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ABSTRACT

The Readiness Program for Disadvantaged Pre-School Children with Exceptional Learning Disabilities, a New York State Urban Education Quality Incentive Program, provides educational, clinical and socialization services to children who manifest developmental problems in the areas of language functioning, social and emotional adjustment, fine and gross motor development, activity levels, and cognitive development. The essential components of the program are as follows: (1) identification and diagnosis of pre-school children with major general and specific learning disabilities; (2) provisions of a pre-school classroom environment for appropriate diagnosed and classified children; (3) assistance of parents to understand the problems of their children and to develop and use appropriate child-training procedures; and, (4) arrangements for the admission of these children as they reach the age of five years in public and private educational facilities; and, follow-up on the adjustment of children and their parents when they are no longer affiliated with the program. Sixteen classroom units were in operation during the 1972-73 school year, primarily domiciled in public and private hospitals in the five boroughs of New York City. Over 400 children were screened for admission by hospital-based teams consisting of medical, speech, psychological, and educational professionals. A total of 299 children who met all admission criteria were in attendance in the pre-school classroom programs established in the 16 units. The evaluation objectives were based upon the predictions of behavioral changes presented in specific program objectives. (Author/JM)

Function No. 17-36404

AN EVALUATION OF THE

READINESS PROGRAM FOR PRE-SCHOOL CHILDREN

WITH EXCEPTIONAL LEARNING DISABILITIES

STATE URBAN EDUCATION PROGRAM

An evaluation of a New York City school district educational project funded by the New York State Urban Education Program Enacted at the 1970 Legislative Session of the New York State Legislature for the purpose of "meeting special educational needs associated with poverty." (Education Law 3602, subdivision 11 as amended), performed under contract with the Board of Education of the City of New York for the 1972-1973 school year.

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July 31, 1973

Dr. Anthony J. Polemeni
Acting Director
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BOARD OF EDUCATION
OF THE CITY OF NEW YORK
110 Livingston Street
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Dear Dr. Polemeni:

In fulfillment of the agreement dated January 12, 1973 between the New York City Public Schools and the Center for Educational Research and Field Services, I am pleased to submit three hundred copies of the final report, AN EVALUATION OF READINESS PROGRAM FOR DISADVANTAGED PRE-SCHOOL CHILDREN WITH EXCEPTIONAL LEARNING DISABILITIES.

The Bureau of Educational Research and the professional staff of the New York City Public Schools were most cooperative in providing data and facilitating the study in general. Although the objective of the team was to evaluate a project funded under State Urban Education, this report goes beyond this goal. Explicit in this report are recommendations for modifications and improvement of the program. Consequently, this report will serve its purpose best if it is studied and discussed by all who are concerned with education in New York City -- the Board of Education, professional staff, students, parents, lay leaders, and other citizens. To this end, the study team is prepared to assist with the presentation and interpretation of its report. In addition, the study team looks forward to our continued affiliation with the New York City Public Schools.

You may be sure that New York University and its School of Education will maintain a continuing interest in the schools of New York City.

Respectfully submitted,

Arnold Spinner

ARNOLD SPINNER
Director

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Executive Summary

The Readiness Program for Disadvantaged Pre-School Children with Exceptional Learning Disabilities, a New York State Urban Education Quality Incentive Program, provides educational, clinical, and socialization services to children who manifest developmental problems in the areas of language functioning, social and emotional adjustment, fine and gross motor development, activity levels, and cognitive development. The essential components of the program are as follows:

- identification and diagnosis of pre-school children with major general and specific learning disabilities
- provision of a pre-school classroom environment for appropriately diagnosed and classified children
- assistance of parents to understand the problems of their children and to develop and use appropriate child-training procedures
- arrangements for the admission of these children as they reach the age of 5 years in public and private educational facilities
- follow-up on the adjustment of children and their parents when they are no longer affiliated with the program

Sixteen classroom units were in operation during the 1972-1973 project year, primarily domiciled in public and private hospitals in the five boroughs of New York City. Over 400 children were screened for admission by hospital-based teams consisting of medical

speech, psychological, and educational professionals. A total of 299 children who met all admission criteria were in attendance in the pre-school classroom programs established in the 16 units.

The objectives of the program were stated in terms of expectations of positive changes in the developmental behavior of the target population in areas of social and emotional adjustment, gross and fine motor coordination, social competence and socialization. It was predicted that a 30 percent improvement in these areas would be made by at least one half of the children who were in regular attendance at the classroom centers.

Evaluation objectives were designed to assess the changes and improvements which had been predicted in the program objectives. Specifically, the evaluation sought to determine through pre- and post-testing (Vineland Scale, Myklebust Scale, and Waltham Inventory) whether the program objectives were realized.

The evaluation objectives were based upon the predictions of behavioral changes presented in the specific program objectives listed above. The evaluation objectives are stated as follows:

1. To determine whether at least 240 children representing the target population were identified and diagnosed for acceptance into the program.
2. To determine through pre- and post-testing whether 50% of enrolled children would show a 30% improvement in language development and motor coordination.
3. To determine through pre- and post-testing whether 50% of enrolled

children would show a 30% improvement in social competence and social development.

4. To confirm and document the results of the program in terms of the number of children who have been accepted into existing educational programs for the next school year.
5. To comment upon the effectiveness of the various aspects of the program which were listed in Program Objectives, above.

The data collected indicated the following:

1. Direct and indirect observation of the program revealed that the program was implemented as outlined in the project proposal.
2. Assessment of the classroom teachers' background and experience indicated that all had appropriate training and certification, over 68 percent held advanced degrees, and most had experience working with children who were educationally and psychologically comparable to the population served by the project.
3. A total of 440 pre-school children from disadvantaged backgrounds were served by the project personnel or related personnel, in some capacity. Approximately 373 children were identified and diagnosed as having major general and/or specific learning disabilities, or 55 percent more than the original number stated in the project proposal.
4. Approximately 164 children who received remedial training and treatment were placed in the following programs: brain injured classes, emotionally disturbed classes, CRMD classes, classes for the aphasic, schools for the deaf, classes for the multi-handicapped, and regular

kindergartens and first grades. In short, the project objectives regarding the identification, diagnosis, and post-program placement were successfully met, far beyond the criterion measures set at the beginning of the project year.

5. A review of all the major procedures and activities used in the project to stimulate development of abilities and to remediate deficits led the evaluators to conclude that the educational program as a whole was based on sound educational and psychological theory and empirical data.

6. Approximately 300 individual parent interviews were conducted by a variety of project and ancillary personnel, while a total of 157 formal parent workshops were held during the 1972-1973 project year. Despite these generally positive findings, with respect to effort, it was observed that some centers were unable to involve many parents at even a minimal level because of such factors as transportation problems, inability to convince parents of the importance of parental involvement, and various family involvements among others.

7. A variety of relevant topics were included as part of the formal inservice component of the program. In addition, teachers further increased their professional knowledge by attending hospital lectures, conventions, workshops, special day meetings, and committee meetings in a total of 126 instances over the year.

8. The educational assistants employed in the project made valuable contributions to the day-to-day functioning of the program.

9. Teachers' ratings of the effectiveness of a variety of components were generally very positive, with an overall rating of 4.8 out of a possible 5.0.

10. Analysis of test scores obtained in the following areas yielded statistically significant gains from initial to final measures: language development, gross and fine motor coordination, social development, and behavior control. Examination of the magnitude of the change in pre- and post-test measures indicates that the population showed gains of from 50 percent to as high as 75 percent of the average standard deviations on the measures used.

11. The project was a success in securing the active participation in the project of hospital and mental health center clinical personnel from such areas as medicine, psychology, speech and hearing, social work, and special education with no cost to the program.

