DOCUMENT RESUME

ED 234 120 UD 023 055

TITLE	Home, School, and the IEP. ESEA Title IV Part C Project Report, Final Evaluation Report, 1981-82.
INSTITUTION	New York City Board of Education, Brooklyn, N.Y. Office of Educational Evaluation.
PUB DATE	82
NOTE	19p.
PUB TYPE	Reports - Evaluative/Feasibility (142)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	*Autism; *Behavior Change; Elementary Secondary Education; Individualized Education Programs; *Internship Programs; *Parent Education; *Parent School Relationship; Program Descriptions; *Program Effectiveness; Special Education
IDENTIFIERS	New York City Board of Education; Project Home School and the IEP; Vort Behavioral Characteristics Progression

ABSTRACT

The "Home, School and the IEP (Individualized Education Program)" program was developed in order to provide counseling and training to the parents of autistic children in public schools in Brooklyn, New York, and to improve the behavior and achievement of the children themselves. This report briefly describes and evaluates the program in its third year of operation (1981-82). The program's two major activities consisted of home visits conducted by educational interns and parent workshops. Objectives were (1) that 70 percent of participating parents would implement instruction at least 4 out of 5 days per week, following each home visit; and (2) that 80 percent of participating students would master at least 5 new skills, as determined by their performance on designated strands of the Vort Behavioral Characteristics Progression (BCP). Two problems were encountered which hampered program effectiveness. First was the use of unpaid educational interns, which resulted in high turnover and extensive time expenditure for training. Second was the difficulty of recruiting interns to visit families in neighborhoods that were perceived to be unsafe. Nonetheless, program objectives were either met or surpassed. (GC)

FINAL EVALUATION REPORT

SEQUENCE #: 42-079-4011 DEV

NYC I.D. #: 5001-62-24504

ESEA TITLE IV PART C PROJECT REPORT
1981-82 COVER SHEET

Name & Address of School District: NEW YORK CITY PUBLIC SCHOOLS
110 LIVINGSTON STREET
BROOKLYN, NEW YORK 11201

Congressional Districts: 6-23

Title of Project: HOME, SCHOOL, AND THE IEP

District Enrollment: 924,215 PUBLIC; 311,359 PRIVATE

Curriculum Area: SPECIAL EDUCATION

Target Population: PARENTS OF AUTISTIC STUDENTS Grade Level(s): DOES NOT APPLY

Type & Number of Direct Participants in Project:

	Public	Private	Total
Pupils	72	0	72
Teachers	0	0	0
Others	72	0	72

Total Number of School Districts Served by Project: 1

At End of This Budget Period, Project Will have Been Funded by Title IV-C: 3 YEAR(S)

Fiscal Year Source of Funds: 1982 Budget Period: 7/1/81 To 9/30/82

Type of Project: DEVELOPER

Project Contact Person:

ALLISON TUPPER
DIVISION OF SPECIAL EDUCATION
110 LIVINGSTON STREET/ROOM 446
BROOKLYN, NEW YORK 11201
(212) 522-1570

Evaluation Manager:

ROBERT J. TOBIAS
OFFICE OF EDUCATIONAL EVALUATION
110 LIVINGSTON STREET/ROOM 736
BROOKLYN, NEW YORK 11201
(212) 596-5136

ABSTRACT

File Number: 42-079-4011-DEV

1. School District: NEW YORK CITY PUBLIC SCHOOLS (Popular Name) 924,215 (Total Enrollment K-12)
110 Livingston Street, Brooklyn, New York 11201 (Address) Kings (County)

2. Title of Project: HOME, SCHOOL, AND THE IEP

3. Type of Grant: DEVELOPER

4. Total Budget: 30,350

5. Pupils Served: 72 Number Public 0 Number Non-Public

Needs Statement Summary:

Parents of autistic children require counseling and training to enable them to understand and meet the special needs of their children. A frequent problem is that autistic children cannot meet their parents' expectations. Abnormal behavior can become the focal point of a family's life, and the family's basic functioning is threatened. Consistency between home and school is an essential element in the autistic child's adjustment.

