26% indicated that six or more of their children would remain in a Preschool Handicapped Program. First Grade with a Resource Room or other special help was the second most common expected placement (38%: one to five; 10%: six or more). A regular First Grade class ranked third, and a Primary Educable Mentally Handicapped class ranked fourth. The 18% of the respondents who checked "other" mentioned the following possible placements (each one for fewer than five children): Self-contained Kindergarten, Self-contained Hearing-Impaired, Combination of Learning Disabilities class and First Grade, and Headstart.

Staff

Table 6 addresses the number and roles of staff in North Dakota's programs for preschool handicapped children. The unexpected figure of zero teachers for 4% of the programs is explained by the fact that services in these two programs were provided by a coordinator and/or aides only. A clear majority of respondents (65%) indicated that their program was staffed by one teacher only. The number of respondents checking two or more teachers was small, and many of these responcents worked in one large program.

Table 7 summarizes the respondents' prior teaching experience.

TABLE 5

RESPONDENTS' EXPECTATIONS REGARDING FUTURE

EDUCATIONAL PLACEMENTS OF THEIR STUDENTS

Expected Placement in One Year	Number of children				
	0	1-5	6-10	11-20	21+
Remain in Infant Prog.	84%	6%	8%	--	2%
Preschool Hand. Prog.	18%	54%	14%	8%	4%
Regular Preschool/Day Care	90%	6%	2%	--	2%
Kindergarten	80%	18%	2%	--	--
Kindergarten with Resource Room (with special help)	69%	22%	6%	2%	--
1st Grade	61%	24%	8%	6%	--
1st Grade with Resource Room (or special help)	51%	38%	8%	2%	--
Primary EMH (self-contained)	65%	30%	4%	--	--
Primary TMH (self-contained)	84%	16%	--	--	--
ED (self-contained)	94%	6%	--	--	--
LD (self-contained)	94%	6%	--	--	--
Severely or Multiply Handicapped	88%	10%	2%	--	--
Other	82%	18%	--	--	--

TABLE 6

STAFF PER PROGRAM

	0	1	2-5	6+
Teacher(s)	4%	65%	16%	12%
Teacher Aides	31%	35%	32%	6%
Support Personnel	22%	10%	42%	24%

Sixty-six percent had taught for four or more years before the survey was taken, but only 34% had taught preschool handicapped children for that amount of time. Of those, only 8% had taught preschool handicapped children for more than five years. The majority (62%) had been teaching in this field for three years or less.

TABLE 7

TEACHER'S PRIOR EXPERIENCE

	Years Teaching	Years Teaching Preschool Handicapped
1 year or less	16%	22%
2-3 years	18%	40%
4-10 years	56%	34%
11+ years	10%	--

The picture for teacher aides is different. There is an even distribution among none (31%), one (35%) and two to five (32%). This parallels the distribution among small, medium, and large programs. In examining the figures for support personnel, the reader will note that 22% of respondents reported that there were no support personnel associated with their program, and that 10% had only one. The majority, however, appear to have had access to support services, with 42% reporting 2-5 and 24% indicating six or more support personnel providing services.

The kinds of support personnel and the frequency of the services they provided to the programs was the topic of the next three questions. Table 8 lists in numerical order the percentages of respondents whose programs included services provided by various

TABLE 8

SUPPORT PERSONNEL

Support personnel	% Respondents
Speech/Language Therapist	88
Occupational Therapist	63
Physical Therapist	61
Nurse	43
School Psychologist	43
Social Worker	39
Other	43
Consulting Teacher/ Coordinating Teacher	
Learning Disabilities Teacher	
Family Therapist	
Physical Education Teacher	
Vision Consultant	
Tutor	
Home-bound Teacher	
Nutritionist	
Dorm Counselor	
Audiologist	
Habilitation Consultant	
Case Manager	
Hearing Consultant	
OT/PT Aide	
Student	

support personnel. The speech/language therapist was clearly the most frequently used professional, with 88% indicating this. Close seconds were the occupational therapist (63%) and the physical therapist (61%). The nurse, the school psychologist, and the social worker were used in less than half of the respondents' programs. Additional support personnel is listed under "Other" in Table 8. Although the number of programs utilizing any one individual was extremely low (between 21-16%), this list includes valu-

TABLE 9

FREQUENCY OF SUPPORT PERSONNEL PROVIDING

SERVICES TO CHILDREN

	Frequently*	Occasionally+	When Needed	No Response or not applicable
Speech/Language Therapist	75%	8%	4%	8%
Occupational Therapist	38%	20%	10%	32%
Physical Therapist	40%	10%	12%	34%
Nurse	10%	14%	18%	53%
School Psychologist	4%	8%	26%	59%
Social Worker	8%	4%	20%	69%
Other (includes list from Table 9 plus foster Grandparent)	18%	4%	--	76%

*Daily to 2-3 times per week
+Once per week to once per month

able suggestions for alternative staffing patterns.

Tables 9 and 10 provide data on the frequency of services provided by support personnel to the children themselves and to the respondents on a consulting basis. A comparison of these tables with Table 8 is useful. With one exception (the speech/language therapist) the figures under "frequently" are substantially lower than the figures in Table 8. In other words, although support personnel were included in a large number of programs (as shown in Table 8), their actual involvement was not as extensive as it originally appeared. A second finding from this data is that support services provided directly to the children were on a more frequent

basis than consultations with respondents. The number of people checking "not applicable" or not responding to the question on consulting with support personnel was consistently higher than the number under frequency of direct service. In both Tables 9 and 10, the nurse, school psychologist, and social worker appear to be used primarily when needed, with only a few respondents checking frequent or occasional services for each of these.

TABLE 10

FREQUENCY OF SUPPORT PERSONNEL

CONSULTING WITH RESPONDENTS

	Frequently*	Occasionally+	When Needed	NR or NA
Speech/Language Therapist	28%	36%	6%	22%
Occupational Therapist	14%	24%	10%	43%
Physical Therapist	18%	16%	10%	51%
Nurse	6%	12%	14%	63%
School Psychologist	2%	10%	20%	65%
Social Worker	4%	10%	16%	69%
Other	4%	8%	--	86%

*Daily to 2-3 times per week
+Once per week to once per month

The final inquiry about staff related to the administration and supervision of the programs. The results of these questions are found in Tables 11 and 12. Particularly notable is the high percentage (74%) of programs which were administered by the public schools. The number of programs administered by non-public school

agencies was extremely low (22%). Table 12 shows that almost half (49%) of the respondents were responsible directly to the director of their special education unit. Thirty-one percent were supervised by a coordinator, usually an individual who in turn was responsible to the director. Very few respondents considered their building principal to be their direct supervisor. Interestingly, at least one institutional program was directly supervised by three different agencies, the Department of Institutions, the Department of Public Instruction, and local special education units.

TABLE 11

ADMINISTRATION OF PROGRAMS

Administered by:	% Respondents
Public School	
Special Education Cooperative	45
Local School District	29
Total	74
Non-public School	
Mental Health Center	6
State Department(s)	8
Other (includes Private Board of Directors, Local, and Federal Government)	8
Total	22

Parent Involvement

The frequency of contacts between respondents and parents ranged from 2-4 times a year to every day. Table 13 presents this

TABLE 12

DIRECT SUPERVISOR

Supervised by:	% Respondents
Director of Special Education	49
Program Coordinator	31
Other: Includes:	26
Principal Superintendent Agency Director Speech and Hearing Coordinator Institutional Personnel Community Representative	

data. Only 10% of respondents checked 2-4 contacts a year. This figure included one Headstart program and two programs at state institutions. The majority of respondents indicated more frequent contacts, either weekly or monthly. A small percentage (15%) checked every day. The nature of these parent contacts is the subject of Table 14. The most frequent contacts with parents (88%) involved IEP and/or Placement meetings, and telephone conversations. Less than half the respondents checked loaning of toys and/or teaching materials to parents (45%), holding group meetings for parents (43%) and observations of parents teaching at home (41%)

Half of the respondents indicated that parents were expected to spend some amount of time working with their children at home. Twenty-four percent checked 1-3 hours a week, while 22% checked 4-6 hours a week. Only two respondents expected parents to work with their children seven or more hours a week. The remaining 50%

TABLE 13

FREQUENCY OF PARENT CONTACTS

Frequency	% Respondents
2-4 times/year	10
Every 2-4 weeks	32
Every week	24
Every day	15
Varies with child	20

TABLE 14

NATURE OF PARENT CONTACTS

Nature of Parent Contacts	Respondents
IEP and/or Placement Meeting	88%
Telephone Conversations	88%
Informal Discussions at Home	80%
Notes and/or Newsletters Sent Home	78%
Parent-Teacher Conferences	71%
Children's Arrival & Departure Times	71%
Teaching Demonstrations at Home	55%
Loaning of Toys and/or Teaching Materials	45%
Group Meetings for Parents	43%
Observations of Parents Teaching at home	41%
Other: Including Test Interpretations & Screening Regular Follow-up Resident Staffing Parents Observing at Center	12%

did not answer this question or checked not applicable. Table 15 lists (in their own words) respondents' expectations regarding the role of parents in their service delivery system. These expectations are divided into formal and informal activities. Carrying out prescribed activities clearly heads this list. Twenty-three respondents included this expectation, with five specifying that the activities were "drills." Keeping written records, either anecdotal or in the form of charts, was the second most frequent expectation.