In short, the program was favorably perceived by the classroom teachers, the supervisors, and the evaluation team. The results of the analyses of the data lend support to the over all favorable evaluation of the program.

In usual situations, recommendations are directed toward upgrading inadequate aspects of a program. However, in this situation those program activities which are mandated by the funding agency have been carried out in an outstanding manner. Many of the recommendations that follow are beyond the control of the present project personnel. They are presented here, however, in the hope that they may come to the attention of those who are in a position to implement such changes, and thus broaden the impact of this excellent program. It should be stressed

that these recommendations should not be implemented at the expense of reducing any of the currently available services.

1. The Readiness Program for Disadvantaged Pre-School Children with Exceptional Learning Disabilities should be continued.
2. All-day training and orientation workshops,[1] lasting from one to three days should be scheduled at the beginning of each school year for teachers in other facilities with whom the pre-school graduates will be placed. The purposes of these workshops should include among others: to insure continuity in the training, remedial, and therapeutic services provided for the children formerly enrolled in the project; to avoid the duplication of services and/or procedures (e.g., obtaining certain diagnostic and background data already available); to provide further feedback of the effectiveness of the pre-school program and the post-program adjustment of children formerly enrolled in the project.
3. While flexibility in program planning and informal assessment techniques are both essential ingredients of a sound intervention program for the population served in this project, teachers should be helped to plan a greater variety of structured remediation strategies based on the more formal standardized diagnostic instruments in psychology and education.
4. Outside speakers, representing various professional areas, should be added to the project and clinical personnel already participating

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[1] This recommendation is, in part, based on a personal communication with Dr. Helen M. Feulner, Acting Director, Special Education and Pupil Personnel Services.

in the in-service training component of the project.

5. There should be opportunity for inter-center visitations by classroom teachers, including exposure to clinical emphases other than that represented by a teacher's own clinical affiliation, in order to insure a greater balance of therapeutic orientations and practices in a particular center.

6. The following recommendations are directed specifically toward increasing parental involvement in the efforts to assist both the child and the parent.

   A. Every effort should be made to identify and remove the barriers to more frequent and intensive parent involvement in the preschool program.

   B. The following specific services and activities should be given serious consideration in future project planning and development:

      a. Employment of sufficient numbers of school social workers to provide services for all parents needing them, without reducing direct services and other resources currently provided for the children.

      b. Time allotments be made for home visits by classroom teachers and other project personnel.

      c. All-day parent workshops be planned, with "baby sitting" services available, to provide parents with training in child management techniques; speech, language, and cognitive stimulation activities; and methods for creating a therapeutic home environment, among others.

Program Description

The 1972-1973 Readiness Program for Disadvantaged Pre-School Children with Exceptional Learning Disabilities is a continuation of a New York State Urban Education Quality Incentive Program which provides educational, clinical, and socialization services for New York City children between three and five years of age who manifest the following problems, among others: developmental lags or disabilities in the language, social, emotional, and cognitive areas; fine and gross motor impairments, hyperactivity; and excessive withdrawl behavior. During the 1972-1973 project year, classroom units were established in public and private hospitals and in schools and private agencies which have affiliations with nearby hospitals and mental health centers. The principal components of these programs are as follows:

identification and diagnosis of pre-school children with major general and specific learning disabilities

provision of a pre-school classroom environment for appropriately diagnosed and classified children

assistance of parents to understand the problems of their children and to develop and use appropriate child-training procedures

arrangement for the admission of these children as they reach the age of five years in public and private educational facilities

follow-up on the adjustment of children and their parents when they are no longer affiliated with the program.

Approximately 240 or more children were to be identified and screened for admission to the program during the current project year.

Referrals were made by hospitals, public and private clinics, head start programs, private physicians, day-care centers and New York City Board of Education units. Wide publicity was given to all health and social service agencies to whom children in the target population might be known. The actual screening was carried out at hospital centers, and consisted of medical, speech, psychological, and educational assessments. The diagnostic breakdown of the children who received services during the previous project year is presented in Table 1.

Cutting across all diagnostic categories in the past was a generalized maturational lag which was expressed in the areas of language, physical growth factors, psycho-motor development, and socialization.

Staff. One or two teachers and an educational assistant were assigned to each unit, depending on class enrollment. The teachers were primarily recruited from early childhood or special education backgrounds. The educational assistants had paraprofessional status, were involved in the immediate community where they were assigned, and had backgrounds of paid or voluntary experience in working with parents and pre-school children.

The central office coordination of the program was the responsibility of a director, a guidance counselor, and a teacher trainer. Each of these individuals spend a great deal of their time in the field and had the responsibility for general program supervision and implementation. A secretary and clerk-typist completed the central office.

Table 1

Diagnostic Categories of Children Served*

1971-1972

Classification	N
Brain Injured	45
Undifferentiated	19
Retarded	16
Multi-handicapped	73
Emotionally Disturbed	49
Hearing Impairment	9
Severe Visual Problems	4
Language Lag	55
Developmental Lag Only	16
Aphasia	22

*Data included in Table 1, as well as in some of the other tables in this report are based on information supplied by project personnel.

Planned Classroom Activities. Morning and afternoon sessions were held each school day; each session extending for two and one-half hours. A typical schedule for a morning session was as follows:

Time	Activity
9:00 - 9:30	Arrival - personal greeting & individual attention, open day's routines - group
9:30 - 10:00	Work-play period - small group or individual
10:00 - 10:30	Clean up and pause for snack
10:30 - 11:00	Prescription teaching for learning disability
11:00 - 11:20	Music, stories, and/or outdoor play
11:20 - 11:30	Clothing and departure

Parent Involvement. In past project years, many parents accompanied their children to the centers in which daily classroom sessions were held. Space was provided in the lobby of each facility where parents could wait for their children until the end of a daily program. While the children were in the classrooms, parents frequently were interviewed by staff members of the clinics where an affiliation had been established. The parents were also provided with an opportunity to meet informally with teachers and educational assistants before and after classroom sessions. The 1972-1973 project included provisions for a social worker or a psychologist in the hospital staff on a voluntary basis to hold group sessions with parents, during which time the problems of individual parent-child relationships would be discussed. Many

of these conferences were devoted to conversations about child-training procedures, and the necessity for parents to work closely with the teachers and educational assistants on matters related to their children.

In some units, transportation was provided for the children each day if they met the age requirement. For those parents who did not accompany their children to the school, special arrangements, in the form of token money, were made so that the parents could participate in meetings conducted by members of the clinical staff.

Clinical Conferences. Weekly clinical conferences were held and included the participation of teachers, educational assistants, and hospital or mental health center staff members. The agenda for these conferences were built around discussions of individual children who were or were not adjusting well in the program. In certain instances, decisions regarding immediate and future placement for a child were decided at such conferences. Ordinarily, recommendations were communicated to the school or other agency personnel concerning the management of certain children, with suggested techniques for classroom interventions being presented.

Post-Program Placements. In addition to identification and diagnosis, one of the major purposes of the current project was to provide appropriate treatment and education for their child. Table 2 presents data on the placements which occurred at the end of the previous project year.

Specific Program Objectives

The general objectives of the Readiness Program for Disadvantaged Pre-School Children with Exceptional Learning Disabilities were mentioned at the beginning of this report. More specifically, the 1972-1973

Table 2

Post-Program Placements

1971-1972

Type of Class	N
Brain Injured Classes	18
Emotionally Disturbed Classes	12
Classes for CRMD	7
School for the Aphasic	6
Multi-handicapped (unknown placement)	3
School for the Deaf	1
Regular K's or Grade 1	17

program objectives which were evaluated were as follows:

1. As a result of the program, approximately 240 children will be identified and diagnosed as to learning disability by means of tests such as the Denver Developmental Screening Test, Vineland Scale of Social Maturity, and other tests as appropriate.