Major Objectives:

--seventy percent of parents participating in the home visit portion of the program will implement instruction at least four out of five days per week following each home visit; and
--eighty percent of participating pupils will master at least five objectives on selected strands of the Vort Behavioral Characteristics Progression (B.C.P.) as a consequence of the combined efforts of their parents and teachers.

Major Activities:

--a total of 118 home visits were made to the parents of 64 autistic children; and
--a total of 27 parents attended one or more of 12 workshops held on topics of concern to the families of autistic children.

Major Evaluation Finding(s):

--eighty-one per cent of parents participating in home visits instructed their children on four out of five days for four weeks following each home visit; and
--eighty per cent of participating pupils mastered five or more objectives on selected strands of the B.C.P.

Thus, both objectives were achieved.

TABLE OF CONTENTS

I. NEEDS

The Education for All Handicapped Children Act (P.L. 94-142) mandates a free and appropriate education for all disabled children. Meeting this mandate sometimes requires counseling and training parents to understand the special needs of their children, as noted in Section 12a.13, Part 6 of the law.

The need for parent training is particularly important to the education of autistic children. Educational research has documented an interaction between parent expectations and children's behavior and achievement. That is, parent expectations, which are at least partly based upon the perception of their children's abilities, affect pupil achievement and behavior which, in turn, reinforce or modify parent expectations. In the case of autistic children, this parent-child interaction may prove maladaptive. Since the parents of autistic children find it difficult to establish appropriate expectations, their children often cannot meet the behavioral and academic criteria demanded by their parents. To optimize the success and development of these children, it is essential that parents maintain realistic expectations consistent with their children's strengths and disabilities and the goals and methods of the special education programs. This program was designed to help parents gain understanding of the special needs of their autistic children and to train them in educational methods which have promoted the academic and social progress of autistic children.

II. OBJECTIVES

For the 1981-82 program cycle two objectives were proposed, one for pupil achievement and one for parent participation:

--70 percent of participating parents will implement instruction at least four out of five days per week following each home visit.

--80 percent of participating students will master at least five new skills as determined by their performance on designated strands of the Vort Behavioral Characteristics Progression (B.C.P.)

III. ACTIVITIES ACCOMPLISHED

Throughout its three years of operation, the program's two major activities were home visits conducted by educational interns and parent workshops on topics of concern to the families of autistic children.

During 1979-80, 78 families enrolled in the program and received at least two home visits from one of seven educational interns who were recruited from local universities and trained and supervised by the project coordinator. The interns served as liaisons between the classroom teachers and the parents in implementing the children's individual educational plans. During the home visits the interns trained the parents to promote the attainment of behavioral objectives selected from among ten designated strands of the B.C.P. The B.C.P. strands, all of which were taught in class, included activities of daily living, cognitive development, and socio-emotional behavior. The interns suggested relevant strands, objectives, and procedures based on their observations of the child in the classroom and on conferences with their teachers. Following each home visit, parents maintained weekly logs on which they recorded the amount of time spent implementing the activities agreed upon by the parents and interns. In addition, parents of 50 of the participating students attended one or more parent workshops on structuring lessons at home. Finally, the staff developed a preliminary orientation manual which included a program description, procedures, forms, and B.C.P. information.

During the second cycle, 1980-81, families of 113 autistic children enrolled in the program but 17 chose not to continue. Almost all of the participating families, 93 out of 96, received home visits from thirteen

educational interns; interns made a total of 207 visits. Parents of 54 students also attended one or more of the 32 workshops held throughout the city; parents of three students only attended workshops. Workshop topics, selected cooperatively by parents and program staff, covered behavior management, task analysis, group-home placement, travel training, baby-sitting, and medical services. The orientation manual and administrative procedures were further developed and improved.