TABLE 15

RESPONDENTS' EXPECTATIONS OF PARENTS

Expectations of Parents	# Respondents
FORMAL ACTIVITIES:	
Carry out prescribed activities	23
Keep written records	10
Observe in classroom regularly	5
Attend regular meetings	4
Learn behavior management techniques	1
Serve on Policy Council	1
INFORMAL ACTIVITIES	all 1 or 2
Observe in classroom (whenever)	
Volunteer to help in classroom (whenever)	
Interact and play with child daily	
Review child's work & discuss with him	
Attend socials	
Serve on Committees	
Communicate effectively with child	
Enroll child in recommended services	
Help child attend regularly	

The companion question to respondents' expectations of the role of parents in their programs was the role of the respondent in instructing or supporting parents. A compilation of respondents' descriptions of these roles is found in Table 16. The most frequently occurring answers parallel the most frequent response in Table 15, that is, explaining and demonstrating teaching activities/tasks to parents (13 each). On-going supervision of home programming is the third item on the list, and conducting meetings/workshops for parents is the fourth.

Curriculum:

The subject of curriculum is so encompassing that a breakdown of this section was necessary. Five sub-headings will divide this section--Service Delivery System, Room Arrangement, Materials, Assessment Procedures, and Teaching Approach. Each of these topics, although presented separately, is closely related to the other four and must be considered with reference to them.

Service Delivery System

Almost half of the respondents' programs (49%) were primarily center-based. This means that the teacher's main responsibility was to plan and operate a preschool or other group program which her students attended regularly. Seven respondents (14%) indicated that their programs were primarily home-based, that is, the children were visited at home by the teacher, and teaching was conducted by both the teacher and the parents. Over a third of the respondents (37%) checked that their programs were a combination of home and center. Some of these programs provided programming at a center with regular home visits to each child. Others provided

TABLE 16

TEACHERS' ROLES: INSTRUCTING AND SUPPORTING PARENTS

(IN WORDS OF RESPONDENTS)

Teacher's Roles	# Respondents
Explain Teaching activities/tasks	13
Demonstrate teaching activities/tasks	13
Supervise home programming (on-going)	10
Conduct parent education meetings/workshops	9
Assist with referrals	5
Provide materials	4
Listen to parents, discuss anything	4
Maintain resource library	2 or less
Model effective teaching procedures in school	2 or less
Provide encouragement	2 or less
Provide written instructions	2 or less
Suggest alternative family scheduling	2 or less
Establish rapport and trust	2 or less
Provide counseling	2 or less

center programming for some of their students and home programming for others.

Contact hours per child per week ranged from one hour/week (2 respondents) to over 30 hours/week (8 respondents) with 20-30 hours/week being the most frequent response (35%). Twenty-five percent saw their students less than 10 hours/week, while 25% saw them 10-20 hours/week. For programs which had a center component (86%), the nature of its scheduling was also examined. Center schedules

ranged from once a week for 2-3 hours (1 respondent) to five days a week, all day (10%). In between was every possible combination. In general, 14% checked that their center program met a few half-days per week, 37% indicated half-days every day, and 6% indicated slightly below full-time. One program provided a center program only twice a week but for the entire day, and one provided a center component one hour every day. The latter was the smallest amount of contact time for preschoolers in a residential program. Four respondents wrote that center scheduling for a child depended on individual needs.

Room Arrangement

In answer to the question, "Is your room divided into distinct/separate learning areas?" 31% of respondents checked yes, 51% checked "somewhat," and 8% checked no (10% did not respond). Table 17 lists the kinds of learning centers/activity areas which were included in respondents' centers. The most frequent were a reading/quiet area (65%) and a manipulative materials area (63%). The least popular were a woodworking area (12%) and a science area (10%). Less than half the respondents indicated that their center had a house/fantasy play area (49%), art area (41%), sand/water center (39%) block area (39%) or an outside area (31%). Slightly more than half (57%) checked that their center had a separate space for special one-to-one teaching or therapy, and 73% checked that their room contained one or more tables which could accommodate all the children for an activity. Of these, 63% indicated that such a table was used often.

TABLE 17

LEARNING CENTERS/ACTIVITY AREAS

Learning Center/Activity Area	% Respondents
Reading/Quiet Area	65
Manipulative Materials Area	63
Large Motor Area	53
Music Area	51
House/Fantasy Play Area	49
Art Area	41
Sand/Water Center	39
Block Area	39
Outside Play Area	31
Woodworking Center	12
Science Area	10
Other: Includes:	25
Circle/Language Area (12%)	
Pre-academics	
Whole Group-Sharing	
Numbers	
Infant Stimulation	
Self-Care	
Snack	
Work Stations	
Listening Center	
Teaching Center	

Materials

When the toys/materials listed in question 36 (see Appendix A) are categorized into curricular areas, the following results emerge: manipulative materials such as puzzles, balls, and blocks appeared the most frequently, with materials relating to art and music activities ranking second. Preacademic materials followed. The materials which appeared least frequently were role playing and make-believe materials such as puppets, dolls, dress-up clothes, and housekeeping furniture; materials which foster large motor development such as climbing apparatus; materials which foster cognitive development (in addition to materials listed in other categories) such as sand and accessories; and self-help/community responsibilities materials such as student cubbies and living organisms. This data is presented in Table 18.

The accessibility of toys/materials to the children is the focus on Table 19. Only nine out of the 59 listed materials were checked by more than half the respondents as being accessible to their students most of the time. An additional 15 materials were checked by 33-50% of respondents as being accessible. Materials which were not checked accessible were checked "available at the discretion of the teacher." Table 19 shows that the majority of the most accessible materials (41%) were from the category of fine motor/manipulative. Only one-sixth of the most accessible were from the role playing/make believe category, and one-eighth were from the category called self-help community/responsibilities.

Assessment Procedures

Table 20 lists assessment tools which were reported by three

TABLE 18

USE OF MATERIALS

Curricular Area	Materials	% Respondents Indicating Yes
Fine Motor/ Manipulative	Balls	92
	Wooden Puzzles	83
	Small Blocks	81
	Beads	79
	Large Blocks	73
	Stacking Rings	67
	Table Top Trucks, Cars, Trains	67
	Cardbook Puzzles	65
	Infant Toys	59
	Large Knobbed puzzles	53
	Mechanical toys	41
	Tools	36
Art	Paper	88
	Scissors	88
	Crayons	86
	Clay/Play dough	80
	Finger Paints	77
	Easel & paints	69
	Collage Materials	53
Music	Phonograph & Records	83
	Tape Recorder	75
	Tapes	73
	Rhythms Instruments	71
	Piano	28
Preacademics	Story books	79
	Chalkboard	73
	Filmstrips	69
	Flannel Board	69
	Math Materials	62
	Books Primers, Texts	56
	Workbooks	49
	Magnetic Board	30
Role Playing/ Make Believe	Puppets	77
	Dolls	63
	Large cars, Trucks, Trains	59
	Stuffed Animals	55
	Dress-up clothes	51
	Housekeeping Furniture	45
	Play Farm	43
	Doll House	43
	Play School or Hospital	35
	Doll carriage/buggy	35
	Puppet Theater	31

TABLE 18 (Continued)