2. As a result of the program, 50% of the children enrolled in the program will improve 30% in the areas of concern (e.g., gross and fine motor coordination, language development, use of materials, etc.) as measured by monthly ratings completed by teachers in the field of special education.

3. As a result of the program, 50% of the children enrolled in the program will improve by 30% in social development (i.e., able to relate to peers and adults and self, including self-control, and psychomotor skills) as measured by the Vineland Scale completed by the parents and teachers in special education.

4. As a result of the program, at least 25% of the children will gain the appropriate behavior needed for acceptance into existing educational programs.

5. Assess the perceived contribution of community and educational agency personnel and parents to the following aspects of the program:

   Recruitment of students
   Diagnostic work-up
   Implementation of staff training program
   Development of a parent program
   Post-program placement

Evaluation Objectives and Procedures

The evaluation objectives were based upon the predictions of behavioral changes presented in the specific program objectives listed above. The evaluation objectives are stated as follows:

1. To determine whether at least 240 children representing the target population were identified and diagnosed for acceptance into the program

2. To determine through pre- and post-testing whether 50% of enrolled children would show a 30% improvement in language development and motor coordination

3. To determine through pre- and post-testing whether 50% of enrolled children would show a 30% improvement in social competence and social development

4. To confirm and document the results of the program in terms of the number of

children who have been accepted into existing educational programs for the next school year

5. To comment upon the effectiveness of the various aspects of the program which were listed in Program Objectives above.

To meet the evaluation objectives, a variety of procedures were utilized by members of the evaluation team. In order to describe the implementation of the program, rosters containing lists of personnel assigned to the project, together with the services performed by them were examined. Questionnaires were developed and sent to all classroom teachers in order to collect data on various aspects of the program. Questionnaire items were developed to obtain information on the qualification of personnel to work in the program. Included among the items were a number designed to ascertain the perceptions of project personnel regarding the success of the program in meeting the project objectives.

Members of the evaluation team were in frequent contact with the supervisory personnel throughout the course of the project year to obtain information regarding the implementation of the program. Finally, continuous monitoring of programs was carried out through site visits made during the hours the intervention services were being performed by the project personnel.

Improvements in language development, gross and fine motor coordination, social development, behavior control, and related developmental areas were determined by obtaining pre- and post-test measures on the following standardized instruments: a) The Pupil Rating Scale: Screening

for Learning Disabilities (Myklebust, 1971); b) Denver Developmental Screening Test (Frankenburg and Dodds, 1969); c) Vineland Social Maturity Scale (Doll, 1965); and d) Social-Emotional Scale (Waltham, 1969).

Analysis of Data. Data were analyzed by means of a Subjects x Trials Analysis of Variance. F ratios were computed for the total group comparing the two trials (pre-test and post-test), taking into account the correlation between the pre- and post-test results. These F ratios are equivalent to the square of t ratios that would have been obtained in a correlated t test analyses of the data. In addition, descriptive statistics were used to provide a summary of central tendency measures, as well as measures of variability.

Findings and Results

Staff. An examination of the personnel rosters revealed that a total of 30 professional specialists were involved in providing direct and indirect educational services to the target population during the 1972-1973 project year. Of this total, 27 were hired as classroom teachers and three were involved in an administrative and/or supervisory capacity. Among the latter group, there was a Project Coordinator, a Guidance Supervisor and Liasion Person, and one Teacher Trainer. An Educational Assistant was assigned to each of the class centers to assist the classroom teachers. The project's mid-progress report also listed the following: one Clerk, four Family Workers, and three Family Workers (part time). Finally, a School Secretary was housed in the central project

office. While not directly employed in the project, the section on project personnel would not be complete without mentioning the numerous clinical team members who contributed their skills and knowledge to the program and who, in a significant way, contributed to the success of the project. Each of the clinical affiliations established by the project personnel generally contributed the services of at least one of their staff members to each center. In most cases, an entire team from the clinical facility donated their combined professional services to the fulfillment of the project's objectives. These clinical members represented such specialties as neurology, pediatrics, psychiatry, psychology, social work, language and speech specialists, among others.

Centers. A total of 32 pre-school classes, with separate registers for morning and afternoon sessions where appropriate, were formed to serve the youngsters identified as a result of the project's operation during 1972-1973 school year. Table 3 lists the various center locations, together with their clinical affiliation. Table 4 presents data on the total number of classes at the mid-year point, along with sub-totals divided into teacher classes. The number of teachers assigned to each center, and therefore classes, depended upon pupil enrollment.

Children Served. Tables 5 through 8 summarize the data on the number and types of children served in the 1972-1973 project year, as well as their final status. Inspection of Table 5 reveals that 244 pre-school children were enrolled in the centers by the middle of the year, while the total number attending the program over the entire year was 299 (see Table 7). Tables 5 and 6 also provide enrollment figures according

Table 3

Center Locations and Affiliations

	Center Locations	Affiliations
Man.	P-116-M, 210 E. 33 Street	NYU Dept. of Child Psychiatry Learning Disorders Unit
	P-171-M, 19 E. 103 St. (Unit I) Mt. Sinai Hospital (Unit II)	Mt. Sinai Hospital, Dept. of Child Psychiatry
	East Broadway School, 197 E. Broadway	Educational Alliance
	Harlem Hospital, 530 Lenox Ave, "K" Bldg.	Division of Child Psychiatry
	Babies Unit, 626 W. 165 St., N.Y.C.	Babies Hospital, Dept. of Pediatric Neurology
Bronx	P-23-X, 793 E. 165 Street	Montefiore-Morrisania, Comprehensive Health Care Center
	P-94-X, 3530 Kings College Place	Montefiore Hospital, Speech & Hearing
	P-150-X, Einstein Loop North & Hutchinson River Parkway East	Einstein Hospital
Bklyn.	P-261-K, 314 Pacific Street	Long Island College Hospital
	P-298-K, 85 Watkins Street	Brookdale Hospital, Dept. of Child Psychiatry
	Kings County Hospital, "J" Bldg., Winthrop St. & Albany Ave.	Dept. of Child Psychiatry
	Carey Gardens Day Care Center 2964 W. 23 Street	Jewish Board of Guardians, Coney Island Mental Health Center
Queens	Elmhurst I and Elmhurst II 8101 Baxter Street, Elmhurst	Elmhurst City Hospital, Developmental Evaluation Clinic; Neuromuscular Clinic; & Dept. of Speech Pathology & Audiology
	Queens General Hospital, School of Nursing, 82-68 164 St., Jamacia	Child Psychiatry; Dept of Speech & Hearing; & Child Rehabilitation Cntr
S. I.	Moravian Church, 1657 Victory Blvd.	Staten Island Mental Health Center St. Vincent's Hospital

Table 4

Total Number of Classes:

Mid Total

	Double (2 Teachers)	Single (1 Teacher)	TOTAL*
Mid	19	13	32

* A new center was started after the beginning of the project year and not included in this table.

Table 5

Types of Handicapped Enrolled

Mid Totals

	Learning Disabled	Emotionally Disturbed	Speech Impaired	Retarded	Hearing Impaired	Visually Impaired	Other Health Impairments	TOTAL
Mid	93	62	52	26	3	2	6	244

Table 6

Types of Handicapped Screened and/or Enrolled:

Final Totals

Emotionally Disturbed	Neuro-logical MBD	Language Lag	Language Impariment	Undiag-nosed	Develop-mental Lag Only	Retarda-tion	Multi-Handi-capped	Hearing Loss	Visual Loss	TOTAL TOTAL
85	61	36	33	24	18	15	17	66	4	440

Table 7

Status and Total Number of Children Served: 1972 - 1973 Project Year

Service Category/Status	Total
Attended Program	299
Leaving Program	164
Remaining in Program	95
Screened Only	67
Screened & Accepted for 9/73	74

Table 8

Ethnic Enrollments: Mid Totals

	Black	Oriental	Spanish	White & Others
Mid	93	1	60	92

to category of major exceptionality attached to the children at this age level. Table 8 is included to provide additional information on the characteristics of the population served by the pre-school centers.