Participation declined during the third year of operation, 1981-82; parents of 97 students enrolled but only 72 participated in workshops or home visits from four interns, two of whom continued from the previous year. Interns made 118 home visits to the families of 64 children and parents of 27 children attended one or more workshops. The program manual, developed during the first two years, was completed; in addition to materials specific to program operation, it contains an extensive bibliography, summaries of research, and techniques for education of autistic children.

During the second and, especially, the third project year the shortage of special education classroom teachers in the New York City public schools made it more and more difficult to find and keep special education graduate student interns. The qualifications for special education classroom teachers were revised to decrease the number of credit hours required, and the result was that the target recruiting population for interns and for teachers was the same. Potential interns chose to take salaried teaching jobs rather than unsalaried intern positions. Thus, there were only four interns during 1981-82 as compared to the proposed ten. This accounts for the smaller numbers of participating families.

IV. EVALUATION

To determine whether at least 70 percent of the parents implemented instruction at least four out of five days per week following each visit by an intern (Objective 1), parent logs for the 1981-82 program cycle were reviewed and tabulated by an Office of Educational Evaluation (O.E.E.) consultant. Records indicated that 52 of the 64 parents receiving home visits (81 percent) instructed their children on four out of five days for four weeks following each home visit. Accordingly, the objective was attained.

To determine whether 80 percent of participating students mastered at least five new skills (Objective 2), the O.E.E. consultant examined student achievement records. The educational interns assessed the students' levels of functioning on the ten designated B.C.P. strands at three points during the year, September, January, and June; each time they recorded the highest point reached on the developmental continuum of behavioral objectives within each strand. Three strands measured activities of daily living (eating, toileting, and dressing); two strands were cognitive (language comprehension and reasoning); and five strands covered socio-emotional behavior (listening, adaptive behavior, impulse control, attention span, and task completion). Mastery for each student was determined by comparing the three scores for each of the ten strands and noting whether improvement was shown on each succeeding assessment. For example, if a student showed improvement between September and January but the June score remained the same as in January, mastery in that strand was recorded as one. Similarly, if the student's functioning improved both times mastery was counted as two. Thus, for the ten strands, the greatest possible mastery score was two per

strand, or 20 overall. Using this scoring scheme, the five-skill criterion of the program's student objective was operationally defined as an overall mastery score of at least five. Records indicated that 63 students had complete achievement data; that is, they were tested at least two out of three times and thus their mastery scores could be computed. Frequency distributions of mastery scores were prepared for the full year and for each semester; these results are presented in Table 1. For the full-year 49 out of 63, or 77.6 percent, of the students showed a mastery score of at least five. Application of a binomial test for large samples (see Technical Note 1) to these data indicated that the observed number of students attaining the five-skill criterion did not differ significantly ($Z = 0.28$, $N = 63$, $p = .39$) from the expected number (50) based on the 80 percent goal for the objective. Accordingly, the student achievement objective was attained.

Somewhat more mastery occurred during the first semester; from September to January 35, or 56 percent, of the students showed improvement in five or more strands compared to 27, or 43 percent, from January to June. (See Table 1.)

A number of analyses were carried out to determine the effects of parental instruction on student mastery. To measure the relationship between total amount of at-home instruction and total amount of mastery, a partial correlation coefficient was computed controlling for students' pre-test language-comprehension scores. (See Technical Note 2.) No relationship was observed; total amount of instruction was not significantly correlated with overall mastery.