Curricular Area	Materials	% Respondents Indicating Yes
Large Motor	Large Trucks, Cars, Trains	59
	Climbing Apparatus	53
	Scooters	51
	Slide	49
	Swings	43
	Tricycle	43
	Wagon	39
Cognitive (excluding those materials listed above)	Sand & Accessories	57
	Water `lay Toys	55
Self-Help/ Community Responsibilities	Cooking Materials	63
	Student Cubbies	53
	Plants	24
	Live Animals	14

or more respondents as being part of their evaluation procedures. The Peabody Picture Vocabulary Test heads the list with 76% checking this standardized test. Only one other test was checked by more than half the respondents, the Test for Auditory Comprehension of Language (TACL, 57%). All other assessment instruments were reportedly used by fewer than 50% of respondents. Table 21 categorizes all the tests listed by respondents; it indicates that the most frequently checked tests were either developmental checklists such as the Portage Guide to Early Education or the Learning Accomplishment Profile (LAP) (frequency of 16), or tests designed to assess language development such as the Peabody Pictur Vocabulary Test, the TACL, or the Boehm Test of Basic Concepts (frequency of 15). The number of norm-referenced tests of intelligence (or development), such as the Alpern-Boll Developmental Profile or the Slosson Test of Intelligence, was 10, and the number of screening

TABLE 19

ACCESSIBILITY OF TOYS/MATERIALS TO CHILDREN

Materials	% Respondents Checked Accessible	Curricular Area
Wooden Puzzles	67	Fine Motor
Large Blocks	63	Fine Motor
Library/story Books	63	Preacademics
Small Blocks	61	Fine Motor
Dolls	55	Make Believe
Stacking Rings	53	Fine Motor
Beads	53	Fine Motor
Puppets	51	Make Believe
Paper	51	Art
Crayons	49	Art
Cubbies	49	Self-help
Dress-up Clothes	49	Make Believe
Cardboard Puzzles	49	Fine Motor
Stuffed Animals	49	Make Believe
Chalkboard	47	Preacademics
Large Trucks, Cars, Trains	43	Fine Motor
Large Knobbed Puzzles	43	Fine Motor
Balls	43	Fine Motor
Housekeeping Furniture	41	Make Believe
Cooking Materials	39	Self-help
Infant Toys	39	Fine Motor
Play Farm	37	Make Believe
Clay/Playdough	35	Art

instruments, such as the DIAL or DASI, was nine. The least frequently checked assessments in Table 21 were tests of social development and preschool-level evaluation procedures that measure cognitive skills but are not norm-referenced, such as Ordinal Scales of Infant Psychological Development (Uzgiris and Hunt, 1975)

TABLE 20

ASSESSMENT TOOLS USED BY RESPONDENTS

Assessment Tool	% Respondents Reporting Use
Peabody Picture Vocabulary Test (PPVT)	76
Test for Auditory Comprehension of Lanuguage (TACL)	57
Boehm Test of Basic Concepts	49
Checklist of own design	45
Portage Guide to Early Childhood	42
Developmental Indicators for the Assessment of Learning (DIAL)	41
Preschool Language Scale	41
Developmental Activities Sequenced Inventory (DASI)	30
Peabody Developmental Motor Scales	29
Sequenced Inventory of Communicative Development (SICD)	27
Illinois Test of Psycholinguistic Abilities (ITPA)	27
Denver Developmental Screening Test (DDST)	24
Alpern-Boll Developmental Profile	24
Learning Accomplishment Profile (LAP)	22
McCarthy Scales of Children's Abilities	22
Slosson Test of Intelligence	22
Stanford-Binet Intelligence Scale	20
Bayley Scales of Infant Development	20
Wechsler Preschool and Primary Scales of Intelligence (WPPSI)	20
Receptive-Expressive Emergent Language Scale (REEL)	12
Brigance Inventory of Early Development	12
Bankson Language Screening Test	10
Behavior Characteristics Profile (BCP)	10
Merrill Palmer Scale of Mental Tests	8
Gesell Development Schedules	6
Carrow Elicited Language Inventory (CELI)	6
Haeussermann's Developmental Potential of Preschool Children	6
Meyer's Early Childhood Developmental Scale	6
Learning Accomplishment Profile-Diagnostic Edition (LAP-D)	6
Ordinal Scales of Infant Psychological Development	6

TABLE 21

CLASSIFICATION OF ASSESSMENT TOOLS

Category	Assessment Tool	% Respondents Reporting Use
Developmental Checklists	Checklist of own design	45
	Portage Guide to Early Education	42
	Learning Accomplishment Profile (LAP)	22
Total = 16	Brigance Inventory of Early Development	12
	Behavior Characteristics Profile (BCP)	10
	Gesell Development Schedules	6
	Meyer's Early Childhood Developmental Scale	6
	Marshalltown Project - Behavioral Developmental Profile	4
	Uniform Performance Assessment System (UPAS)	4
	Carolina Developmental Profile	2
	Minnesota Child Development Inventory	2
	Preschool Profile (University of Washington)	2
	Sewall Early Education Development (SEED)	2
	Michigan Early Intervention Developmental Profile	2
	Callier-Azuza Scale for Deaf-Blind Children	2
	Education of Multi-handicapped Infants (EMI)	2
Language Development	Peabody Picture Vocabulary Test (PPVT)	76
	Test for Auditory Comprehension of Language (TACL)	57
Total = 15	Boehm Test of Basic Concepts	49
	Preschool Language Scale	41
	Sequenced Inventory of Communicative Development (SICD)	27
	Illinois Test of Psycholinguistic Abilities (ITPA)	27
	Receptive-Expressive Emergent Language Scale (REEL)	12
	Bankson Language Screening Test	10
	Carrow Elicited Language Inventory (CELI)	6
	Developmental Sentence Scoring (DSS)	4
	Goldman-Fristoe Test of Articulation	4
	Assessment of Children's Language Comprehension (ACLC)	2
	Lindamood Auditory Comprehension Test (LAC)	2
	Token Test for Children	2
	Ski-Hi Receptive Vocabulary Test	2

TABLE 21 (Continued)

Category	Assessment Tool	% Respondents Reporting Use
Norm-referenced Tests of Intelligence (or Development)	Alpern-Boll Developmental Profile	24
	McCarthy Scales of Children's Abilities	22
	Slosson Tests of Intelligence	22
	Stanford-Binet Intelligence Scale	20
	Bayley Scales of Infant Development	20
Total = 10	WPPSI	20
	Merrill Palmer Scale of Mental Tests	20
	Draw-a-Man	8
	WISC-R	2
	Leiter Intelligence Test	2
Screening Tests	DIAL	41
	DASI	30
Total = 9	Denver Developmental Screening Test (DDST)	24
	Screening tool developed locally	6
	Metropolitan Readiness Test for Kindergarten	4
	Inventory of Readiness Skills	2
	First Grade Screening Test	2
	Test for Ready Steps (Houghton Mifflin)	2
	Preschool Inventory	2
Motor Development	Peabody Developmental Motor Scales	29
	Berri Visual-Motor	2
Total = 7	Test of Visual-Motor Integration	2
	Checklist for Sensory Dysfunction & Reflex Development	2
	Gross Motor Development and Bobath	2
	Milani-Comparetti Motor Development Screening Test	2
	Movement & Assessment of Infants (University of Washington)	2
Not Norm-Referenced: Cognitive	Haeussermann's Developmental Potential of Preschool Children	6
	Learning Accomplishment Profile-Diagnostic Edition (LAP-D)	6
Total = 3	Ordinal Scales of Infant Psychological Development (Uzgiris-Hunt Scales)	6
Social Development	Vineland Social Maturity Scale	2
Total = 1		

and Developmental Potential of Preschool Children (Haeussermann, 1958).

TABLE 22

RESPONDENTS' CHARACTERIZATIONS OF THEIR TEACHING APPROACHES

Curricular Approach	% Respondents
Combination of Behavior Management and Developmental Skill Areas	24
Developmental Skill Areas	18
Combination of Behavior Management, Developmental Skill Areas, and Psychodynamic	10
Behavior Management	6
Cognitively-Oriented and Developmental Skill Areas	8
Cognitively-Oriented, Developmental Skill Areas and Behavior Management	4
Traditional Nursery School	4
Behavior Management, Montessori, and Cognitively-Oriented	2
Cognitively-Oriented and Psychodynamic	2
Developmental Skill Areas and Psychodynamic	2
Behavior Management and Traditional Nursery School	2
Structured Language	2
Infant, Neuro-developmental	2
Multi-cultural	2
Parenting Skills	2

Teaching Approach

Respondents' perceptions of their curricular approaches are summarized in Table 22. Sixty-six percent of respondents included Developmental Skill Areas in their characterization of their curriculum. Forty-eight percent included Behavior Management. Only 16% included Cognitively-Oriented, and only 14% included Psychodynamic. Identifying one single philosophy as their teaching ap-

proach was not common (less than one third); rather, the majority of respondents indicated that their curriculum was comprised of two or more different approaches. No respondent indicated that their curricular approach was primarily Cognitively-Oriented, Psychodynamic, or Montessori.