Further inspection of Table 7 reveals that a total of 440 preschoolers were served by the project personnel in some capacity. After subtracting the number of children who only were screened from the total of 440, the figures in the table indicate that some 373 children were identified and diagnosed with respect to major general and specific learning disabilities. The 373 preschoolers identified and diagnosed surpasses the 240 children listed in the project objectives by 133 pupils, or by more than 55 percent of the stated program objective.

Of the 299 children who attended the pre-school centers, a total of 164 were scheduled to leave the program and enter into other existing educational programs. While final totals on the number of children placed in specific programs would not be available until the beginning of the 1973-1974 school year, the 164 have been and will be entered into the following programs: brain injured classes, emotionally disturbed classes, CRMD classes, classes for the aphasic, schools for the deaf, classes for the multihandicapped, and regular kindergartens and first grades. In short, the project objectives regarding the identification, diagnosis, and post-program placement were successfully met, far beyond the criterion measures set at the beginning of the project year.

Qualifications of Teachers. A total of 25 classroom teachers responded to the items on the teacher questionnaire pertaining to educational and professional background. Table 9 presents information on level of training of the classroom teachers. Scrutiny of this table

reveals that 82 percent of the teachers had some graduate training with 68 percent holding at least a master's degree.

Table 9

Level of Education of Teachers

Degree	Frequency	Percent	N
Bachelor's	2	8	25
BA plus Graduate Credit	6	24	
Master's	17	68	

Table 10 summarizes the areas of specialization in which the teachers received their formal training. Inspection of this table indicates that the teachers have specializations that are relevant to providing services to the types of children served in the project. The frequency of specializations in early childhood/elementary education and special education was almost equal, with the areas of speech/langauge and special education following closely.

The types of New York City licenses held, or one for which the teachers were eligible, are listed in Table 11.

Table 10

Educational Major and Minor

Specializations of Teachers

Area	Frequency	Rank	N
Early Childhood/Elementary Education	10	1	*
Special Education	9	2	
Speech and Hearing	7	3	
Psychology	5	4.5	
Other	5	4.5	

* Although a total of 25 teachers responded, the data should be interpreted with the knowledge that each teacher might have from 1 to 4 major-minor areas.

Table 11

N.Y.C. Board of Education

Licenses Held by Teachers

License	Frequency	Percent*	N
Common Branches	7	28	*
Early Childhood	14	56	
Speech Improvement	6	24	

*Some of the 25 teachers who responded held more than one license.

Results obtained from the teacher questionnaire indicate that the majority of classroom teachers had some experience in working with exceptional children and/or children from inner-city, and low-income areas. (See Table 12). Ten of the 25 teachers who responded have two or three years experience in the current program. In short, the classroom teachers were found to have training in specialization areas that were directly relevant to providing special stimulation and developmental experiences to pre-school children with special learning disabilities. The majority of teachers also had experience in dealing with children who were educationally and psychologically comparable to the population served by this project.

Table 12

Educational Experience of Classroom Teachers

Type	Years	Frequency	$\bar{x}$	S.D.	N
Current Program	1	15	1.4	.6	25
	2	9			
	3	1			
Other Economic Opportunity Programs	0	16	—	—	
	2-3	6			
	4-6	3			
Private Tutoring	0	21	—	—	
	2	3			
	4	1			
Other	0	12	1.4	2.8	
	1-2	11			
	>3	2			

Classroom Training Activities. Information on the types, frequency, and quality of remedial and developmental classroom activities used by the teachers was obtained through direct observation of the actual classroom activities by members of the evaluation team, as well as by indirect observations. Table 13 presents the activities used most frequently across all centers, and in the order of frequency of emphasis placed on each area by all classroom teachers observed. Reference to this table reveals that training and stimulation activities in the area of language development were scheduled most often and given greater emphasis than any other single developmental area. The Peabody Language Development Kit (Dunn and Smith, 1966) was the source most frequently utilized by teachers in obtaining training and stimulation techniques in this area. Other language type programs used included the Illinois Test of Psycholinguistic Abilities (Kirk and McCarthy, 1968), the Slingerland method (Slingerland, 1964) and "electric" approaches.

Activities designed to promote both gross and fine motor development were second in terms of frequency and emphasis in program planning. Major sources of motor training activities listed by the teachers and observed during site visits included those suggested by Kephart (1971), Valett (1969) and Myklebust (1968).

Training in the area of visual perception was third with respect to frequency of use and program emphasis among the project teachers. Training activities suggested by such authorities as Frostig (1963), Kephart, Valett and Van Witsen (1967) were listed most frequently as the major sources for planning in this area.

Table 13

Frequency and Type of Special Developmental Remedial Classroom Activities Used

Activity	Rank
Language	1
Motor: Gross and Fine	2
Visual perception	3
Socialization	4
Pre-academic skills: reading, math, science	5
Music, art, dramatic play	6
Auditory perception	7

Socialization activities were listed next in terms of program emphasis by the 25 teachers who supplied usable responses on the teacher questionnaire. While most teachers reported that social skills were emphasized throughout the class sessions and taught indirectly during most activities, interpersonal skills were listed most frequently as the specific foci during such activities as snacks, preparing foods, games, and group singing.

Activities designed to increase pre-academic skills in such areas as reading, arithmetic, and language were listed as the next major program emphasis by the teachers sampled. Although listed as a separate area, most teachers felt that all of the preceding training activities were directed at basic processes that were crucial to future school achievement. Activities in music, art, dramatic play and in auditory perception were also among the six most frequently used intervention activities in the present project. In short, direct and indirect observations revealed a fair amount of variability in quality of individual programs, both below and above the generally high level of the program when the latter was viewed as a whole.

A review of all the major procedures and activities used in the project to stimulate development of abilities and to remediate deficits led the evaluators to conclude that the educational program as a whole was based on sound educational and psychological theory and empirical data.

Services for Parents. One of the important objectives of the present project was to involve the parents of the pre-school children

in the educational and psychological aspects of the program as well as to provide the parents with the support and services needed to successfully adjust to having an exceptional child. An examination of the project records suggests that attempts to get parents to become involved in the general program were carried out at an extremely high level. Inspection of Table 14 reveals that approximately 300 individual parent interviews were conducted by a variety of project and ancillary personnel, while a total of 157 formal parent workshops were held during the 1972-1973 project year.

Table 14

Frequency and Type of Parent Services

Type	N
Parent Interviews	900*
Parent Workshops	157

*Estimated

Despite these generally positive findings, with respect to effort, it was observed that some centers were unable to involve many parents at even a minimal level because of such factors as transportation problems, inability to convince parents of the importance of parental involvement, and various family imvolvements among others. Table 15 presents the type and relative frequency of parent contacts as reported by the individual classroom teachers.

