DOCUMENT RESUME

ED 228 779 EC 151 626

| | |
|---|---|
| TITLE | Program for Unserved Handicapped Children From Birth - 3 Years (Me Too Program). 1980-81 End of Year Report. |
| INSTITUTION | Solano County School System, Fairfield, Calif. |
| SPONS AGENCY | Special Education Programs (ED/OSERS), Washington, DC. Handicapped Children's Early Education Program. |
| PUB DATE | [82] |
| GRANT | 444AH80144; G007800107 |
| NOTE | 46p. |
| PUB TYPE | Reports - Evaluative/Feasibility (142) |
| EDRS PRICE | MF01/PC02 Plus Postage. |
| DESCRIPTORS | *Developmental Disabilities; *Early Experience; *Handicap Identification; *High Risk Persons; Infants; Parent Attitudes; Preschool Education; Program Evaluation; *Referral; Student Characteristics; *Student Evaluation |
| IDENTIFIERS | California (Solano County) |

ABSTRACT

The 1980-1981 evaluation report on a Solano County, California, project to serve children (birth to 5 years old) who are handicapped or at high-risk for developmental delay is presented. The project, which provides identification, screening, assessment, and educational/therapeutic services, is examined in terms of five process objectives and six outcome objectives. The process components are as follows: 1) number of children seen, referred, and screened; 2) individualized goals for each child's developmental functioning; 3) individualized staff development goals; 4) parent satisfaction with the program and the services to their child; and 5) referral sources. The six outcome objectives include: 1) referral and screening; 2) special preschool day classes; 3) specialized instructional services to remedy specific problem areas, usually speech and language therapy; 4) special toddler day classes; 5) home program for infants; and 6) high-risk infant longitudinal followup. Information on program participants includes: sex, age, racial/ethnic status, referral sources, and family income. Student scores on specific tests are also provided. A parent survey form and a rating form for long- and short-term objectives are included. (SEW)

1980-81

# END OF YEAR REPORT

HCEEP

GRANT NUMBER: G007800107

444AH80144

Program for Unserved

Handicapped Children From

Birth - 3 Years

(Me Too Program)

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Introduction

During 1978-81, the Me Too Program was funded through state grants (ESEA Title IV-C, Infant/Preschool Distretionary/Incentive Grants) in addition to the funding received through this HCEEP grant to provide identification, screening, assessment, and educational/therapeutic services to unserved high risk, developmentally delayed and handicapped young children from birth to 5 years in Solano County.

This 1980-81 End of the Year Report is a copy of the Evaluation Report submitted to the California State Department of Education, ESEA IV-C. It reports on activities of the program serving students from 3 to 5 years, in addition to the services provided to children from birth to 3 years, the age range covered in this grant.

This report summarizes much of the data collected on the Me Too Program from July 1978 to June 1981. The reader should be prepared to examine a complex program with multiple elements. We will be examining process objectives in five areas. We will then study outcome objectives in six additional areas. One of these areas--numbers of children seen, their characteristics, and their parents' satisfaction--falls into both process and outcome areas. It will be presented once, in the process section, since it does not deal directly with changes in the competence of the child.

The five areas with process objectives are:

1. Numbers of children seen, referred, and screened. Objective: to see children, evaluate their needs, refer them appropriately to needed services (if necessary). In addition to looking at the children and their characteristics, we will present data on parent satisfaction with the contact and referral.
2. The second process objective is to have the children in the program attain individualized goals. It is expected that attainment of multiple goals over time will augment each child's developmental functioning and help the child compensate for the handicap and/or approach normal functioning.
3. The third process objective is for the Staff to attain their individualized goals in areas of staff development. As Staff become more highly trained, the program should become more effective in assisting handicapped children.
4. The fourth process objective is that parents with children in the program will be satisfied with the program and the services to their child.
5. The fifth process objective is that community agencies would be informed about, and satisfied with the services of the Me Too Program. Attainment of this objective should keep referrals of preschool handicapped children flowing into the Me Too Program.

The six outcome objectives have to do with six different subprograms or program elements in the Me Too program. The six areas are:

1. Referral and Screening Component. As mentioned earlier, this component will be discussed under process objectives, but it can stand as a separate program. For example, the major goal might be to receive referrals of, screen, and assess one hundred children each year.

2. Preschool: Special Day Classroom. This is a special half-day class for developmentally delayed and learning handicapped children three through five years of age.

3. Designated Instructional Services. These are specialized instructional services provided to remedy specific problem areas, most often, speech and language therapy.

4. Toddlers: Special Day Classroom. This is a non-categorical half-day class for handicapped and developmentally delayed children eighteen through thirty-five months of age.

5. Infants: Home Program. This is an intervention program conducted in the infants home by infant specialist teacher and the child's parents. Heavy reliance is placed on involving the parent in appropriate remedial and developmental activities.

6. High Risk Infant Longitudinal Follow-up. This element has early identification and early intervention as its objective. Children are identified at birth as high risk and periodically screened or, if appropriate, offered services.

In the following pages, we will review the program accomplishments, first with the process objectives, and then with the outcome objectives.

Process Objectives

1) Were one-hundred children seen each project year, and what were their characteristics?

During the first project year (1978-79), one-hundred children were seen and processed through the program. During the second year (1979-80), or the first replication year, 195 new children were seen by the program. In the third year, or second replication year, 144 children have been seen. The first project year provided data on most elements, so for the Me Too program, each additional year can be seen to be a replication --the same program repeated for different students. Thus, the Me Too program has been

successful in seeing over one hundred new preschool children each year. Tables 1 through 6 show the basic characteristics of each group and show the similarity in the populations each year.

Table 1 shows the sex distribution by year. The majority of students, as would be expected, are male. Males represent 62%, 75%, and 69% of the referrals across the three years.

Table 2 shows the distribution by age group. The 36 month to 60 month age group has the most referrals across the three years (57%, 44%, 55%). However, each year, over one-third of the referrals have been for the Toddler group (38%, 41%, 36%). As would be expected, the youngest group (Birth through 17 months) has the fewest referrals. Handicaps have to be fairly severe to be detected reliably before this young age.

Table 3 presents data on the racial/ethnic status of the three year groups. Whites are the majority each year. Each minority group has between 5% and 10% which is similar to their proportions in the county. The high frequency of missing information in the current year reflects the number of cases still being screened and assessed. During this process, racial data and income data is collected.

Table 4 captures referral source which most often is the parent (31%, 25%, 53%). Substantial referrals are made by physicians and other agencies or professionals. This initial data would seem to indicate that the public education efforts of the program have reached large numbers of professionals and parents. The increase in parent originated referrals during the third year to 53% may also be an artifact due to improved record keeping and decreased missing information on this item.

Finally, Table 5 shows the income distributions for the families of these children. Gross family income ranges from low income less than $10,000 (34%, 30%, 23%), to more affluent families, or more than $25,000 (7%, 11%, 5%). Compared to the total county population, the Me Too program is probably slightly over-serving the poorer families. This, however, is in keeping with the recognized high risk and incidence of handicapping conditions for persons of lower socio-economic status.

Program Activity

Table 5.1 summarizes the activity of the Me Too program during the third year. Of the 144 referrals, 137 were screened and 74 were assessed.