TABLE 23

RESPONDENTS' PERCEPTIONS OF CURRICULUM EMPHASIS

Area of Emphasis	% Respondents
Language/Communication	31
Language and Cognition	16
All Skill Areas Equally	14
Cognition	8
Sensory Motor/Perception	8
Language and Socioemotional Development	6
Socicemotional Development	4
Language, Cognition, and Sensory Motor	4
Language, Social and Sensory Motor	4
Language and Sensory Motor	2
Prevocational/Self-Help	2
Gross and fine motor	2

Respondents' perceptions of the emphasis of their curriculum are shown in Table 23. With 63% checking it, Language/Communication was selected by more respondents than any other area of emphasis (this excludes the 14% who checked all areas equally). No other single area was checked by more than 50% of respondents. Cognition was mentioned as an area of emphasis by 28% and Sensory Motor/Perception was included by 18%. Only 14% included Socioemotional Development as an emphasis in their curriculum. Pre-

academics were included in more than half of the respondents' programs. Table 24 lists the pre-academic areas covered by respondents' curricula. Reading readiness was the most frequent response (55%), with art and math following closely (49% each). Social studies (18%) and science (12%) were included in only a few programs, and reading was checked by three respondents only. Thirty-six percent of respondents did not respond or checked "not applicable" to the question on pre-academics.

TABLE 24

PRE-ACADEMIC AREAS INCLUDED IN CURRICULA

Pre-academic Areas	% Respondents
Reading Readiness	55
Art	49
Math or Arithmetic	49
Music	47
Language Arts	39
Movement/Dance	29
Social Studies or Our Community	18
Science	12
Reading	6

Curriculum kits and materials which are produced commercially were used by 59% of respondents. Of these 12% checked that they followed a curriculum closely, and 47% indicated that they used such curricula but altered them somewhat. Twenty-five percent had access to commercially-produced materials but used them only some-

times, and 14% used them rarely. A list of the curriculum materials used in respondents' programs is found in Table 25. The Peabody Language Development Kit and the Peabody Early Experiences Kit (PEEK) were the clear favorites, with 15 and 14 respondents respectively mentioning them. No other curricular material was noted by more than six respondents. Table 26 provides a breakdown of these curricula by subject matter. Kits and materials which are designed to teach language skills were the most frequently mentioned (42 times). "Overall curricula," that is, curricula which include all areas of development, were mentioned 16 times. Only four of these were written specifically for infants and/or severely handicapped children. The least frequently listed materials fall under the heading of fine motor development and, if we artificially distinguish between language and cognitive skills, cognitive development.

The data on activities in which the teacher played the primary directing role and those in which children chose what they wanted to do is presented in Table 27. These were open-ended questions and the activities listed in this table are in the respondents' own words. Teacher-directed activities clearl dominated the respondents' programs. The only two "child-directed" activities which were mentioned by more than 5 respondents were free play and outside time. The length of the free play periods should be noted. Only 3 respondents reported a free play period of more than 30 minutes. A much larger number (12) indicated a 20-30 minute free play, but often these referred to arrival times, that is, many of the children did not arrive until well into the scheduled free play period. In contrast to this limited number of child-directed ac-

TABLE 25

CURRICULUM MATERIALS LISTED BY RESPONDENTS

Curriculum Kits and Materials	# Respondents
Peabody Language Development Kit	15
Peabody Early Experience Kit (PEEK)	14
DISTAR-Reading, Math and/or Language	6
Portage Guide to Early Childhood	6
Boehm Resource Guide for Basic Concepts (or CUP)	5
Planning Guide to the Preschool Curriculum (Chapel Hill)	3
Marshalltown Project-Behavioral Developmental Profile	3
Game-Oriented Activities for Language (GOAL)	3
Developing Understanding of Self and Others (DUSO)	3
Alphaphonics	3
Dubnoff	2
Sullivan Reading Program	2
Other	1 each
RADEA	
Developmental Syntax Program	
MWM for Visual Problems	
Santa Clara Inventory	
Learning Language at Home	
Learning Accomplishment Profile (LAP)	
T.A. for Tots	
DLM Photo Lab	
Goldman-Lynch Sounds & Symbols Development Kit	
Uniform Performance Assessment System (UPAS)	
Education of Multi Handicapped Infants (EMI)	
Wabash Center Curriculum	
Adaptic	
Montessori Materials	
Lavatelli Materials for Seriation, Classification, Measurement, and Space	
Ready, Set, Go, Talk to Me (Environmental Language Intervention Program)	

TABLE 26

CURRICULUM MATERIALS BY SUBJECT MATTER

Subject Matter	Curriculum Kit or Material	# Respondents
Language Development	Peabody Language Development Kit	15
	Peabody Early Experiences Kit (PEEK)	14
	DISTAR (language)	4
	Boehm Resource Guide for Basic Concepts (or CUP)	5
	GOAL	3
	Developmental Syntax Program	1
	Learning Language at Home	1
	Ready, Set, Go, Talk to Me	1
	Total	42
"Overall" Curricula	Portage Guide to Early Childhood	5
	Planning Guide to the Preschool Curriculum (Chapel Hill)	3
	Marshalltown Project	3
	RADEA	1
	Learning Accomplishment Profile	1
	Uniform Performance Assessment System (UPAS)	1
	Education of Multi-Handicapped Infants (EMI)	1
	Wabash Center Curriculum	1
	Total	16
Reading	DISTAR Reading	2
	Alphaphonics	3
	Sullivan Reading Program	2
	Goldman-Lynch Sound & Symbol Development kit	1
	Total	8
Social Development	Developing Understanding of Self and Others (DUSO)	3
	IA for Tots	1
	Total	4
Fine Motor Development	Dunnoff	2
	Total	2
Cognitive Development	Montessori Materials	1
	Lavatelli Materials	1
	Total	2

tivities, 10 kinds of teacher-directed activities were mentioned by at least 10 respondents.

The final topic to be discussed in this section of teaching approaches is the use of field trips in the preschool curriculum. Sixty-nine percent checked that they had either taken field trips with their students or planned on taking some during the year.

TABLE 27

TEACHER-DIRECTED ACTIVITIES AND CHILDREN'S CHOICES

Teacher-Directed Activities	# Respondents	Activities in which Children Make Choices	# Respondents
Language	25	Free Play	27
Academics	18	5-15 minutes 9 20 minutes 3 25-30 minutes 12 30-45 minutes 2 45 minutes 1	
One-to-one (Therapy or Tutoring)	16		
Snack/Meals	16		
Gross Motor	16	Outside/Gross Motor/ Recess	13
Fine Motor	12		
Music and Movement	12	Snack	4
Arrival/Opening Activity	12	Art/Creative Activities	4
Reading Readiness	10	Center Time	4
Story Time	10	Physical Education	3
Large Group	8	Music	3
Home-based Activities	8	Reading/Story Time	2
Rest Time	7	Order of activity (home-based)	2
Math	6		
Art/Creative Activities	5	Choose one thing	2
Small Group	4	Cognitive Time	1
Writing	3	Arrival	1
Tactile Stimulation	3	Reinforcement	1
Work Time	3		
Social Studies, Science, DUSO	1		
Show and Tell	1		

Many of the remaining 31 worked in programs which were primarily home-based, that is, their weekly time with a group of children was very low. A few, however, taught in center-based programs. Table

TABLE 28

FIELD TRIPS

Destination of Field Trip	# Respondents	Destination of Field Trip	2 or Fewer Respondents
Fire Station	19	Nurserv/Greenhouse	
Farm (including dairv, sheep, cattle farms)	14	Radio/TV Station	
Park/picnic (including state, city, and town parks)	13	Skating	
Library (including puppet shows there)	11	Post Office	
Zoo	11	Train/Bus Depot	
Grocery Store	8	Nursing Home	
Police Station	7	Theater	
Fair/Winter show	6	Gas Station	
Fast food establishment (including ice cream joints)	6	Sausage Making Plant	
Swimming	6	Creamery	
Shopping Center	6	Car Dealer	
Nature Walk	5	Hotel	
Airport	4	Chicken Hatchery	
Museum (including historic sites)	4	Cheese Plant	
Hospital	4	Haircuts at Beauty Shop	
Local Businesses	4	Coca Cola Plant	
Restaurant	4	State Capitol Building	
Bakery	4	Produce Stand	
Pet Shop	3	Where Parents Work	
Pumpkin Patch	3	Plays	
Homes (including the teacher's)	3	Church	
		Public School Programs	
		Train Yards	
		Artist's Studio	
		Special Arts Festival	
		Swamp	
		Biology Room at High School	
		Circus	

28 lists the places which respondents visited with their students. The most frequently mentioned field trips were to the fire station,

a farm (this included dairy farms, sheep farms, and cattle farms), a park/picnic (this included state parks, city parks, and town parks), the library (this included puppet shows at libraries), and the zoo. The many other field trips are included in Table 28 because, although not mentioned by a large number of respondents, the places represent a wealth of ideas for other preschool teachers.