Table 15

Frequency and Type of Parent Services Provided

Type	N
Consultations with teachers: formal and informal	1
Individual counseling: social worker	2
Group counseling: social worker	3
Parent discussion groups	4.5
Consultations with member of clinical staff: psychiatrist, pediatric neurologist, psychologist, etc.	4.5

In-Service Training. There is an increasing recognition of the critical need for early intervention services for children with learning disabilities in order for them to increase their opportunity for successful later adjustment. While the need is recognized, there are few, if any, adequate programs currently available to service disadvantaged pre-school children with major specific learning disabilities. In view of the need and paucity of programs in the area, additional objectives of the current project were to develop new techniques and materials; evaluate and improve available training approaches; and to provide an empirically developed, new and improved intervention model for children similar to the population served in the current project. An important aspect of developing new models is a teacher-training

component. The current project utilized video tapes as a training device. Table 16 lists the various topic areas covered in the course of the current project year. Examination of this list indicates that a variety of relevant topics were included as part of the formal in-service component of the program. In addition to the above, teachers were encouraged to take advantage of increasing their professorial knowledge by attending hospital lectures, conventions, workshops, special day meetings, and committee meetings. Teachers participated in one or more of the preceding meetings in a total of 126 instances over the year.

Educational Assistants. An educational assistant was assigned to each of the classroom centers. Priority was given to employing persons indigenous to the community and interested in continuing their education in fields related to the project. The information in Tables 17 and 18 indicate that most of the assistants were from the local community, but only a few of them expressed an interest in continuing studies in fields related to their current positions as reported by the teacher respondents.

The major purpose for employing the educational assistants was to aid the teachers in providing direct services to the children. Table 19 lists the relative frequency and type of involvement of the assistants. Involvement of these assistants in the program ranged from total involvement and at the same level and type as the classroom teachers, to simply helping with classroom routines and housekeeping chores. In general, the educational assistants made valuable contributions to the day-to-day functioning of the program.

Teachers Perceptions of Program Quality. One of the objectives of the evaluation was to obtain the teachers' perceptions of the effectiveness of the various factors related to the functioning of the total

Table 16

Topics Included in In-Service Training Sessions

Staff Conferences: Topics
The Hyperactive Child
Screening
Lesson Planning
Relationships
Play
Teacher or Therapist
Parent Involvement

Special Training Conferences: Topics
Medication
Differential Approach to Working with Parents
Innovative Approaches to Team Composition and Functioning
Problems of Differential Diagnosis Beyond Labelling
The Educator's Utilization of the Clinical Contribution
Problems of Clinical Consultation to the Readiness Program
After the Readiness Program... What? Day Dreams and Realities
Role of Therapeutic Education in the Readiness Program
Criteria & Evaluation of Eligibility for Admission to Readiness Program
Issues in Group Composition
Considerations in Working with the Child with Neurological Dysfunction
Helping the Language Impaired Child in the Readiness Program
Working with Behavioral Problems in the Classroom

Table 17

Residences of Teacher Assistants

(N=15)

Local Community	10
Non-Local Community	5

Table 18

Number of Educational Assistants

Interested in Education Careers

(N=15)

Interested	3
Not Interested	12

Table 19

Activities Performed by Educational Assistants

Activity	$\bar{X}$*	S.D.
Assisting individual children during specific remedial/therapeutic activities	4.0	
Helping with classroom routines	3.9	0.4
Aiding with behavior management	3.7	0.5
Providing motor training activities	3.4	0.7
Talking with parents	2.6	0.7
Reading stories to children	2.6	0.9
Taking individual children for walks	2.1	1.1

* Key: 1--never; 2--sometimes; 3--fairly often; 4--frequently

program. Tables 20 through 31 summarize the data on teacher ratings of the effectiveness of:

a. procedures used to identify and recruit children
b. physical facilities
c. time allocated for instructional/training activities
d. number of children participating in program
e. materials and supplies
f. communication between medical/community agency
g. supervision of program by program directors
h. frequency of clinical conferences
i. quality of clinical conferences
j. degree of parental involvement
k. appropriateness of post-program placement
l. overall effectiveness of the program.

The ratings are based on the following: 1) unsatisfactory; 2) fair; 3) average; 4) good; and 5) very satisfactory. Perusal of these Tables indicates that, with the exception of parent involvement, the teachers as a group rated all of the factors listed above as falling on a point on the rating scale that was from close to good, through a point that was two-tenths from the highest rating possible. In short, the teachers' rating of the effectiveness of the program was very positive with an overall rating of 4.8 out of a possible 5.0.

Table 20

Teacher Ratings of Identification Procedures

Rating	Frequency	Percent	$\bar{X}$	S.D.	N
1	0		3.8	0.9	25
2	3	12			
3	5	20			
4	11	44			
5	6	24			

Table 21

Teacher Ratings of Physical Facilities

Rating	Frequency	Percent	$\bar{X}$	S.D.	N
1	0		3.7	1.2	25
2	6	24			
3	3	12			
4	8	32			
5	8	32			

Table 22

Teacher Ratings of Time Allocations for Instruction

Rating	Frequency	Percent	$\bar{X}$	S.D.	N
1	0		3.8	0.7	25
2	1	4			
3	6	24			
4	15	60			
5	3	12			

Table 23

Teacher Ratings of Number of Children Served

Rating	Frequency	Percent	$\bar{X}$	S.D.	N
1	0		4.2	0.9	25
2	2	8			
3	3	12			
4	9	36			
5	11	44			

Table 24

Teacher Ratings of Adequacy of Materials and Supplies

Rating	Frequency	Percent	$\bar{X}$	S.D.	N
1	0		4.5	0.9	25
2	2	8			
3	0	0			
4	6	24			
5	17	68			

Table 25

Teacher Ratings of Communication with Clinical Staff

Rating	Frequency	Percent	$\bar{X}$	S.D.	N
1	2	8	3.8	1.3	25
2	2	8			
3	5	20			
4	6	24			
5	10	40			

Table 26

Teacher Ratings of Supervision Received

Rating	Frequency	Percent	$\bar{X}$	S.D.	N
1	1	4	3.6	0.9	25
2	0				
3	11	44			
4	9	36			
5	4	16			

Table 27

Teacher Ratings of Frequency of Clinical Conferences

Rating	Frequency	Percent	$\bar{X}$	S.D.	N
1	0		4.2	1.2	25
2	3	12			
3	3	12			
4	6	24			
5	13	52			

Table 28

Teacher Ratings of Clinical Conferences

Rating	Frequency	Percent	$\bar{X}$	S.D.	N
1	2	8	3.9	1.3	25
2	1	4			
3	6	24			
4	5	20			
5	11	44			

Table 29

Teacher Ratings of Degree of Parental Involvement

Rating	Frequency	Percent	$\bar{X}$	S.D.	N
1	2	8	3.2	1.2	25
2	6	24			
3	7	28			
4	6	24			
5	4	16			

Table 30

Teacher Ratings of Post-Program Placements

Rating	Frequency	Percent	$\bar{X}$	S.D.	N
1	0		4.0	0.8	25
2	2	8			
3	1	4			
4	16	64			
5	6	24			

Table 31

Teacher Ratings of Overall Effectiveness of Program

Rating	Frequency	Percent	$\bar{X}$	S.D.	N
1	0		4.8	0.4	25
2	0				
3	0				
4	5	20			
5	20	80			

Results of Tests of Statistical Significance

The data presented in this section are designed to objectively assess the effectiveness of the pre-school program. Instruments assessing functioning in the social, emotional, and cognitive domain were administered pre and post to children enrolled in the program. Data will be presented showing changes in functioning and indicating whether such changes were of a magnitude greater than at the .05 level of significance. Pre-post changes in functioning greater than expected at the .05 level will be viewed as providing support for the program's objectives of obtaining significant growth in selected areas of functioning.

Data will be presented which have been collected on the following assessment instruments: a) Waltham Scales of Social Emotional Behavior; b) Myklebust Pupil Rating Scales for Children with Learning Disorders; c) Vineland Social Maturity Scale; and d) Denver Developmental Screening Test.