TABLE 1

SEX OF CHILD

| YEAR 1 | Number | % |
|---|---|---|
| Male | 62 | 62 |
| Female | 38 | 38 |
| Total | 100 | |
| YEAR 2 | | |
| Male | 146 | 75 |
| Female | 49 | 25 |
| Total | 195 | |
| YEAR 3 | | |
| Male | 99 | 69 |
| Female | 45 | 31 |
| Total | 144 | |

TABLE 2

AGE OF CHILD

| YEAR 1 | Number | % |
|---|---|---|
| 0-17 months | 5 | 5 |
| 18-35 months | 38 | 38 |
| 36-60 months | 57 | 57 |
| Total | 100 | |
| YEAR 2 | | |
| 0-17 months | 29 | 15 |
| 18-35 months | 80 | 41 |
| 36-60 months | 86 | 44 |
| Total | 195 | |
| YEAR 3 | | |
| 0-17 months | 13 | 9 |
| 18-35 months | 52 | 36 |
| 36-60 months | 79 | 55 |
| Total | 144 | |

TABLE 3

RACIAL/ETHNIC GROUP

| YEAR 1 | Number | % |
|---|---|---|
| White | 71 | 71 |
| Black | 9 | 9 |
| Mexican-American | 5 | 5 |
| Other | 8 | 8 |
| Missing Data | 7 | 7 |
| Total | 100 | |
| YEAR 2 | | |
| White | 135 | 69 |
| Black | 13 | 7 |
| Mexican-American | 6 | 3 |
| Other | 13 | 7 |
| Missing Data | 29 | 15 |
| Total | 163 | |
| YEAR 3 | | |
| White | 64 | 44 |
| Black | 7 | 5 |
| Mexican-American | 5 | 3 |
| Other | 5 | 3 |
| Not Available | 61 | 42 |
| Total | 144 | |

TABLE 4

REFERRAL SOURCE

| YEAR 1 | Number | % |
|---|---|---|
| Parent | 31 | 31 |
| Physician | 15 | 15 |
| School District | 9 | 9 |
| County | 10 | 10 |
| Other Agency | 22 | 22 |
| Missing Data | 13 | 13 |
| Total | 100 | |
| YEAR 2 | | |
| Parent | 49 | 25 |
| Physician | 48 | 25 |
| School District | 8 | 4 |
| County | 8 | 4 |
| Other Agency | 41 | 21 |
| Missing Data | 41 | 21 |
| Total | 195 | |
| YEAR 3 | | |
| Parent | 76 | 53 |
| Physician | 31 | 22 |
| School District | 13 | 9 |
| County | 3 | 2 |
| Other Agency | 17 | 12 |
| Missing Data | 4 | 3 |
| Total | 144 | |

TABLE 5

INCOME DISTRIBUTIONS

| YEAR 1 (1978-79) | Number | % |
|---|---|---|
| INCOME: | | |
| 0- 4,999 | 8 | 11 |
| 5,000- 9,999 | 17 | 23 |
| 10,000-14,999 | 20 | 27 |
| 15,000-19,999 | 15 | 21 |
| 20,000-24,999 | 8 | 11 |
| 25,000+ | 5 | 7 |
| | 73 | |
| Missing Data: 27, or 27% | | |
| YEAR 2 (1979-80) | | |
| 0- 4,999 | 8 | 6 |
| 5,000- 9,999 | 31 | 24 |
| 10,000-14,999 | 35 | 27 |
| 15,000-19,999 | 18 | 14 |
| 20,000-24,999 | 24 | 18 |
| 25,000+ | 15 | 11 |
| | 131 | |
| Missing Data: 64, or 33% | | |
| YEAR 3 (1980-81) | | |
| 0- 4,999 | 6 | 8 |
| 5,000- 9,999 | 11 | 15 |
| 10,000-14,999 | 22 | 31 |
| 15,000-19,999 | 13 | 18 |
| 20,000-24,999 | 13 | 18 |
| 25,000+ | 7 | 5 |
| | 144 | |
| Missing Data: 72, or 50% | | |

TABLE 5.1

SUMMARY OF THIRD YEAR PROGRAM ACTIVITY

| Program Activity | |
|---|---|
| Number of referrals | 144 |
| Not screened or referred out | 12 |
| Screened by Me Too | 137 |
| Assessed by Me Too | 74 |
| Enrolled in Me Too | 24 |

| Class/Program Size | |
|---|---|
| Active in Me Too at beginning of year | 27 |
| Enrolled during year | 24 |
| Dismissed during the year | 11 |
| Active at end of year | 40 |

| Referral Source for Those Referred Out | | |
|---|---|---|
| Category: | N | % |
| Community preschool | 1 | 1 |
| District program | 18 | 17 |
| County program | 9 | 8 |
| Leapfrog | 3 | 3 |
| No services needed | 47 | 44 |
| Other agency | 4 | 4 |
| Family moved out of area | 9 | 8 |
| Family refused services | 15 | 14 |
| | 106 | |

Twenty-four of those assessed were enrolled in the program during the 1980-81 year. By the end of the year, there were 40 children (16 carried over from 1980-81 year) receiving services from the program.

The tally of referral source for those referred out is interesting. The largest number screened (44%), did not need services and their parents were probably reassured about their child's development. Eight percent of those referred into the program moved before services could be offered. In addition, 14% of the parents refused services that were recommended for their children.

While contact with these children is one index of program accomplishment, we still need to know how useful the contact was if they were not enrolled in the program. Figure 1 presents a copy of a brief form used to assess helpfulness and satisfaction during the second project year. Table 6 summarizes the responses of fifty parents who completed the survey. Note that 60% of these children were in another special school program or regular preschool. Sixty percent of the parents felt that their child was making progress in spite of not being enrolled in the Me Too program. Items three and four examine their perception of help received. Sixty-four percent said their child had been helped. Some of the negative responses are explained by parents who said "they only tested him and sent us to another program. The referral was good, though." A whopping 80% of the parents felt that the program was helpful to them personally.

Figure 2 shows the revised version of the questionnaire used during the third project year or second replication year. Are the positive results with parents of children who are referred out, borne out? During the second project year, 64% of the parents felt their child was helped by the Me Too program when asked a yes-no question. During the third year (see Table 7), on a five point rating scale, 75% said they were satisfied either quite a bit or a lot. Only two persons (3%) said not at all.

Did the contact with the Me Too program help the parent? In the second project year (Table 6), 80% said the project was helpful to them personally. During the third project year, 90% said they were helped (Table 6.1). Of this sample of parents, 79% also said that they were either quite a bit or a lot satisfied with the services they received.

2) Did children attain individualized goals?