However, when instruction and mastery were examined within specific strands, several significant relationships were observed. According to the parent logs, a substantial number of students received at-home instruction in the following areas: dressing, listening, adaptive behaviors, impulse control, attention span, and task completion. (On the other hand, fewer than one-third of the students were instructed in feeding, toileting, language comprehension, and reasoning; accordingly, these areas were not analyzed.) Contingency tables were prepared for each strand in which substantial mastery was observed by crosstabulating the numbers of students mastering skills by whether or not those skills were taught. The degrees of relationship between the strands taught at home and the strands on which mastery was observed were determined through the computation of Cramer's $\underline{V}$, a measure of degree of association, and the chi-square ($\underline{X}^2$) test of goodness-of-fit. (See the Appendix). Results indicated a significant relationship between at-home instruction and mastery for dressing ($\underline{V}$ = 0.49, $\underline{X}^2$ = 13.5, $\underline{p}$<.01), adaptive behavior ($\underline{V}$ = 0.45, $\underline{X}^2$ = 11.4, $\underline{p}$<.01), attention span ($\underline{V}$ = 0.49, $\underline{X}^2$ = 13.9, $\underline{p}$<.01), and task completion ($\underline{V}$ = 0.35, $\underline{X}^2$ = 6.9, $\underline{p}$<.05). (See Technical Notes 3 and 4 for a further description of these statistics.) In other words, students whose parents reported instructing them at home in these skills were more likely to show improvement in these strands than were students whose parents did not report having instructed them in these strands; thus evidence was found for a relationship between student achievement and at-home instruction, a central focus of the program.

Significant positive relationships were also observed between length of time in the program and measures of the degree of parent participation. For example, the greater the number of months in the program this year,

the greater the number of home visits received (r = 0.33, df = 72, p<.01) and the greater the number of workshops attended (r = 0.26, df = 73, p<.05). Similarly, the greater the number of home visits, the greater the number of parent logs which were returned (r = 0.49, df = 57, p<.01). (See Technical Note 5.) In other words, families who were involved in the program continued to actively participate.

Results of the evaluation of program objectives for 1981-82 were similar to those for the previous two cycles. For the 1979-80 cycle, the pupil achievement objective was the mastery of four or more I.E.P. objectives by at least 80 percent of the participating students; 95 percent met this goal. The parent participation objective was workshop attendance by 80 percent of the parents; only 64 percent of the parents met this goal. For the 1980-81 cycle, both program objectives were fully attained: 70 percent of the parents receiving home visits returned weekly activity logs three out of four weeks following each home visit and 80 percent of the students mastered five or more B.C.P. objectives.

Further evidence of program effectiveness was apparent from the parents' response to a questionnaire distributed near the end of the 1981-82 program year. Twenty parents completed the questionnaire, all of whom were active participants in the program; all but two had received home visits and half had attended workshops. Major findings were as follows:

--for the ten behavior categories focussed on by the program, 60 to 100 percent, or an average of 74 percent, of the parents felt that their children had shown progress during the previous year;

--nearly all parents reported that they had changed their teaching and behavior management methods as a result of program participation;

--all but one found the workshops and home visits useful; and

--all but one or two agreed with statements regarding the interns' knowledge, caring, and clarity of presentation; the effectiveness of the methods; satisfaction with the extent of their own role in choosing areas for training; and desire to continue to participate.

V. PROBLEMS

Two problems occurred which hampered program effectiveness throughout its operation. One was a by-product of staffing by unpaid educational interns; while use of interns reduced program costs considerably it also necessitated a time-consuming annual or semi-annual period of retraining. Internship requirements of their universities varied but never exceeded two semesters; consequently, with the exception of 1981-82 when two interns returned for a second year, only the coordinator remained from year to year. In addition, the program could not always recruit midyear replacements for one-semester interns, with the result that some families lost service.

The second continuing problem was the difficulty of recruiting interns to visit families living in neighborhoods that were perceived as unsafe. As a consequence, the program could not provide home visits to some families who had enrolled and requested them.

The program also experienced continuing difficulty serving the numbers of students proposed. The program was well-publicized and adequate numbers of students and families enrolled but attrition and problems with recruiting and assigning interns diminished the numbers of students and families actually served.

During the second and, especially, the third project year the shortage of special education classroom teachers in the New York City public schools made it more and more difficult to find and keep special education graduate student interns. The qualifications for special education classroom teachers

were revised to decrease the number of credit hours required, and the result was that the target recruiting population for interns and for teachers was the same. Potential interns chose to take salaried teaching jobs rather than unsalaried intern positions. Thus, there were only four interns during 1981-82 as compared to the proposed ten. This accounts for the smaller numbers of participating families.