Tables 32-37 summarize the analysis of data collected on the Waltham Scales. It should be kept in mind when viewing these tables that a decrease in the means indicates an improvement in functioning. The data in Table 32 reflect changes in functioning in the area of Behavioral Characteristics. The Behavioral Characteristics scale refers to such areas as activity levels, consistency of behavior, and so on. Scrutiny of the data in Table 32 reveals that it is clear that the children enrolled in the program showed a significant change ($p < .001$) in the anticipated direction in the area of Behavioral Characteristics.

Table 32

Analysis of the Behavioral Characteristics Subscale (9 items) of the Waltham Social-Emotional Scale

Testing Period	Mean	S.D.	F	df
Pre-test (N=224)	19.89	4.09	173.68*	1/223
Post-test (N=224)	17.30	4.13		

* $p < .001$

Table 33 contains the data collected on the Waltham Social Relations Subscale. Social relations refers to such areas as working alone, cooperating, etc. Examination of the data in Table 33 clearly indicates that there was significant growth ($p < .001$) in the area of social relations.

Table 34 contains the pre- and post-scales on the Waltham Attention-Span Subscale. Perusal of Table 34 indicates that it is apparent the enrolled children showed a significant ($p < .001$) increase in attention span after exposure to the pre-school program.

The data in Table 35 refers to pre-post changes in emotional development and control, with emphasis on stability and self-reliance. A review of the pre- and post-test mean scores on the Emotional Development and Control Scale reveals that it is apparent that the objective of significant improvement in emotional control was attained ($p < .001$).

Table 33

Analysis of the Social Relations Subscale (4 items)

of the Waltham Social-Emotional Scale

Testing Period	Mean	S.D.	F	df
Pre-test (N=224)	8.17	2.25	101.63*	1/223
Post-test (N=224)	7.01	1.91		

* $p < .001$

Table 34

Analysis of the Attention Subscale (6 items)

of the Waltham Social-Emotional Scale

Testing Period	Mean	S.D.	F	df
Pre-test (N=224)	13.99	3.08	180.75*	1/223
Post-test (N=224)	11.75	3.08		

* $p < .001$

Table 35

Analysis of the Emotional Development and Control (12 items)

Testing Period	Mean	S.D.	F	df
Pre-test (N=224)	20.04	5.08	154.19*	1/223
Post-test (N=224)	22.85	4.96		

* $p < .001$

Table 36 presents the results of the analysis of data on the combined scores of the subtests contained on the Waltham, while Table 37 presents the data on acceptance of responsibility. Reference to the data in Tables 36 and 37 reveals, that as stated in the program objectives, children enrolled in the program showed a significant ($p < .001$) improvement in overall social-emotional functioning, and in acceptance of overall responsibility.

In reviewing the data which follow, it should be noted that increases in means between pre- and post-test scores reflect positive growth.

Tables 38-40 contain data collected on the Myklebust Scales for Children with Learning Disorders. Table 38 presents the pre- and post-test means, as well as the tests of significance on the auditory comprehension.

Table 36

Analysis of Combined Score of Behavioral Characteristics, Social Relations, Attention, and Emotional Development and Control Subscales of the Waltham Social-Emotional Scale

Testing Period	Mean	S.D.	F	df
Pre-test (N=224)	68.10	12.12	235.66*	1/223
Post-test (N=224)	58.92	12.13		

* $p < .001$

Table 37

Analysis of the Poor Acceptance of Responsibility Subscale of the Waltham Social-Emotional Scale (1 item)

Testing Period	Mean	S.D.	F	df
Pre-test (N=224)	1.84		42.37*	1/223
Post-test (N=224)	1.51			

* $p < .001$

Table 38

Analysis of the Auditory Comprehension Subscale

of the Myklebust Pupil Rating Scale (4 items)

Testing Period	Mean	S.D.	F	df
Pre-test (N=220)	7.38	2.89	374.64*	1/219
Post-test (N=220)	9.82	2.88		

* $p < .001$

Table 39

Analysis of the Spoken Language Subscale

of the Myklebust Pupil Rating Scale (5 items)

Testing Period	Mean	S.D.	F	df
Pre-test (N=220)	8.84	3.62	109.92*	1/219
Post-test (N=220)	10.81	3.83		

* $p < .001$

Table 39 contains the data collected on the Spoken Language Subscale of the Myklebust Scale. The data presented in Table 39 indicate that the results support the program objective of significant ($p < .001$) improvement in spoken langauge.

Table 40 presents the data obtained with the final subscale used in the Myklebust series--motor coordination. The analysis of the data in Table 40 again indicated that the children enrolled in the pre-school program showed a significant ($p < .001$) gain in motor coordination.

Table 40

Analysis of the Motor Coordination Subscale
of the Myklebust Pupil Rating Scale (3 items)

Testing Period	Mean	S.D.	F	df
Pre-test (N=220)	6.04	2.27	193.92*	1/119
Post-test (N=220)	7.36	2.17		

* $p < .001$

The next analysis focuses on the data collected from the Vineland Scale of Social Maturity. The Vineland data allows for a comparison of pre-test social age and post-test social age. This test also allows for an analysis of overall growth in social functioning. Table 41 contains the Vineland data.

Table 41

Analysis of Vineland Social Maturity Scale Age Norms

Testing Period	Mean	S.D.	F	df
Pre-test (N-229)	3.59	1.29	522.63	1/228
Post-test (N=229)	4.70	1.47		

* $p < .001$

The analysis of the data in Table 41 revealed that substantial growth had taken place in the areas measured by the Vineland. The difference between pre- and post-scores of greater than 1 year of growth is highly significant. This difference is also consistent with previously cited findings.

The final set of test results refers to the data collected on the Denver Developmental Screening Test. The data on the Denver is broken down into four subscales: personal-social; fine motor; language; and gross motor. Tables 42-45 include the data on all of the subscales of the Denver. A review of the data in these Tables indicates that significant gains were achieved in all areas assessed by the Denver subscales. As stated in the program objectives, children enrolled in the program showed significant gains in all developmental areas of functioning assessed.

In summary, the analysis of differences between the pre- and post-test scores on a variety of measures of social, emotional and cognitive

growth indicate that the children enrolled in this pre-school program made highly significant gains in all areas assessed.

Table 42

Analysis of the Personal-Social Subscale of the Denver Developmental Screening Test

Testing Period	Mean	S.D.	F	df
Pre-test (N=206)	5.94	2.58	197.92*	1/205
Post-test (N=206)	7.45	2.69		

* $p < .001$

Table 43

Analysis of the Fine Motor Adaptive Subscale of the Denver Developmental Screening Test

Testing Period	Mean	S.D.	F	df
Pre-test (N=206)	6.93	2.75	295.92*	1/205
Post-test (N=206)	9.28	2.85		

* $p < .001$

Table 44

Analysis of the Language Subscale of the

Denver Developmental Screening Test

Testing Period	Mean	S.D.	F	df
Pre-test (N=206)	5.78	2.28	315.29*	1/205
Post-test (N=206)	7.73	2.34		

* $p < .001$

Table 45

Analysis of the Gross Motor Subscale of the

Denver Developmental Screening Test

Testing Period	Mean	S.D.	F	df
Pre-test (N=206)	6.22	2.56	243.45*	1/205
Post-test (N=206)	8.42	2.59		

* $p < .001$

Although the previously cited results support the effectiveness of the program, the interpretation is somewhat limited because of the absence of a comparison group. A previous evaluation report used as one evaluation objective the following: 50 percent of the children will show 30 percent growth. This criteria is weak for the following reasons. Calculation of the percent of students that gained at least 30% a highly inappropriate technique, particularly with this age group. Such an analysis does not take into account the amount of variability within the groups, either at pre- or post-test. In addition, it does not consider the starting points. For example, a one point raw score gain is a 50% gain over a starting score of 2, but only a 25% gain over a starting score of 4. Furthermore, such a crude analysis does not consider the fact that repeated measures were administered to the same subjects.