This second process objective concerns attainment of student goals and objectives. Several different methods of rating goals have been used

# 30 DAY PHONE FOLLOW-UP

## REFERRALS OUT OF PROGRAM

(use only for children not enrolled in intervention program)

## SURVEY FORM

Child's Name: _____ Date: _____

1. HELLO! Our records indicate your child was referred to: _____

_____

2. Is this accurate? Yes _____

No _____

_____

(if no, please explain)

3. a. Has your child been seen by that program? Yes _____ No _____

b. If no, have you contacted the program? Yes _____ No _____

c. Was this referral appropriate for your child? Yes _____ No _____ Unknown _____

| | Not At All | A Little | Some | Quite A Bit | A Lot |
|---|---|---|---|---|---|
| 4. How satisfied are you with the referral made by the Me Too Program? | 1 | 2 | 3 | 4 | 5 |
| 5. Was the contact with the Me Too Program helpful to your child? | 1 | 2 | 3 | 4 | 5 |
| 6. Was the contact with the Me Too Program helpful to you as a parent? | 1 | 2 | 3 | 4 | 5 |

_____

(if not satisfied, please explain)

_____

(if not, please explain)

_____

(if not, please explain)

7. Do you have any other comments?

_____

_____

_____

_____

THANK YOU

Me Too Staff

TABLE 6

PARENTS OF CHILDREN NOT IN THE ME TOO PROGRAM - YEAR 2

Summary Sheet

n=50

1) Is _____ currently enrolled/attending a local school program?

| | N | % |
|---|---|---|
| Yes, currently enrolled | 30 | 60 |
| No, not currently enrolled | 18 | 36 |
| No response or unknown | 2 | 4 |
| TOTAL | 50 | 100 |

2) Has _____ been making progress?

| | | |
|---|---|---|
| Yes | 30 | 60 |
| No | 1 | 2 |
| No response or unknown | 1 | 4 |
| * (mailed-in surveys which did not ask this question) | 16 | 32 |
| yes and no | 1 | 2 |
| TOTAL | 50 | 100 |

3) The services your child received at the Me Too program helped him/her?

| | | |
|---|---|---|
| Yes | 32 | 64 |
| No | 14 | 28 |
| N/A or no response | 4 | 8 |
| TOTAL | 50 | 100 |

4) Was the Me Too program helpful to you?

| | | |
|---|---|---|
| Yes | 40 | 80 |
| No | 5 | 10 |
| N/A or no response | 5 | 10 |
| TOTAL | 50 | 100 |

5) Do you need any further information or services at this time?

| | | |
|---|---|---|
| Yes | 6 | 12 |
| No | 42 | 84 |
| N/A or not sure | 2 | 4 |
| TOTAL | 50 | 100 |

TABLE 6.1

YEAR 3

FOLLOW-UP OF PARENTS OF CHILDREN NOT ENROLLED

| | | | |
|---|---|---|---|
| 1. | If child referred to another program, has he/she been seen yet? (N = 29) | Yes: | 76% |
| 2. | Do you feel the referral was appropriate? | Yes: | 83% |
| 3. | How satisfied with the referral? | A Lot: | 56% |
| | | Quite A Bit: | 23% |
| | | Some: | 19% |
| | | A Little: | 2% |
| | | Not At All: | 0% |
| 4. | Was contact with Me Too helpful to your child? | "Quite A Bit" or "A Lot": (not at all, N=2, 3%) | 75% |
| 5. | Were you helped by Me Too? | "Quite A Bit" or "A Lot": (not at all, N=1, 1%, total N = 70) | 90% |

from simple yes-no format to a nine point standardized scale. During the first project year, Jefferson Goal Scaling (Edwards, 1973), was used with a sample of six students. Ratings were made on a standardized scale which ranged from -4 (impossible to reach) to 0 (no change) to +4 (completely attained). Figure 3 shows a sample of the goal definition and rating form used in the first and third project years. During the first year (1978-79), the average rated goal attainment was +2.03 (or somewhat attained), with a range from +0.7 to a high of +3.6. Generally, "somewhat" attainment was observed in yearly goals and quarterly objectives.

During the second year, the project staff instituted a trial procedure with short-term behavioral goals that were rated either attained or not attained. During this year, 1,595 goals were defined and rated for the students in the program. A total of 1,069 of those goals were rated as attained by the teachers. The method was cumbersome and time consuming and while it lent easily to daily planning, it was too awkward to use for program evaluation purposes.

During each quarter of this third project year, quarterly objectives have been rated using the form in Figure 3. Examples of the types of goals defined for the children are:

a) Jennifer will visually track a ball or a balloon horizontally for 180 degrees

b) Bobby spontaneously uses plurals correctly 90% of the time

c) Rita will walk independently for five feet

d) Will take ten block/pegs from a board and place into a container

e) Joey will sit independently for one minute

Tables 8, 9, and 9.1 present the mean ratings of short-term objectives for the children enrolled in the classroom each quarter. The ratings are presented separately for: 1) the preschool group and, 2) the toddlers and infants. Global average ratings for the group as a whole are 2.23 in November, 2.95 in February, and 3.02 by May 1981. Students increased their average goal attainment from "some" in November to "quite a bit" by May. One hundred percent of the students showed some positive goal attainment. These ratings compare favorably with the first year average of 2.03, and the second year percentage of 67% attainment.

Table 9.2 contains ratings of the annual goals from the students IEPs. Some sample goals are:

1) Use three word combinations 50% of the time (0)

FIGURE 3

ME TOO PROGRAM

Rating of Goals and Objectives

Child's Name _____

Birthdate _____ Age _____

Parent(s) _____

Teacher(s) _____

KEY:

+4 attained completely
+3 attained quite a bit
+2 attained somewhat
+1 attained a little bit
0 no change
-1 a little further from goals
-2 somewhat further away
-3 quite a bit further
-4 not possible to reach goal

| Starting Date | LONG-TERM GOALS (yearly) | Teacher rating initials, date | Parent rating initials, date |
|---|---|---|---|
| | 1. | | |
| | 2. | | |

COMMENTS:

| Starting Date | SHORT-TERM OBJECTIVES (3 mo. intervals) | Teacher rating initials, date | Parent rating initials, date |
|---|---|---|---|
| | 1. | | |
| | 2. | | |
| | 3. | | |
| | 4. | | |
| | 5. | | |
| | 6. | | |

COMMENTS:

copy: 1-teacher 2-home 3-school

TABLE 8

Fall - Nov./Dec. 1980

STUDENT MEAN GOALS/OBJECTIVES ATTAINMENT RATINGS

| 3 - 5 Years | 0 - 36 Months |
|---|---|
| +1.0 | 3.5 |
| +3 | 2.0 |
| +1 | +3.0 |
| +3 | 2.0 |
| +2.5 | 1.5 |
| +1 | 3.5 |
| +3 | 1.0 |
| +2.5 | 1.5 |
| +1.5 | 2.5 |
| 2.5 | 1.5 |
| 3.5 | 3.5 |
| +3.0 | 1.5 |
| 1.5 | 1.5 |
| 3.5 | 1.5 |
| n=15 | n=15 |
| X = 2.33 | X = 2.13 |
| S = 0.90 | S = 0.85 |
| GRAND MEAN X=2.23 | |

TABLE 9

WINTER - MARCH 1981

STUDENT MEAN GOALS/OBJECTIVES ATTAINMENT RATINGS

| 3-5 Years | 0-36 Months |
|---|---|
| 1. 4.0 | 1.5 |
| 2. 3.5 | 2.0 |
| 3. 3.0 | 4.0 |
| 4. 3.0 | .5 |
| 5. 3.5 | 2.0 |
| 6. 3.0 | 4.0 |
| 7. 2.5 | 3.0 |
| 8. 3.0 | 2.5 |
| 9. 3.0 | 3.0 |
| 10. 3.0 | 4.0 |
| 11. 2.0 | 3.5 |
| 12. 3.0 | 4.0 |
| 13. 3.5 | 2.5 |
| 14. 3.5 | 3.0 |
| 15. 3.5 | |
| $\bar{X}$ = 3.07 | $\bar{X}$ = 2.82 |
| S = .50 | S = 1.07 |
| Grand Mean $\bar{X}$ = 2.95 | |