TABLE 1

Frequency Distribution of Improvement on Selected B.C.P. Strands, for the Fall Semester, Spring Semester, and School Year

FALL				SPRING			FULL YEAR		
Number of Skills Mastered	Number of Students	Percent of Population	Cumulative Percent	Number of Students	Percent of Population	Cumulative Percent	Number of Students	Percent of Population	Cumulative Percent
15 or more	0	0	0	0	0	0	6	10	10
10 - 14	4	6	6	0	0	0	24	38	48
5 - 9	31	49	55	27	43	43	19	30	78
1 - 4	27	43	98	27	43	86	13	21	99
0	1	2	100	9	14	100	1	2	101[a]
	63			63			63		

[a]Does not total 100 percent due to ing.

A total of 78 percent of the student., as opposed to the 80 percent proposed, met the criterion level of achievement of at least five new skills on the B.C.P; the observed and proposed percentages did not differ significantly.

mewhat more mastery occurred during the first semester than during ne second.

TECHNICAL NOTES

1. The binomial test for large samples is a method for ascertaining the probability that an observed vaue differs significantly from an expected value.

2. In computing a partial correlation coefficient between two variables, the effect of some third variable on each is held constant.

3. Cramer's V is a measure of the degree of association between variables in a contingency table. Values range from -1.00, a perfect inverse relationship, through 0, indicating no relationship, to +1.00, a perfect direct relationship.

4. The chi-square test, a goodness-of-fit statistic, indicates whether a significant difference exists between an observed versus expected frequency of designated categories.

5. r, the Pearson product-moment correlation coefficient, is a measure of the nature and degree of the relationship between two continuous variables. Values range from -1.00, a perfect inverse relationship, through 0, indicating a random relationship, to +1.00, a perfect direct relationship.

APPENDIX

Contingency Tables for Amount of Improvement
By Whether or Not Taught at Home,
for Selected B.C.P. Strands

Strand 7: Dressing

	Not Taught	Taught	
No Improvement	18	1	19
Improved One Semester	13	11	24
Improved Both Semesters	5	9	4
	36	21	

Cramer's $\underline{V}$ = 0.49; $\underline{X}^2$ = 13.5**

Strand 24: Impulse Control

	Not Taught	Taught	
No Improvement	8	2	10
Improved One Semester	12	16	28
Improved Both Semesters	8	11	19
	28	29	

Cramer's $\underline{V}$ = 0.28; $\underline{X}^2$ = 4.6 n.s.

Strand 22: Listening

	Not Taught	Taught	
No Improvement	12	5	17
Improved One Semester	10	11	21
Improved Both Semesters	11	8	19
	33	24	

Cramer's $\underline{V}$ = 0.19; $\underline{X}^2$ = 2.0 n.s.

Strand 32: Attention Span

	Not Taught	Taught	
No Improvement	13	2	15
Improved One Semester	11	10	21
Improved Both Semesters	5	16	21
	29	28	

Cramer's $\underline{V}$ = 0.49; $\underline{X}^2$ = 13.9**

Strand 23: Adaptive Behavior

	Not Taught	Taught	
No Improvement	11	2	17
Improved One Semester	7	16	23
Improved Both Semesters	14	7	21
	32	25	

Cramer's $\underline{V}$ = 0.45; $\underline{X}^2$ = 11.4**

Strand 33: Task Completion

	Not Taught	Taught	
No Improvement	15	2	17
Improved One Semester	13	10	23
Improved Both Semesters	8	9	17
	36	21	

Cramer's $\underline{V}$ = 0.35; $\underline{X}^2$ = 6.9*

*$\underline{p}$<.05; **$\underline{p}$<.01; n.s. = not significant

Students whose parents instructed them at home on dressing, adaptive behaviors, increasing attention span, and task completion were more likely to show improvement in these areas than were students who were not taught at home.