A more meaningful method is to compare differences between pre- and post-means with the average of the standard deviations of pre- and post-test. Cohen (1969) has noted that mean differences of $\frac{1}{2}$ the average standard deviation reflect meaningful psychological change. Table 46 contains the mean pre-post differences and average standard deviations on all measures

Reviewing the data in Table 46, the consistency and magnitude of the change in pre- and post-test results is apparent. In every comparison of differences between pre- and post-means and average standard deviation, the findings indicate change at least 50 percent of the average deviation. In some cases, mean changes were 75 percent of the average

of the standard deviations. These results clearly substantiate the program's objectives of a meaningful change in the child's functioning after exposure to the pre-school program.

Table 46

Analysis of Gain Scores

Variable	Difference Between Pre- and Post-Means	Average Standard Deviation for Pre and Post
Behavioral Characteristics	2.59	4.11
Social Relations	1.16	2.08
Attention	2.24	3.08
Emotional Development	3.19	5.02
	10.10	12.12
	.33	
Auditory Comprehension	2.44	2.88
Spoken Language	1.97	3.72
Motor Coordination	1.32	2.72
Vineland	1.11	1.38
Personal-Social	1.51	2.63
Fine Motor	2.35	2.82
Language	1.95	2.31
Gross Motor	2.20	2.57

Summary and Recommendations

The Readiness Program for Disadvantaged Pre-School Children with Exceptional Learning Disabilities, a New York State Urban Education Quality Incentive program, provides educational, clinical and socialization services to children who manifest developmental problems in the areas of language functioning, social and emotional adjustment, fine and gross motor development, activity levels, and cognitive development. The essential components of the program are as follows:

1. Identification and diagnosis of pre-school children with major general and specific learning disabilities.
2. Provision of a pre-school classroom environment for appropriately diagnosed and classified children.
3. Assistance of parents to understand the problems of their children and to develop and use appropriate child-training procedures.
4. Arrangements for the admission of these children as they reach the age of five years in public and private educational facilities.
5. Follow-up on the adjustment of children and their parents when they are no longer affiliated with the program.

Sixteen classroom units were in operation during the 1972-1973 project year, primarily domiciled in public and private hospitals in the five boroughs on New York City. Over 400 children were screened for admission by hospital-based teams consisting of medical, speech, psychological, and educational professionals. A total of 299 children who met all admission criteria were in attendance in the pre-school

classroom programs established in the 16 units.

The objectives of the program were stated in terms of expectations of positive changes in the developmental behavior of the target population in areas of social and emotional adjustment, gross and fine motor coordination, social competence and socialization. It was predicted that a 30 percent improvement in these areas would be made by at least one half of the children who were in regular attendance at the classroom centers.

Evaluation objectives were designed to assess the changes and improvements which had been predicted in the program objectives. Specifically, the evaluation sought to determine through pre- and post-testing (Vineland Scale, Myklebust Scale, and Waltham Inventory) whether the program objectives were realized.

The evaluation objectives were based upon the predictions of behavioral changes presented in the specific program objectives listed above.. The evaluation objectives are stated as follows:

1. To determine whether at least 240 children representing the target population were identified and diagnosed for acceptance into the program.
2. To determine through pre- and post-testing whether 50% of enrolled children would show a 30% improvement in language development and motor coordination.
3. To determine through pre- and post-testing whether 50% of enrolled children would show a 30% improvement in social competence and social development.

4. To confirm and document the results of the program in terms of the number of children who have been accepted into existing educational programs for the next school year.
5. To comment upon the effectiveness of the various aspects of the program which were listed in Program Objectives, above.

The data collected indicated the following:

1. Direct and indirect observation of the program revealed that the program was implemented as outlined in the project proposal.
2. Assessment of the classroom teachers' background and experience indicated that all had appropriate training and certification, over 68 percent held advanced degrees, and most had experience working with children who were educationally and psychologically comparable to the population served by the project.
3. A total of 440 pre-school children from disadvantaged backgrounds were served by the project personnel or related personnel, in some capacity. Approximately 373 children were identified and diagnosed as having major general and/or specific learning disabilities, or 55 percent more than the original number stated in the project proposal.
4. Approximately 164 children who received remedial training and treatment were placed in the following programs: brain injured classes, emotionally distrubed classes, CRMD classes, classes for the aphasic, schools for the deaf, classes for the multi-handicapped, and regular kindergartens and first grades. In short, the project objectives regarding the identification, diagnosis, and post-program placement

were successfully met, far beyond the criterion measures set at the beginning of the project year.

5. A review of all the major procedures and activities used in the project to stimulate development of abilities and to remediate deficits led the evaluators to conclude that the educational program as a whole was based on sound educational and psychological theory and empirical data.

6. Approximately 300 individual parent interviews were conducted by a variety of project and ancillary personnel, while a total of 157 formal parent workshops were held during the 1972-1973 project year. Despite these generally positive findings, with respect to effort, it was observed that some centers were unable to involve many parents at even a minimal level because of such factors as transportation problems, inability to convince parents of the importance of parental involvement, and various family involvements, among others.

7. A variety of relevant topics were included as part of the formal inservice component of the program. In addition, teachers further increased their professional knowledge by attending hospital lectures, conventions, workshops, special day meetings, and committee meetings in a total of 126 instances over the year.

8. The educational assistants employed in the project made valuable contributions to the day-to-day functioning of the program.

9. Teacher's ratings of the effectiveness of a variety of components were generally very positive, with an overall rating of 4.8 out

of a possible 5.0.

10. Analysis of test scores obtained in the following areas yielded statistically significant gains from initial to final measures: language development, gross and fine motor coordination, social development, and behavior control. Examination of the magnitude of the change in pre- and post-test measures indicates that the population showed gains of from 50 percent to as high as 75 percent of the average standard deviations on the measures used.
11. The project was a success in securing the active participation in the project of hospital and mental health center clinical personnel from such areas as medicine, psychology, speech and hearing, social work, and special education with no cost to the program.

In short, the program was favorably perceived by the classroom teachers, the supervisors, and the evaluation team. The results of the analyses of the data lend support to the over-all favorable evaluation of the program.

In usual situations, recommendations are directed toward upgrading inadequate aspects of a program. However, in this situation those program activities which are mandated by the funding agency have been carried out in an outstanding manner. Many of the recommendations that follow are beyond the control of the present project personnel. They are presented here, however, in the hope that they may come to the attention of those who are in a position to implement such changes, and thus broaden the impact of this excellent program. It should be stressed that these recommendations should not be implemented at the expense of

reducing any of the currently available services.

1. The Readiness Program for Disadvantaged Pre-School Children with Exceptional Learning Disabilities should be continued.
2. All-day training and orientation workshops,[1] lasting from one to three days should be scheduled at the beginning of each school year for teachers in other facilities with whom the pre-school graduates will be placed. The purposes of these workshops should include among others: to insure continuity in the training, remedial, and therapeutic services provided for the children formerly enrolled in the project; to avoid the duplication of services and/or procedures (e.g., obtaining certain diagnostic and background data already available); to provide further feedback of the effectiveness of the pre-school program and the post-program adjustment of children formerly enrolled in the project.
3. While flexibility in program planning and informal assessment techniques are both essential ingredients of a sound intervention program for the population served in this project, teachers should be helped to plan a greater variety of structured remediation strategies based on the more formal standardized diagnostic instruments in psychology and education.
4. Outside speakers, representing various professional areas, should be added to the project and clinical personnel already participating

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[1] This recommendation is, in part, based on a personal communication with Dr. Helen M. Feulner, Acting Director, Special Education and Pupil Personnel Services.

in the in-service training component of the project.