TABLE 9.1

SHORT-TERM GOAL RATING

MAY 1981 ATTAINMENT

| 36 - 60 Months | 0 - 36 Months |
|---|---|
| 1. 3.5 | 1. 3.5 |
| 2. 3.5 | 2. 3.0 |
| 3. 3.5 | 3. 3.5 |
| 4. 4.0 | 4. 3.5 |
| 5. 3.0 | 5. 4.0 |
| 6. 2.0 | 6. 2.5 |
| 7. 2.5 | 7. 3.0 |
| 8. 2.5 | 8. 4.0 |
| 9. 3.5 | 9. 1.0 |
| 10. 3.3 | 10. 3.5 |
| 11. 3.0 | 11. 2.5 |
| 12. 1.5 | 12. 1.5 |
| 13. 3.7 | 13. 1.5 |
| 14. 4.0 | 14. 4.0 |
| 15. 4.0 | 15. 1.0 |
| 16. 3.5 | 16. 3.0 |
| 17. 3.5 | |
| Mean = 3.21 | Mean = 2.81 |

GRAND MEAN = 3.02

WITH POSITIVE OUTCOMES 100%

TABLE 9.2

LONG TERM GOAL ATTAINMENT ON

ANNUAL GOALS 1980-81

| 3 - 5 Years<br>Mean Goal Attainment<br>Long-Term Goals (Yearly) | 0 - 36 Months<br>Mean Goal Attainment<br>Long-Term Goals (Yearly) |
|---|---|
| 1. +3 | 1. +2 |
| 2. +3 | 2. +2 |
| 3. +3.5 | 3. +2 |
| 4. +3 | 4. +2 |
| 5. +2 | 5. +3.5 |
| 6. +2.5 | 6. +1.0 |
| 7. +2.5 | 7. +3 |
| 8. +3.0 | 8. +2.0 |
| 9. +2.5 | 9. +1.5 |
| 10. +1.5 | 10. +3.5 |
| 11. +2.0 | 11. +2.0 |
| 12. +2.0 | 12. +2.0 |
| 13. +2.0 | 13. 0 |
| 14. +2.5 | 14. +2.0 |
| 15. +3.0 | 15. +2.0 |
| 16. +3.0 | 16. +0.5 |
| 17. +2.5 | |
| 18. +4.0 | |
| 19. +1.5 | |
| Mean = 2.58 | Mean = 1.94 |

GRAND MEAN = 2.29 (97% Positive Attainment)

2) J will demonstrate smooth, consistent visual tracking (+2)

3) S will walk independently at least ten feet (+4)

As can be seen from Table 11, only one student demonstrated no progress this year. The grand mean attainment was 2.29 or "some." The older group (mean = 2.58) demonstrated highest average gain than the younger group (+1.94). This is probably due to the more severe handicapping conditions in the younger group.

This method might be one economical way to develop an index of student progress in other programs. It would involve a single rating by the teacher for each IEP goal at the end of the year.

3) Did staff attain their inservice training goals?

This third process objective has to do with inservice training and continuing education of the staff. During the first project year, five general areas of staff competency were defined as areas likely to need ongoing training. Figure 4 shows the form developed and implemented in the 1978-79 project year (first year).

Table 10 summarizes the staff goal attainment each eyar. It can be clearly seen that the average attainment has decreased each year. In this area, the Me Too program is clearly not documenting or replicating past gains.

Our experience has been that for any given area of competence, when training a professional staff, the major gains and basic learning come early. More time was devoted to inservice training in the early stages of the program's development, as would be expected.

As staff is asked to define new and more ambitious goals, they start to push realistic time and resource limitations. The documented trend in these services is what one would expect from valid data.

4) Are parents active in the program and satisfied with its services?

Appendix A contains the revised Parent Satisfaction Survey used in year 2. It was administered again in the third year. As the Me Too program has matured, parents have been increasingly involved at more intensive participation levels. A satisfaction survey is useful to highlight strengths and potential problem areas. The satisfaction questionnaire has two positive categories: "somewhat satisfied" and "very satisfied." In order to present conservative results, we shall focus on the percentage "very satisfied." On this, as with other satisfaction questionnaires in good programs, there are only a few negative ratings.

FIGURE 4

NAME _____

GOAL DEFINITION: STAFF INSERVICE

Below are listed several areas of project emphasis. We want you to define your most important goal in each area. Please write the specific result you would like to attain in the next three months. We will be asking you to rate your attainment in January. In each area, just complete the sentence defining your goal.

1. My most important goal for diagnostic skills with children aged birth to 5 years is: _____

2. My most important goal for improving my teaching techniques with children aged birth to 5 years is: _____

3. My most important goal for developing intervention programs for children is: _____

4. My most important goal for working with parents is: _____

5. My most important goal for working with community agencies is: _____

TABLE 10

SUMMARY OF STAFF GOAL ATTAINMENT FOR THE

THREE PROJECT YEARS

| | $\bar{X}$ | N |
|---|---|---|
| **First Year** | | |
| 1. Diagnostic skills for children 0-35 months | 2.75 | 4 |
| 2. Diagnostic skills for children 36-60 months | 4.00 | 4 |
| 3. Developing intervention programs for children | 3.50 | 4 |
| 4. Working with parents | 1.00 | 4 |
| 5. Working with community agencies | 3.00 | 4 |
| 6. Grand Mean | 2.85 | 4 |
| **Second Year** | | |
| 1. Diagnostic skills for children 0-35 months | 1.50 | 6 |
| 2. Diagnostic skills for children 36-60 months | 2.16 | 6 |
| 3. Developing intervention programs | 2.33 | 6 |
| 4. Working with parents | 3.33 | 6 |
| 5. Working with community agencies | 3.33 | 6 |
| 6. Grand Mean | 2.53 | |
| **Third Year** (Averaged across three quarters) | | |
| 1. Diagnostic skills for children 0-35 months | 1.6 | 6 |
| 2. Diagnostic skills for children 36-60 months | 1.8 | 6 |
| 3. Developing intervention programs | 2.2 | 6 |
| 4. Working with parents | 1.17 | 6 |
| 5. Working with community agencies | *1.4 | 6 |
| 6. Grand Mean | 1.74 | |

*(one -4 rating: impossible to reach)

TABLE 11

PARENT SATISFACTION - YEAR 1, YEAR 2, AND YEAR 3

| First Year | 1st Yr. | 2nd Yr. | 3rd Yr. |
|---|---|---|---|
| 1. Referred by physician/social agency - yes | 68% | 35% | 74% |
| 2. Always treated with warmth and dignity by staff - always | 72% | 83% | 83% |
| 3. Always, your child was handled with skill and care - always | 79% | 74% | 87% |
| 4. Do you feel your child was helped - yes | 100% | 100% | 100% |
| 5. Satisfaction with: | % Very Satisfied | | |
| a. Assessment services | 78% | 81% | 80% |
| b. Bus services | 69% | 47% | 77% |
| c. School program | 84% | 87% | 86% |
| d. Home program | 61% | 62% | 85% |
| e. Physical therapy services | 79% | 54% | 83% |
| f. Speech therapy services | 83% | 81% | 88% |
| g. Parent group meetings | 62% | na | na |
| h. Staff knowledge of community resources | 55% | na | na |
| i. Parent conferences | 79% | na | na |
| j. Parent potlucks | na | 30% | 44% |
| k. Parent education meetings | na | 60% | 60% |
| l. Parent support groups | na | 25% | 50% |
| m. Individual counseling | na | 60% | 90% |
| n. Observing/assisting in the classroom | na | 77% | 80% |
| o. Participation in developing child's program | na | 71% | 73% |

Table 11 summarizes those results for Year 1, Year 2, and Year 3. The reader should also know that a parent often left the question blank if they had not used a specific service (e.g., physical therapy) or did not know what it was.