Needs of Teachers

Data gathered on needs of respondents and their programs indicated that approximately half the respondents (46) felt their training was adequate and the other half (51') felt that it was "somewhat adequate." Only one person checked no, that her training was not adequate. Areas identified as being high priority for further training are listed in Table 29. No single area ranked extremely higher than the others, but two, teaching the blind/visually impaired and teaching the deaf/hearing impaired, were checked by more respondents than any other topic. It should be mentioned that several respondents who had checked that their training was adequate also checked some areas for further training.

Asked about the adequacy of their program's space, time, and staff, respondents did not check "too much" on any item. The were split roughly in half ("too little" vs. "adequate") over their administrative support, their time available for work with parents, and the adequacy of their staff. Fifty-nine percent felt that the time they had with the children was adequate. Table 30 presents this data. The needs of their staff was explored further, and Table 31 contains the results to this question. A speech/language therapist was identified as being needed by 37 of respondents. Either an additional staff member or more time from an existing one

TABLE 29

AREAS FOR FURTHER TRAINING

IDENTIFIED BY RESPONDENTS

Areas for Further Training	% Respondents
Teaching the Blind/Visually Impaired	36
Teaching the Deaf/Hearing Impaired	34
Curriculum Design	30
Assessment	27
Handling the Physically Handicapped Child	27
Teaching the Severely Handicapped Child	25
Creative Activities	22
Behavior Management	18
Child Development	16
IEPS	14
Working with Parents	12
Reading	12
Screening	8
Team Teaching	6
Classroom Management	6
Others:	2 each

Pre-operational Stage of Development and Cognitive Activities
Impulsive Children/Socially Maladjusted Children
[illegible] Bicultural Instruction

[illegible], Thirty-five percent indicated that some kind of "extra hands" were needed either in the form of teacher aides or parent or student volunteers. More than half (57%) of the respondents checked that their curriculum was adequately conceived and

convenient to implement. Thirty-seven percent answered this question with a "somewhat" and 47% checked "no". Six percent did not respond.

TABLE 30

PROGRAM NEEDS

	Too Little	Adequate	Too much
Space	37%	61%	0
Time spent with children	37%	59%	0
Time available for work with parents	47%	51%	0
Staff	53	45	0
Administrative supervision and support	45%	53	0

The final question regarding the needs of North Dakota's personnel in preschool handicapped related to their interactions with other professionals in the field. Thirty-five percent of the respondents checked that they did not interact informally on a regular basis with teachers or other professional serving preschool handicapped children. Seventeen percent indicated that such interactions occurred with one other professional, 26 checked 2-4 other personnel, and 24 checked 5 or more. In other words, only 50 of the respondents had regular opportunities to discuss their teaching with more than one other professional in preschool handicapped.

TABLE 31

NEEDS FOR ADDITIONAL STAFF

Staff Member	% Respondents Identifying Need
Speech/Language Therapist	37
Teacher Aide or Volunteer	35
Occupational Therapist	29
Teacher	29
Physical Therapist	16
School Psychologist	12
Supervisor	10
Nurse	8
Social Worker	6
Other:	
Teacher of Emotionally Disturbed	
Tutor	
Teacher in Learning Disabilities	
Developmental Disabilities Coordinator	

IV. DISCUSSION

The results of this survey provide a comprehensive picture of early childhood/special education programs in one state of the nation. Since North Dakota is not an extremely reactionary of progressive state in either politics or education, the study's results should be representative of the state of the art in many other states as well. In general, the findings reveal no horrors, nor do they discover any exemplary programs. Rather, the picture is one of dedicated professionals doing their best with the resources that are available in this relatively new field. In some programs the resources are quite adequate; in others their absence is felt.

In this section, interpretations of the results will be presented along with a discussion of the strengths and weaknesses of the programs as revealed by the survey data. Although some of the shortcomings identified may be due to forces beyond the ordinary teacher's control (such as an agency's budget or its policies), many are related to curriculum and the actual practice of teaching young handicapped children. It is hoped that this discussion will serve as "food for thought" for those involved in such teaching.

The data gathered on the population of children being served by preschool handicapped programs contained few surprises. The predominantly rural nature of the state appears to be reflected in the high number of respondents who served fewer than 10 children, the small number of children of any one handicapping condition in any one program, and the extremely small number of children with

low incident handicapping conditions. It seems appropriate, however, to raise a question about the 43% of respondents who were not serving severely handicapped children. Was this due to an actual low incidence of severely handicapped preschoolers? Was it the result of a reluctance on the part of teachers to label young children as severely handicapped? Or was it a result of a lack of availability of qualified staff prepared to teach children who function below a one or two year developmental level? Are there severely handicapped preschoolers in the state who are not being served because services for preschool children are only permissive, not mandatory in North Dakota? This is an important area which warrants further investigation.

The addition of preschool-aged children to North Dakota's state institutions was evidenced in the data on population. Although almost all the programs surveyed were non-categorical, residential programs at state institutions showed populations limited to single handicapping conditions. It will be interesting to see if these residential preschool programs expand over the next few years or if local programs around the state will become more capable of educating preschoolers with low incidence handicapping conditions.

The most glaring point found in the data on children being served was that, at the time of the study, the overwhelming majority of preschool handicapped programs in the state did not include nonhandicapped children. Nor is there any evidence to suggest that this segregation of preschoolers has changed since this study was completed. It is particularly distressing to note the meager number of public school programs (3 out of 18) which attempted to mainstream their preschoolers. Is the placing of pre-

school handicapped programs under the office of special education causing this exclusion of nonhandicapped children? Are the people in decision-making roles not aware of the value of mainstreaming young children? Are teachers? Convincing arguments for integrating handicapped and nonhandicapped preschoolers, which are available elsewhere (Bricker, 1978; Guralnick, 1978; Turnbull and Blacher-Dixon, 1980), convey clearly the benefits which arise out of this mixture of young children. It is most unfortunate that at an age in which social development is at least, if not more, critical than other areas of development (Johnson and Johnson, 1980), preschoolers are being denied this opportunity for crucial social interactions.

The second major concern to stem from this study relates to the ages of the children being served. The data indicated strongly that 1) children below the age of three were served by only a few programs; and 2) children who were three and four years old were served more than infants and toddlers but less than those who were kindergarten age. The first finding, although very distressing, was expected. Services for zero-three are not mandated in North Dakota and P.L. 94-142 has done nothing to change that. Neither public schools nor Headstart programs will serve children younger than three. Only the mental health centers and one residential institution were serving this population at the time of the survey. Hopefully recent funding decisions at the state level will encourage more programs to serve children of this age. What was surprising, however, was that although services to three, four, and five-year-olds were increased by Preschool Incentive monies, it appears that many programs chose to concentrate on the five-and six-

year-olds, neglecting the true preschoolers in the process. The reasons for this are not clear. Regardless, if early intervention is to be effective, efforts will have to be made to identify and serve children no later than their third birthday.

Taken as a whole, the data on staffing patterns and support personnel were impressive. A substantial number of respondents seem to have had access to a variety of support personnel and at least some paraprofessional assistance. A notable finding, however, was that support personnel were providing services much more frequently to children directly than through consultations with teachers. This may be the one major deficiency in the provision of support services. Consultations of quality and regularity represent one key to providing consistent and therefore, more effective, programming.

A second notable finding relates to the use of the social worker. Not unexpectedly, the frequency of programs utilizing a social worker was low. However, with few exceptions, the social worker was not listed as a high priority need. This raises questions about the present role of the social worker, teachers' perceptions of her role, and her possible future role in preschool programs. With increasing involvement of parents in their children's education, and the (long over-due) consideration of the complex needs of families of children newly diagnosed as handicapped, there is a real need for some professional to assume the role of contact person, counselor, and advocate. Preschool teachers do not have sufficient time to give parents (as made evident in Table 30), and social workers represent excel-

lent alternatives, particularly with their training in communication skills, counseling, and the legal rights of children.