5. There should be opportunity for inter-center visitations by classroom teachers, including exposure to clinical emphases other than that represented by a teacher's own clinical affiliation, in order to insure a greater balance of therapeutic orientations and practices in a particular center.

6. The following recommendations are directed specifically toward increasing parental involvement in the efforts to assist both the child and the parent.

   A. Every effort should be made to identify and remove the barriers to more frequent and intensive parent involvement in the preschool program.

   B. The following specific services and activities should be given serious consideration in future project planning and development:

      a. Employment of sufficient numbers of school social workers to provide services for all parents needing them, without reducing direct services and other resources currently provided for the children.

      b. Time allotments be made for home visits by classroom teachers and other project personnel.

      c. All-day parent workshops be planned, with "baby sitting" services available, to provide parents with training in child management techniques; speech, language, and cognitive stimulation activities; and methods for creating a therapeutic home environment, among others.

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Appendix A

READINESS PROGRAM FOR DISADVANTAGED PRE-SCHOOL CHILDREN
WITH EXCEPTIONAL LEARNING DISABILITIES

New York University
Center for Field Research

Evaluation Questionnaire -- Teachers

1. Readiness Unit_____ Hospital or Affiliated Agency_____

   Name(s)_____

   Date_____

PLEASE NOTE: All responses will be held in strict confidence and will be used only for evaluation of the program. No person connected with the program or Board of Education will have access to these raw data.

2 (a) Educational Background

	Degree	Institution	Major & Minor Field
A.			
B.			

(b) What NYC Board of Education License(s) do you hold? A_____
B_____ OR On what list are you pending licensing?
A_____ B_____

3. Teaching Experience

School	Grade or Subjects	No of Years

4. Experiences specific to working with disadvantaged, pre-school and/or learning disabled. Check those experiences which you have had and the number of years.

A	B	Experiences	No. of Years A	No. of Years B
____	____	Current Program	_____	_____
____	____	Other Title I Programs	_____	_____
____	____	Private Tutoring	_____	_____
____	____	Other (please specify)	_____	_____

5. Total enrollment in Unit_____
   a. Of total enrollment, how many children attend on part-time basis_____
   b. Number entered since September, 1972_____
   c. Number retained from previous year_____
   d. Number screened_____

6. Indicate number of children referred/recruited from the sources below:

a.	Headstart	_____
b.	Day Care Centers	_____
c.	Hospital: Psychiatric	_____
	Speech and Hearing	_____
	Neurology	_____
d.	Community Agency	_____
e.	Private	_____
f.	Other (please specify)	_____
	TOTAL	_____

7. List the most frequently used procedures and materials (up to 6) in your unit (e.g., Language - ITPA; Language - Peabody; Motor Training - Kephart, etc.)

	Activity and Material	Percent of Instructional Time Devoted to Activity
a.	_____	_____
b.	_____	_____
c.	_____	_____
d.	_____	_____
e.	_____	_____
f.	_____	_____

8. List number and types of parent services provided through your unit.

9. Indicate type and number of post-program placements.

	No.	Ages
a. Regular Class	_____	_____
b. CRMD Class	_____	_____
c. B. I. Class	_____	_____
d. E. D. Class (public)	_____	_____
E. D. Class (private)	_____	_____
e. Other (please specify)	_____	_____
No. retained in program	_____	

10 (a) Next to each item below, please indicate the relative frequency and type of involvement of the Educational Assistants assigned to your unit. Use the following system to indicate use of time for this person.

1	2	3	4
Never	Sometimes	Fairly	Frequently

Frequency

_____ Assisting individual children during specific remedial/therapeutic activities (puzzles, table activities, etc.)

_____ Aiding with behavior management.

_____ Helping with classroom routines.

_____ Reading stories to children.

_____ Providing motor training activities.

_____ Taking individual children for walks.

_____ Talking to parents.

_____ Other activities (please specify)

_____ _____

_____ _____

_____ _____

(b) Is the teaching assistant a resident of the community from which your children are drawn?

Yes_____ No_____

Has he or she expressed an interest in continuing studies in this field?

Yes_____ No_____

11. Instructions: Listed below are 12 items about the Program for Pre-School Children with Learning Disabilities. Use the following system to evaluate the effectiveness of the program. If you think an item was very satisfactory, put a 5 in the space provided before the item. Use the numbers 5, 4, 3, 2, and 1 similarly, the amount of judged satisfaction decreasing with the number so that 1 would mean unsatisfactory. These categories are further illustrated on the following rating scale.

1	2	3	4	5
Unsatisfacotry	Fair	Average	Good	Very Satisfactory

Rating
A : B

___:___ a. Procedures used to identify and recruit children

___:___ b. Physical facilities

___:___ c. Time allocated for instructional/training activities

___:___ d. Number of children participating in program

___:___ e. Materials and supplies provided by central office

___:___ f. Communication between medical/community agency

___:___ g. Supervision of program by program directors

___:___ h. Frequency of clinical conferences

___:___ i. Quality of clinical conferences

___:___ j. Degree of parental involvement

___:___ k. Appropriateness of post-program placements

___:___ l. Overall effectiveness of the program

12. Please feel free to write additional comments about the program (e.g., what would you like to see increased, decreased, omitted, added, etc.) Use the reverse side of this page, if needed.

Appendix B

NEW YORK UNIVERSITY
Center for Educational Research and Field Services

Readiness Program for Disadvantaged Pre-School Children
with Exceptional Learning Disabilities

SOCIAL-EMOTIONAL BEHAVIOR

CHECK APPROPRIATE COLUMN:	1 EXHIBITS TO A MINOR DEGREE	2 EXHIBITS TO A MODERATE DEGREE	3 EXHIBITS TO A MAJOR DEGREE
1. Behavioral characteristics			
a. Hyperactive and restless			
b. Lethargic			
c. Daydreaming alternative with hyperactivity			
d. Inconsistent achievement			
e. Explosive and unpredictable behavior			
f. Upset by changes in routine			
g. Confused, indecisive, or apprehensive in responding			
h. Confused by punishment			
i. Lacking in self-control (will speak out or jump out of seat)			
2. Social Relationships			
a. Inclined to work alone--withdraws quickly from group activities			
b. Aggressive and destructive especially of work of others			
c. Disruptive of group activities			
d. Lacking in cooperation			
3. Poor acceptance of responsibility			
4. Attention			
a. Cannot concentrate on a given academic or social task for a reasonable length of time			
b. Does not listed attentively			
c. Says "What?" when he receives instructions (because of insecurity)			
d. Gives inappropriate answers to questions			
e. Needs constant supervision to complete an assignment			
f. Lacks perserverance on a given task			

CHECK APPROPRIATE COLUMN:

	1 EXHIBITS TO A MINOR DEGREE	2 EXHIBITS TO A MODERATE DEGREE	3 EXHIBITS TO A MAJOR DEGREE
5. Emotional Development and Control			
a. Stability			
(1) Crying			
(2) Fear			
(3) Temper			
(4) Excitability			
(5) Exhibitionism			
(6) Sensitivity			
(7) Insecurity			
b. Self-Reliance			
(1) Confusion			
(2) Dependence			
(3) Discouragement			
(4) Lack of Confidence			
c. Reality-testing -- tells bizarre stories			

KEY: 1. If checks are concentrated in Column 1
2. If checks are scattered
3. If checks are concentrated in Column 3

SOCIAL-EMOTIONAL RATING

Additional Evaluation Staff

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