The data in Table 11 essentially documents that Year 2 and Year 3 replicate the results of Year 1. There are some minor differences. The proportion referred by an M.D./social agency drops slightly and people become less satisfied with the bus services. On the whole, the results are similar and highly positive. In all years, 70-80% report ALWAYS being treated with warmth and dignity by project staff. In all years, over 70% feel that their child was ALWAYS handled with skill and care. And, finally, in all years, 100% felt that their child was helped by being in the program. Those who are suspicious of such high ratings should be aware that this is an anonymous mailed questionnaire with no way to identify the respondent.

5) Are community agencies knowledgeable and aware of the Me Too program?

The Community Agency Survey was conducted as a community education effort during the first year. A survey form was sent to 280 agencies (social agencies, preschools, physicians, school districts, etc.), in the area informing them of the Me Too program. The major findings, in addition to informing these potential sources about the Me Too program were:

a) Ninety percent of the agencies responding wanted more information on the Me Too program and its services

b) Seventy percent of those responding did not have a liason arrangement with the Me Too program but desired close contacts

c) A total of seventy-one percent of those who had used the program said they were extremely satisfied with services received. The remaining twenty-nine percent were somewhat satisfied

The information from the survey was used by staff to develop improved linkages with ohter community agencies. It should be noted that eighty percent of the agencies responding could provide some type of service to handicapped children in Solano County and all of them were willing to accept appropriate referrals.

During the second project year, a revised survey form was sent to the twenty-six agencies who were the major referral sources for the Me Too program (see form in Appendix B). This survey replicated the first year's satisfaction results (see Table 12), with eighty percent extremely satisfied

TABLE 12

SUMMARY OF COMMUNITY AGENCY

SATISFACTION STUDIES

How satisfied has your agency been with the services provided by the Me Too program?

| | % Somewhat Satisfied | % Extremely Satisfied |
|---|---|---|
| First Year | 29% | 71% |
| Second Year | 20% | 80% |
| Third Year | 26% | 59% |

and the remaining twenty percent somewhat satisfied. No agency reported dissatisfaction with services.

This second year survey asked how the agencies had used the Me Too services. Thirty-two percent reported using the Me Too program for school placement or home interventions. Another thirty-seven percent obtained developmental evaluations for their children from Me Too staff. Twenty-one percent reported using the Me Too program for audiological evaluations. These agencies also reported that thirty-seven percent of them had received consultations on specific issues from Me Too project staff.

The third year survey provides similar results. This year, two persons (out of 21) expressed some dissatisfaction. In each case, the agencies felt that services were not given in a timely manner or feedback was not quick enough. In general, other agencies know about and use the Me Too services. The majority (89%) are satisfied with services.

Outcome Objectives

This section examines data which has bearing on the impact of the program on the capabilities of the children being served. A total of six objectives were formulated in the introduction to this evaluation section. It was noted that the first objective--the referral and screening component--was also a process objective. The data bearing on this component--numbers of referrals and their characteristics--has already been presented.

This section presents an overview of the scales used for screening the children and for assessing the impact of the instructional programs.

The first year of the project involved staff recruitment and training and initial implementation of the program. During the second year, the project activities were refined, increased parent involvement was attained, and greater numbers of children were either enrolled in the program or referred to other specialized agencies.

The third year replicates the effects of the project on new groups of students to demonstrate the generalizability of the project's impact for different students.

This validation design is sufficiently rigorous to rule out such possible factors as the "halo" effect, coincidental implementation of another program, or an unusual class or group of students. The possibility of an unusually strong teacher is ruled out in the project structure by the use of multiple teachers. It is felt that this replication study will clearly indicate the possibility of generalizing this project to other rural school districts.

Because children with a wide range of handicapping conditions and developmental delays are served in the program, several standardized criterion-referenced and informal measures are used to assess student abilities and needs. However, all children are assessed on at least one of the following standardized measures:

The Thorpe Developmental Inventory (Thorpe and Pickens, 1977). This instrument was developed to allow developmental assessment of children aged three to six. It provides a detailed assessment of gross motor skills, self-identity and sentence use, problem solving skills, concept development, comprehension and verbal expression skills, fine motor skills, and self-help skills. Normative data and reliability and validity data are available.

The Sequenced Inventory of Communication Development (SICD, Hedrick and Prather, 1975). The SICD is designed to test discrete landmarks in communication development. It attempts to sequence in a systematic fashion the receptive and expressive communication development for children aged four months to four years. The scale includes 148 receptive items and 162 expressive items. The measure is not an expression of the theoretical basis of communication development, but provides a framework for looking at early communicative behaviors in terms of what the pertinent avenues of interaction may be. Some normative data and reliability data is available. The scale is published by University of Washington Press.

The Bayley Scales Of Infant Development (Bayley, 1969). It provides a detailed assessment of infant development in the mental and motor areas. Normative data is provided based on national studies of several thousand infants. It has good reliability and is widely used for infant assessment.

Pre-test and post-test data is collected on these standardized developmental instruments for each child in the program. The use of age standardized scores controls for gains due to maturation and allows statistical tests on partticipant change eliminating change due to normal growth.

The children's post-test scores can also be statistically compared to expected scores or publishers norms to assess the extent to which these groups of handicapped children reach a normative level of functioning.

Children in this project are divided into three age groups: 1) Preschool children: 3 to 5 years, 2) Toddlers: 18 months to 35 months, and 3) Infants: birth to 17 months.

Preschoolers: 3 to 5 years. This group is given the Thorpe Developmental Inventory (Thorpe and Pickens, 1977), and the Sequenced Inventory of Communication Development (SICD, Hendrick and Prather, 1969). The tests are administered at entrance to the program and at six month intervals (or at termination, if sooner). The Thorpe provides a global score as well as subscale scores in the areas of gross motor, self-identity, comprehension/expression, fine motor, and self-care.

The SICD is given to most of the students with language delays. This measure provides diagnostic information and documents change over the course of the program using age standardized scores. A receptive age score (RCA) and expressive age score (ECA) can be determined.