The one discipline providing support services which stood out above all the others was speech/language therapy. Of the respondents, 88% indicated that a speech therapist participated in their program, with 75% of these checking that the speech clinician served the children frequently (at least two to three times per week). This is the highest percentage in the entire study, and it is significant when examined in relation to other data. Tests for language development were reportedly used by more respondents than any other category of standardized tests. The reader will recall that the three most frequently used assessment instruments were the Peabody Picture Vocabulary Test, the Test for Auditory Comprehension of Language (TACL), and the Boehm Test of Basic Concepts, all easy-to-administer measures of receptive language. The number of curriculum kits and materials which focused on language far exceeded any other category of curricular material mentioned by respondents. Again, the most popular curricular materials were language-related--the Peabody Language Development Kit and the Peabody Early Experiences Kit (PEEK). Furthermore, language/communication was checked as a major emphasis of their curriculum by 63% of respondents, higher than any other curricular area. This group of data leads to the conclusion that children's language was the major focus of most preschool handicapped programs in North Dakota.

It is difficult to determine whether this language emphasis is pedagogically sound or an unhealthy skewing of the curriculum. There are several possible explanations for it. The most obvious, of course, is that delays in language development represent the

most prevalent problem among the preschool handicapped population being served. Certainly speech/language services are needed by many young children in addition to those identified as speech/language delayed; children with physical handicaps, hearing impairments, multiple handicaps, or overall developmental delays often benefit from speech/language intervention. And it follows that if language is identified as a major area of concern, tests and curricula designed to facilitate the establishment of language will be utilized.

However, although this explanation is logical and at least in part supported by the data, the question arises: is language development so important that it warrants greater attention than motor development, cognitive development, or social development? Other factors which may account for this trend must be considered. A number of programs in this survey were staffed by individuals trained as speech therapists, not teachers. With little or no training in other areas of development, were these personnel unintentionally focusing on language at the expense of other areas of development? A similar question can be asked of those teachers whose training and experience were primarily in special education. With their strong background in working with school-aged children, were they emphasizing language because it is the closest area of the curriculum to academics? Or is the explanation simply that more curricular and assessment materials are available in the area of language than any other developmental area? The answers to these questions are beyond the scope of this study but they suggest an important topic for further research into preschool curriculum.

The staff needs presented in the final section of the survey

warrant serious consideration. A speech therapist, teacher aide, occupational therapist, and/or additional teacher were specified as being needed by approximately one third of the respondents. While the majority of respondents appeared to be adequately served by each of these professionals, those that are not cannot be overlooked. This is especially important for the Headstart programs. In several areas of the state, particularly on the Indian reservations, Headstart is the only available service for preschool handicapped children. They are all understaffed and seriously need teachers or tutors with some training in early childhood/special education.

Another problem identified by this study which calls for close attention was the lack of opportunity for more than one third of the preschool handicapped personnel to interact regularly with other professionals in their field. This problem is highlighted because it is more serious than most people realize and because it is one of the easier ones to rectify. As noted before, many teachers of preschool handicapped children who were surveyed did not have extensive preparation in teaching young children. Nor did they have supervisors with that kind of training. Contact and conversation with their colleagues was the one alternative many of them had for professional development. It is reassuring to learn that at least 48% of the respondents had regular opportunities to discuss their work with two or more colleagues. On the other hand, it is to the children's disadvantage that 17% had regular interactions with only one other professional in preschool handicapped and that 35% had no such interactions.

A superficial examination of the data would suggest that these

results were predictable considering the rural nature of the state. A closer examination, however, reveals some interesting findings. Four respondents who indicated no regular professional interactions were not from rural areas of the state but from urban areas. Their isolation was apparently due to other reasons. The other four who had no regular interactions were employed at residential schools. The isolation of staff, then appears to be one more problem facing state institutions. These results support the notion that special conventions or informal meeting times on a statewide or regional basis need to be arranged for personnel serving young handicapped children. Possibilities for such activities exist at the annual state conventions of the North Dakota Association for the Education of Young Children (NDAEYC) and the state Council for Exceptional Children (CEC). Other possibilities for bringing together personnel in preschool handicapped programs include organizing a state chapter of the Division of Early Childhood (DEC) of the Council for Exceptional Children, or utilizing resources from the Department of Public Instruction and/or Project P.H.I.N.D. (Preschool Handicapped Instruction in North Dakota), the University of North Dakota's personnel preparation project in preschool handicapped for special inservice activities.

A definite strength of North Dakota's preschool handicapped programs which emerges from this study is the process of involving parents in their preschoolers' education. Every respondent claimed some regular contact with parents, and only a small number (5) indicated that these were infrequent. The large majority saw themselves devoting a substantial amount of time to parents, and close to half indicated that they would like more time to work with

parents.

The nature of their contacts with parents is also promising. Informal discussions on the telephone and at children's homes, and notes and newsletters sent home engaged almost as many respondents as the required IEP/Placement meeting. The lists of teachers' expectations of parents and of the teacher's role in the parent-teacher relationship contain several additional kinds of contacts and suggest that many preschool teachers are aware of the special role parents of young handicapped children can play in their child's education. In addition to the familiar practice of parents carrying out prescribed teaching tasks at home, the lists include several uncommon and creative ideas such as suggesting alternative family scheduling to help parents accommodate a child's special needs, and helping parents to interact informally and play with their child on a daily basis.

While these efforts are laudable and represent a definite improvement over schools' previous attitudes towards parents, preschool programs have an even greater obligation to parents of handicapped children. Here often parents' first awareness or acknowledgement of their child's special needs occurs when that child attends school for the first time, in this case, preschool. The first time a child is labelled "handicapped" or is placed in a "handicapped" program can be a very fragile time for parents, a time in which communication and support are essential. The results of this study, however, suggest that only a few programs are helping parents in this regard. Providing information to parents through such activities as a resource library or group meetings, which has been shown to be effective and highly valued (Lillie and

Trohanis, 1976; Turnbull and Blacher-Dixon, 1980) does not stand out as a high priority. Less than half the respondents showed involvement in these kinds of activities, and, it is important to note, several of these respondents came from the same program. That is, the most extensive parent program represented in this study was based at one of the largest preschool programs in the state. This finding suggests a second conclusion regarding parent education programs--that there is "strength in numbers". A larger student population and consequently, a larger parent population and larger staff may make a parent education program more feasible. While a small program has the advantage of personalized attention to all children and parents, a larger program presents more opportunities for group efforts.

An even smaller number of respondents identified activities which provide emotional support to parents or which help parents cope with the daily realities of having a handicapped child in the family as a component of the services provided by their program. Apparently, most parents are "on their own" as far as coping is concerned. This contrasts sharply with the needs expressed by parents in the literature (Turnbull & Turnbull, 1978). It would be worthwhile to pursue this issue and investigate the actual effectiveness of North Dakota's parent programs by questioning the parents themselves.

The data on parent involvement begins to suggest an outline of the picture of curriculum in North Dakota's preschool programs. The reader will recall that the most frequent expectation of parents and teachers related to task - oriented instruction. Playing with children and arranging for their interactions (with

either adults or other children) did not rank highly. These trends are confirmed by the data on curriculum. Both respondents' perceptions of their teaching approaches and the data on room arrangement, teaching and assessment materials, and the role of the teacher support the conclusion that preschool programs in North Dakota rely heavily on behavioral technology and neglect the concerns of cognitive, social, and psychodynamic theorists.

In most of the programs reviewed in this study the teacher was viewed as the major change agent. Teacher control of activities and children's behavior was seen as crucial for the establishment of skills in which children were deficient. This deficit-learning approach, characteristic of many special education programs, tends to focus on a child's weaknesses rather than his strengths. Efforts are directed at remediating those weaknesses as directly as possible. Thus, curricula such as DISTAR, the Peabody kits, and RADEA were used by several preschool programs; most programs that encouraged parents to work with their children at home emphasized carrying out specific activities prescribed by the teacher (six respondents, in fact, chose the word "drill" to describe their expectations of parents); room arrangements, accessibility of materials, and daily schedules were such that the teacher was in full control of the classroom activities. The extensive list of activities directed primarily by the teacher (see Table 27) supports this interpretations of the data.