Infants and Toddlers: birth to 36 months. Three major measures are used with these groups. The Bayley Scales of Infant Development (Bayley, 1969), and the Sequenced Inventory of Communication Development (SICD, Hedrick and Prather, 1969). The Bayley is administered upon entrance to the program, at three month intervals for children from three to eighteen months, and at six month intervals for children eighteen to thirty months. Scores from The Early Intervention Developmental Profile (University of Michigan, 1979), which is used for programming purposes, is used for children thirty to thirty-six months. The Bayley gives a developmental quotient score in mental performance (MDI) and motor performance (PDI).

1) Are handicapped and developmentally delayed children being identified?

It is important to examine the screening data to insure that handicapped children are being screened, referred, and provided appropriate services. One threat to program effectiveness could come about if large numbers of normal or nonhandicapped children were referred to the program.

Table 13 presents data for the preschool children who are given the Thorpe Developmental Inventory. Their means of 88.5, 94.1, and 99.6 are below the norm of 100, but only slightly. As we shall see later, this is due to two factors. First, more children are being seen in the group who have normal or superior scores. They are usually brought in by over concerned parents who are worried about their child's performance. When no problems are found, the mothers are reassured and no referral is made. The second factor contributing to high Thorpe scores has to do with the large number of children referred with articulation disorders or behavior disorders which is not relfected in their test scores.

Table 14 presents similar data derived from administrations of the Bayley Scales: the Mental Development Index (MDI) and the Performance Development Index (PDI). As can be seen from the table, the average score on the Bayley scales for these children is significantly below the normalized level of 100. This data clearly indicates, in a replicated series, that handicapped infants and toddlers are being seen.

2) Do students demonstrate improvement?

A. Special Day-Preschool Class

This is a special half-day class for developmentally delayed and learning handicapped children aged three to five years. The major objective is to significantly improve the children's functioning ability in one or all of the following areas: gross motor, fine motor, language,

TABLE 13

SCREENING SCORES FOR PRESCHOOL

CHILDREN USING THE THORPE DEVELOPMENTAL INVENTORY

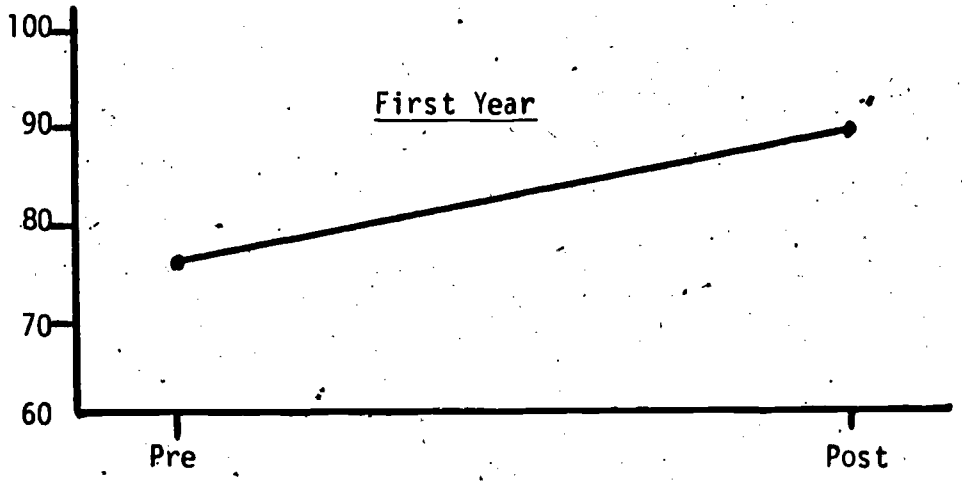
| | N | Mean | Standard Deviation |
|---|---|---|---|
| First Year | 24 | 88.5 | 19.67 |
| Second Year | 75 | 94.1 | 22.50 |
| Third Year | 50 | 99.6 | 17.00 |

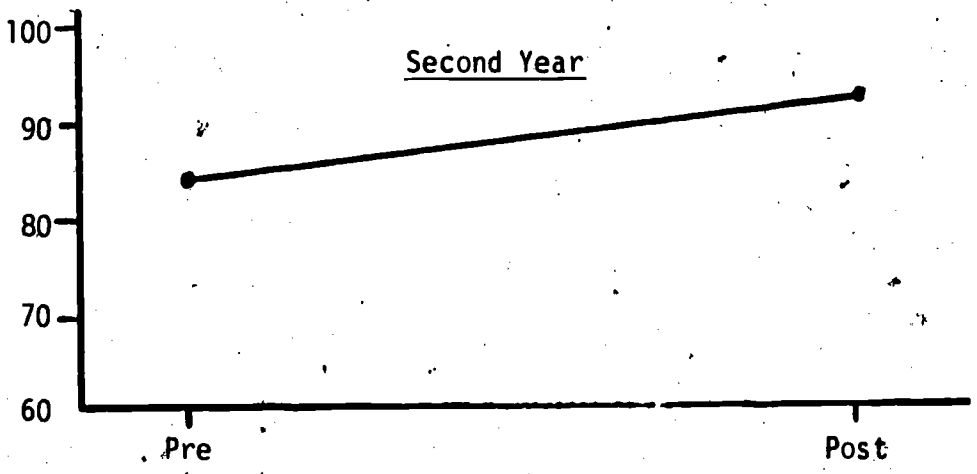
TABLE 15

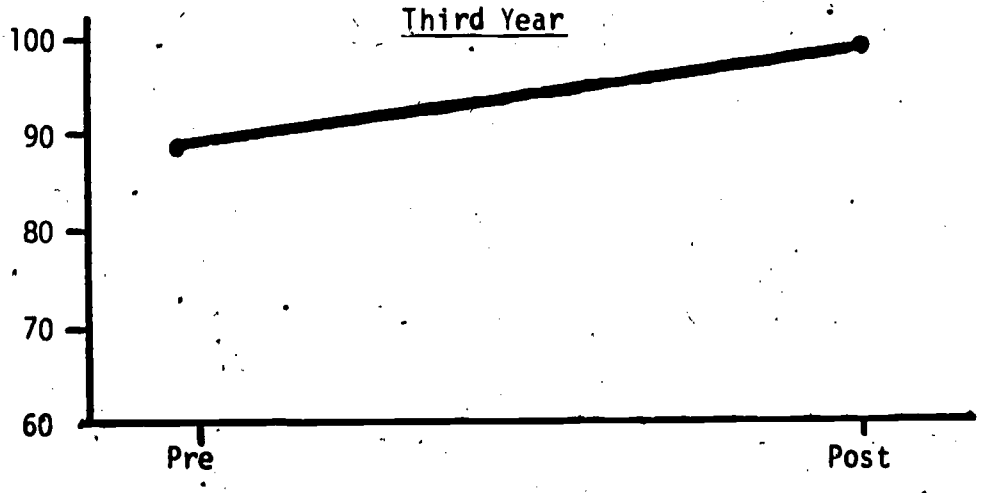
Pre-post change comparisons in three independent samples of the Thorpe Developmental Inventory.

| Group | Means Difference | t | df | p |
|---|---|---|---|---|
| First Year | 13.6 | 2.93 | 9 | <.05 |
| Second Year | 8.7 | 2.14 | 8 | <.05 |
| Third Year | 8.1 | 2.29 | 11 | <.05 |

Plotted Mean Change for Independent Groups
on the Thorpe Developmental Inventory



cognitive; social-emotional, and self-help areas. The children are assessed using the Thorpe Developmental Inventory which is a normed standardized scale. Instruction is aimed at improving developmental skills and behavior to prepare these children to enter a normal or mainstreamed program in kindergarten.

Figure 5 graphically portrays the replicated improvement in three different groups of children over the past three years. The FIRST YEAR group showed a mean increase of 13.6 points. The SECOND YEAR group accomplished a 10.5 point gain, and the THIRD YEAR group showed a gain of 8.1 points.

Table 15 summarizes the t-tests which show statistically significant gains at the .05 level for each of the three project years. Thus, significant improvement has been accomplished by these children each year of the project.

B. Designated Instructional Services

Children in need of special services such as communication skills or perceptual motor skills are offered Designated Instruction and Services (DIS) to remediate these difficulties. The majority of children receiving DIS have fairly normal general developmental quotients on tests like the Thorpe, but will show deficits on the SICD.

Table 16 summarizes the change scores for children during each project year. There were highly significant gains on expressive communication Age Quotients the first two years. However, these groups were still below average. The final means each year were 78.4, 71.4, and 80.3 respectively, compared to the norm of 100. Thus, while there are some significant gains, these children still have significant communication and language handicaps. Figure 6 plots these average gains for this variable.

The scores on Receptive Communication age quotient are more complicated (Table 16). There is a non-significant decrease in scores the first year (from a mean of 83 to a mean of 75). This decrease in the mean quotient does not mean that children's performance decreased. These are age adjusted quotients. A child's quotient can decrease even while his raw score performance increases if his rate of growth is slower than his normal age mates. In the first year, students improved but not as much as their non-handicapped peers. There was a significant gain on this variable for the second year

TABLE 14

SCREENING SCORES

FROM THE BAYLEY SCALES OF INFANT DEVELOPMENT

| First Year | N | Mean | Standard Deviation |
|---|---|---|---|
| Mental Scale | 15 | 73.5 | 25.96 |
| Motor Scale | 15 | 75.4 | 24.60 |
| **Second Year** | | | |
| Mental Scale | 50 | 79.4 | 23.44 |
| Motor Scale | 50 | 76.9 | 26.13 |
| **Third Year** | | | |
| Mental Scale | 37 | 83.2 | 29.04 |
| Motor Scale | 31 | 87.9 | 30.28 |

TABLE 16

PRE-POST CHANGE COMPARISONS FOR DEVELOPMENTAL QUOTIENTS OF THE SEQUENCED INVENTORY OF COMMUNICATION DISORDERS

Receptive Communications Age Quotient

| Group | Mean Difference | t | df | p |
|---|---|---|---|---|
| Year 1 | -8.2 | 1.67 | 9 | N.S. |
| Year 2 | 15.5 | 2.45 | 8 | <.05 |
| Year 3 | 2.0 | 0.51 | 6 | N.S. |

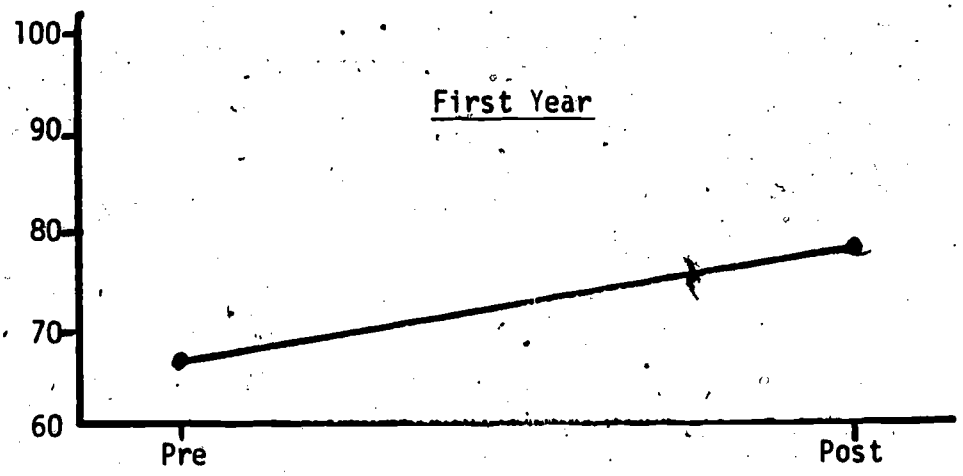
Expressive Communication Age Quotient

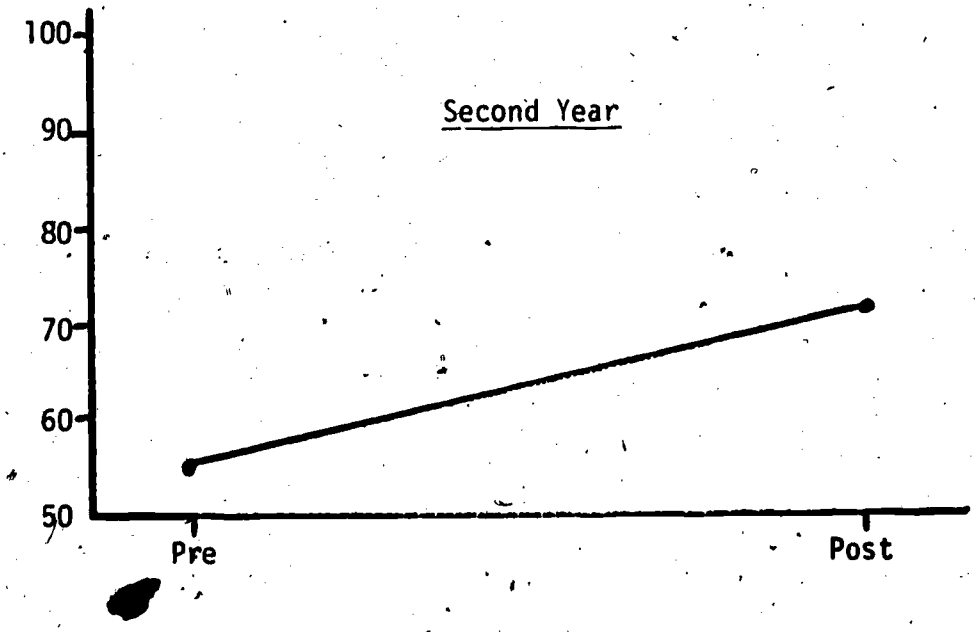
| Group | Mean Difference | t | df | p |
|---|---|---|---|---|
| Year 1 | 11.7 | 2.07 | 9 | <.05 |
| Year 2 | 17.1 | 4.99 | 8 | <.05 |
| Year 3 | 5.7 | 1.32 | 6 | N.S. |