Even more revealing was the small amount of time allotted for free play. Only a little more than half the respondents indicated that their daily schedule included free play, and of these, only a small number had set aside a sufficiently lengthy period of time

for free play. Free play emerges from the data as a time-filler, a non-disruptive activity which kept the children involved while they waited for other children to arrive or go to the bathroom. It was viewed as a brief intermission, a relief, from the "real" learning activities. In few programs did it stand as a valued and integral part of the curriculum. Children's play as a whole was secondary to other, more school oriented goals such as reading readiness or language remediation.

Similarly, other basic tenets of a cognitively-based curriculum were missing from most of the programs surveyed. Concrete experiences with real objects, opportunities to make choices and develop decision-making skills, and opportunities for problem solving were not priorities in most of the programs studied. The reader will note, for example, the extremely small number of respondents who indicated the presence of a live plant or animal in their program. The heavily teacher-directed bias is evident in Table 27 which contrasts activities in which the children had opportunities to make choices. Few respondents indicated that their children were asked to make choices even in such nonacademic activities as snack time, art creative activities, and music!

The data on room arrangements also points to a teacher-directed emphasis. Although many respondents reported the existence of activity areas in their programs, these seemed limited to the more convenient reading/quiet area and manipulative material area. Both of these activity centers call for somewhat quiet, sitting activity. Areas which are more "messy" and which encourage more social interactions and play, such as a house/make-believe area, art area or block area, were noted by fewer than half the respon-

dents. A science area, which encourages exploration and experimentation, was included in fewer than 15% of respondents' programs. Data on the accessibility of materials, children's opportunities for making choices during the day, and the use of a large table to accommodate all the children support the notion that most of the curricula are not learning center based.

This tendency away from play and social interactions is particularly troublesome when considered in relation to the particular emphasis on language discussed above. A heavily teacher-directed approach focuses on children's language with the teacher, not on functional communication with other children or adults. This contrasts sharply with the current views of language intervention expressed by such leaders in the field as Bricker and Carlson (1980), Mahoney and Weller (1980) and Schiefelbusch (1980). To paraphrase Mahoney and Weller, "social communication" does not appear to be "the core component of (the) language intervention" being provided in the preschool programs studied. Similarly, Banet's (1979) suggestion that active learning is necessary in order to establish "language that is purposeful, social, and generalizable outside the classroom" contrasts noticeably from the teaching approaches which characterized the preschool programs in this study.

This inattention to cognitive and social concerns is supported in the respondents' own perceptions of their teaching approaches. Only 1% included cognition and only 1% included psychodynamics in their characterization of their curriculum. Approximately one quarter of the teachers mentioned cognition as an area of concern in their curriculum and 1% mentioned socioemotional development.

In contrast to these low figures, 66% of respondents included

developmental skill areas in their characterization of their curriculum, and developmental checklists were reportedly used by more respondents than any other kind of assessment procedure. There appears, then, to be some focus on child development in the preschool programs studied. It is the author's opinion, however, that developmental skill areas have been used in only a narrow sense, for a superficial categorizing and sequencing of skills to be taught. This is certainly the case with the majority of developmental checklists used by the respondents. The Portage, LAP, BCP, Marshalltown, and VMAS are all behaviorally-oriented curricula which utilize developmental skill areas in this limited way. While these checklists are extremely valuable in their own right, their use does not suggest a developmental perspective.

The reasons for this general behavioral teaching style are not difficult to deduce. Although many respondents are relatively new to the field of early childhood handicapped (see Table 7), more than two thirds have been teaching in some field for four years or more. The tendency of public schools has been to hire individuals from special education, not regular education, to fill positions in preschool handicapped (since individuals trained in preschool handicapped are limited in number). Consequently, a large number of respondents received their formal training and prior teaching experience in special education which, generally speaking, trains students in task analysis and prescriptive-teaching, not in methods which emphasize the facilitation of cognitive and social development. The approach of supervising agencies also affects program curricula, and the number of respondents who were supervised by directors of special education in the public schools is high. Con-

sidering these factors of prior training, previous teaching experience, and the general philosophy of supervising agencies, it comes as no surprise that North Dakota's preschool handicapped programs are more behavioral in nature than cognitively- and socially-oriented.

As noted in the review of the literature, however, the field of early childhood handicapped has been developing in recent years into an unusual blend of traditionally opposing viewpoints. The precision and accountability concerns of special education have been mingling with the social and cognitive concerns of early childhood education. The reader will recall the quotation from Anastasiow (1981) included in section II:

> ...Teachers need to understand that handicapped children have more in common with normal children in terms of basic needs than is currently believed, particularly in the areas of emotional development and the need for creative play...(p. 278).

The shift that Anastasiow writes about is not yet evident in the programs reviewed in this study. Neither of the aforementioned "basic needs" was paid much attention by most of the programs surveyed. The relative unimportance of play and social interactions was suggested by the extremely small number of programs which integrated handicapped preschoolers with their nonhandicapped peers and is highlighted by the data on materials and daily scheduling. Materials for make-believe play or role playing were noted by respondents considerably less frequently than materials for fine motor development and preacademics. Furthermore, in most programs, materials for make-believe play were available only at the discretion of the teacher. Sand and water play materials were available in half the respondents' programs but were accessible to chil-

dren in less than 25% of their programs.

The gap between the trends in the literature and the state-of the-art in the field encompasses more than just teaching styles. The most sensitive and valuable assessment procedures developed for preschool handicapped children (many in recent years) were included in pitifully few programs as reported by respondents. Only six people reported using the Brigance Inventory of Early Development, for example, and a total of three mentioned Haeussermann's Developmental Potential of Preschool Children, the Learning Accomplishment Profile-Diagnostic Education, and Uzgiris and Hunt's Ordinal Scales of Infant Psychological/Development. Although norm-referenced tests were considerably more popular, two of the most appropriate of these for young children--the Bayley Scales of Infant Development and the Merrill Palmer Scale of Mental Tests--were used by fewer than 20 of respondents. Helpful scales of motor development, such as the Milani-Comparetti, were reported by only one respondent.

One reason for this may be the fact that most of these assessments are not available from major publishing houses. In addition, the assessments by Haeussermann and Uzgiris and Hunt may have discouraged teachers since they are not available in kit form. Another possible explanation is that many teachers were not aware of these unconventional assessments and need to update their training. Fifty-one percent did check that their training was only "somewhat adequate," and 27 indicated that they would like further training in assessment. From the results on assessment tools used, however, it would seem that a greater number would benefit from such training.

A final issue of concern related to the educational programs provided to severely handicapped preschoolers. As noted earlier in this section, there is some question about the number of severely handicapped preschoolers being served in North Dakota. Of equal importance is the nature of the education available to those severely handicapped children who are receiving services. The data on assessment and curricular materials is particularly weak in the area of the severely handicapped. The two most popular curricular kits in this study (the Peabody Language Development Kit and the PEEK) and most of the other curricular materials mentioned by respondents teach at a level much higher than the functioning level of most severely handicapped preschoolers. The Uniform Performance Assessment System (UPAS) developed by White, Edgar, and Haring at the University of Washington, and the Education of Multi-handicapped Infants (EMI), developed at the demonstration project at the University of Virginia Medical Center, are two curricula which are appropriate for this population; they were reportedly used by two and one respondent respectively. While the availability of materials for severely handicapped preschoolers is limited, there are several (the UPAS and EMI, for example) which are informative, comprehensive, and inexpensive. The use of such materials would help preschool teachers select developmentally appropriate objectives and design effective educational programs for their severely handicapped students. Teachers would also benefit from inservice training in this particular area.

It is hoped that this study has shed some light on the needs and shortcomings of services being provided young handicapped children in the state of North Dakota. Since identification of a

problem is a necessary prerequisite for change, the research results will hopefully serve as a catalyst for close examination and review of existing programs by the professionals responsible for them. This is particularly important at the present time because many of North Dakota's programs were set up on a temporary or experimental basis and are on the verge of comfortably settling into these "ad hoc" services without the in-depth analysis and discussion which should precede such a step. In addition, for those districts or agencies which are contemplating establishing preschool services, the information provided by this study will hopefully contribute to their efforts at providing the best possible services to young handicapped children.

APPENDIX A

Survey Instrument

PROGRAMS SERVING PRESCHOOL HANDICAPPED CHILDREN IN NORTH DAKOTA

1) How many children are you currently serving

_ 1-3 _ 7-9 _ 13-15 _ 19 or more

_ 4-6 _ 10-12 _ 16-18

2) Indicate the number of children in your program/class who could be considered

___ not handicapped

___ mildly handicapped

__ moderately handicapped

__ severely handicapped

3) Indicate the number of children you are serving who could be considered as having the following handicapping conditions:

physical handicap (cerebral palsy, spina bifida, birth defects, muscular dystrophy, etc.)

visual [illegible] or blindness

hearing impairment or deafness

developmental delay

speech or language problems/delay

behavior problems

multiple handicaps [illegible]

4) Indicate the number of children you are serving who fall in the following [illegible]

birth-6 months [illegible]

6-18 months [illegible]

[illegible]

5) Indicate the number [illegible]

[illegible]

6) Indicate the number of staff in your prog r who fill each of the following roles

___ Teachers Teacher aide Support personnel

7) If you have support personnel in your program, indicate the number of each of the following:

__ Physical therapists Social workers

Occupational therapists School Psychologists

__ Speech and language therapists Other - Please specify

Nurses

Not Applicable

8) Indicate how often the following professionals work with children in your program (please write a letter in each blank)

Physical Therapist

Occupational Therapist

Speech Language Pathologist

Nurse

Social worker

School Psychologist

Other

a) every day
b) 2-3 times a week
c) once a week
d) every other week
e) once a month
f) every other month
g) other - please specify
h) not applicable

9) Using the same letters as in question 8, indicate how often the following professionals meet with you in a consultative role

Physical Therapist Social worker

Occupational Therapist Psychologist

Speech Language Pathologist Other

Nurse

10) Who in your program is responsible for [illegible]

[illegible] [illegible]

[illegible] [illegible]

[illegible] [illegible]

11) [illegible]

1. How man[illegible] teachers or other professionals serving preschool handicapped children do you interact with weekly on an informal basis?

0 1 2 3-4 5-6 7 or more

13) Where is your program primarily based

in children's homes in school or center combination of home and center

14) If your program is school or center-based, how many adults (including you) are usually in the room

1 2 3 4 5 or more Not Applicable

15) How many hours a week are you in contact with the children

[illegible] 3-5 10-15 30 or more

1-2 [illegible] 15-20

2-3 7-10 20-30

16) How often are you in contact with parents

Rarely Once a month 2-3 times a week

[illegible] Every other week Every day

[illegible] Once a week Not Applicable

[illegible]

[illegible]

18a) If parents form a major part of your service delivery system, briefly describe your expectation of parents in your program.

18b) If parents form a major part of your service delivery system, briefly describe the kind of instruction or support you provide the parents.

19) How often do your children attend school or center?

Once a week for 2-3 hours	Every day, half day
Twice a week for 2-3 hours each	Every day, all day
3 times a week for 2-3 hours each	Other Please Specify
3 times a week, all day	Not applicable

[illegible]

B[illegible] Inter-locking, [illegible] Legos, Bristle [illegible]

Books — Texts — Primers, etc.

Books — [illegible], Story

Carriage, Rug

Cassette [illegible]

Chalk Board

[illegible]

Easels [illegible]

Filmstrips and [illegible]

Finger [illegible]

Flannel Board

Housekeeping Furniture

[illegible]

Puppet

Puppet Theater

[illegible] Wood

Puzzles — Card-[illegible]

Puzzles — [illegible]

[illegible]

Slide

[illegible] king [illegible]

Stuffed Animal

Swings

Tape Recorder

Tools

Trucks, Cars, [illegible]

[illegible]

38) In which of the activities [illegible] listed in question [illegible] the teacher play the primary directing role?

39) In which of the activities [illegible] listed in question 37 do the children [illegible] what they want to do?

40) Approximately what percentage of the [illegible]'s time is [illegible] in the following manner of operation:

[illegible]

[illegible] adequate to meet the needs of your students?

[illegible] Definitely [illegible] Somewhat [illegible]

[illegible] your training is adequate, in what areas would you like additional [illegible] (Check [illegible] applicable)

[illegible]	[illegible] Exam with Parent	Teaching the Deaf Hearing Impaired
Assessment	Reading	Teaching the Blind/ Visually Impaired
[illegible]	[illegible] Development	Classroom Management
[illegible]	Teaching the Severely Handicapped	Creative Activities
[illegible]	[illegible] Working with Parents of Children	Team [illegible]

Please be assured that the information you provide on this form will be used only for the purposes of this study. No names of individuals, schools or districts will be revealed unless special permission is given.

You may remain anonymous, but if you wish to identify yourself please do so.

Signature (optional) ______________________

[illegible] ______________________

APPENDIX B

Programs Serving Preschool Handicapped Children in North Dakota 1979-80

Anne Carlson School for Crippled Children, Jamestown (Kindergarten)

Badlands Special Education, Dickinson

Bismarck Early Childhood Education Program-Special Needs
Bismarck Special Education

Bismarck Early Childhood Education Program-Headstart

Buffalo Valley Special Education, Jamestown

Center for Human Development, Grand Forks

Deaf-Blind Program-Grafton State School, Grafton

Deaf-Blind Program-N.D. School for the Blind, Grand Forks

Developmental Disabilities Program, Minot

East Central Special Education, New Rockford

[illegible]

Southcentral Mental Health Center, Jamestown

Southcentral Prairie Special Education, Napoleon and Steele

Southeast Mental Health Center, Fargo

Southwest Special Education, Mott

Standing Rock Headstart

Three Affiliated Tribes Headstart

Towner Headstart

Turtle Mountain Headstart

Upper Valley Special Education, Rural Grand Forks and Walsh County

Williston Headstart

Wilbac Special Education, Williston

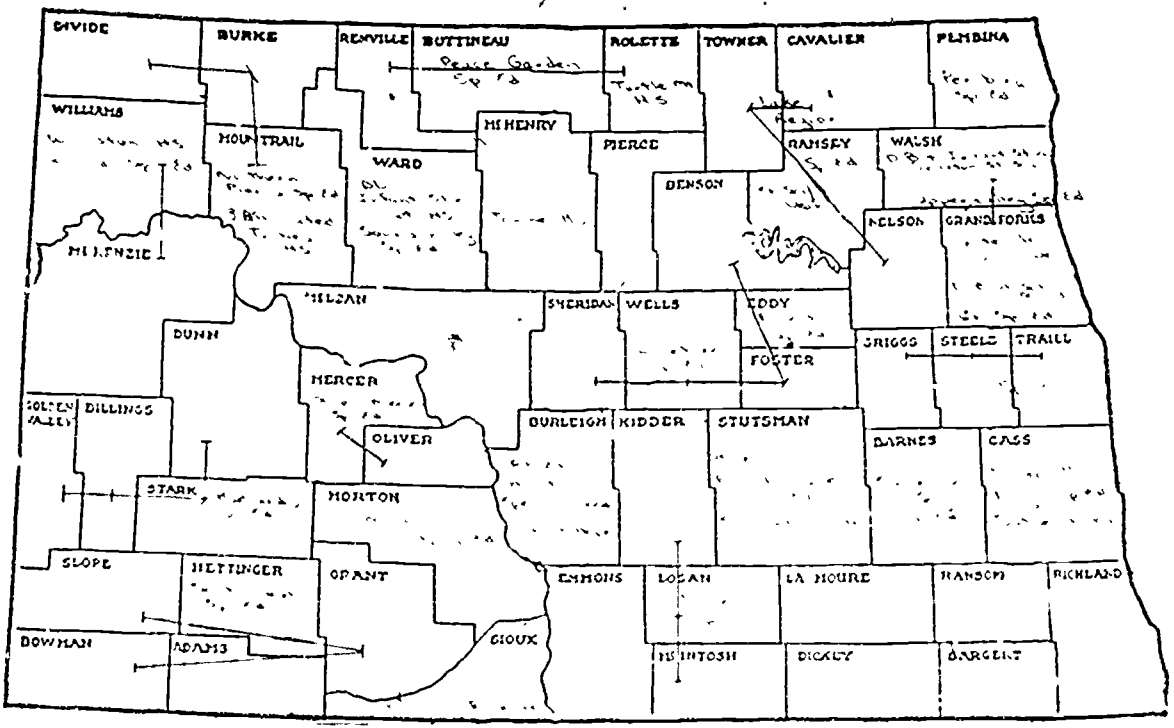
APPENDIX C

GEOGRAPHIC DISTRIBUTION OF PROGRAMS SERVING

PRESCHOOL HANDICAPPED CHILDREN 1979-80

Appendix C

Geographic Distribution of Programs Serving Preschool Handicapped Children 1979-1980



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