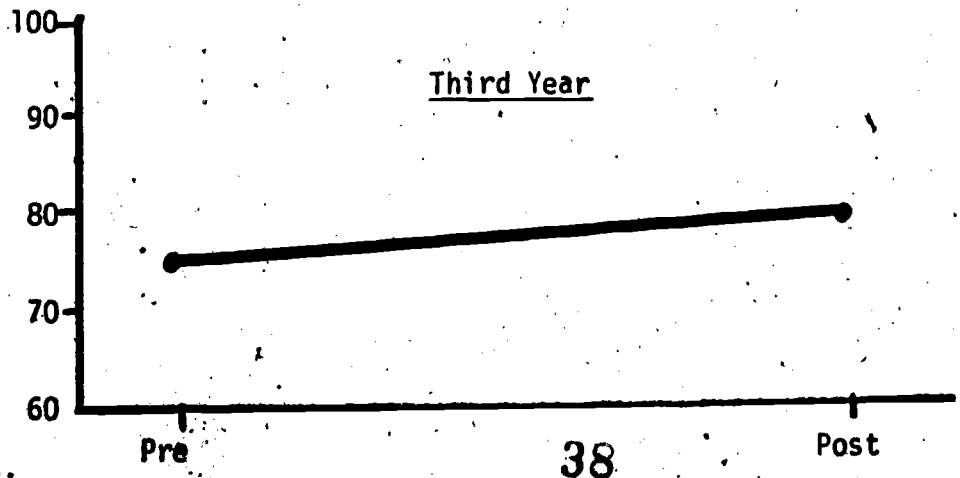
## Sequenced Inventory of Communication Development

Expressive Communication Age Quotient

Pre-post Gains for Child receiving Designated Instructional Services



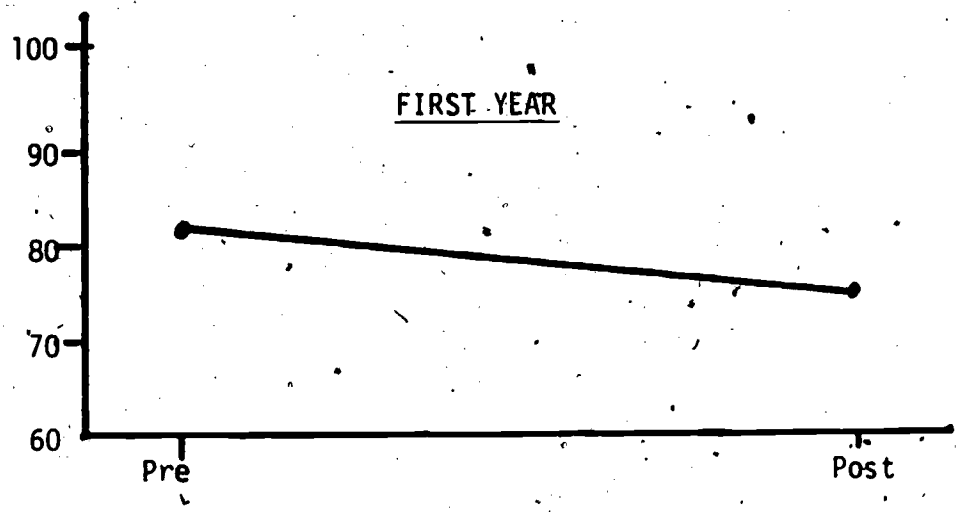



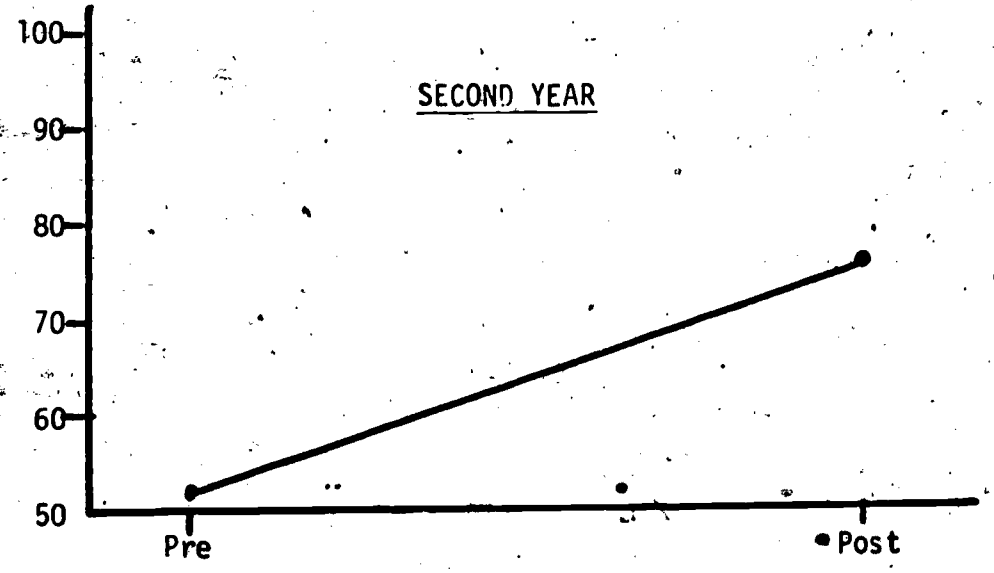



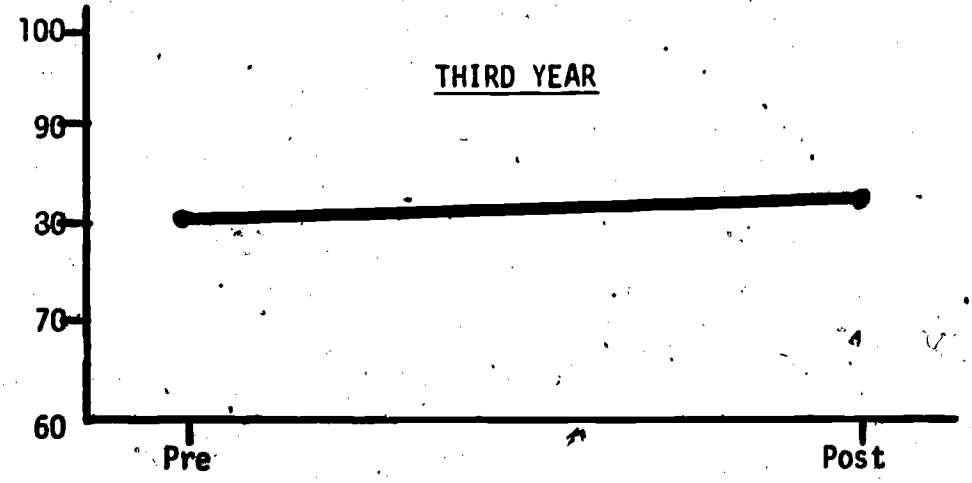
## Sequenced Inventory of Communication Development

Receptive Communications Age Quotient

Pre-post gains for children receiving Designated Instructional Services



group. During the third year, there were only slight gains on the Receptive Communication Scale. Figure 7 plots the mean changes for each group on this variable and clearly illustrates the contrasting changes in these quotients.

C. Special Day Toddler Class

Handicapped and developmentally delayed children from eighteen months to thirty-five months of age are offered a non-categorical intensive, highly individualized half-day classroom experience three days a week. It needs to be recognized that the younger a child is when a handicap is noted, the more severe the handicapping condition is likely to be. Cerebral palsy, Down's Syndrome, blindness, profound hearing loss, various congential diseases were found in this group of children. One of the children previously enrolled in the Toddler's Classroom has succumbed to her illness. This death underscores the severity of some of these handicapping conditions.

The major screening instrument and outcome measures for this program are the Bayley Scales of Infant Development. The MDI--Mental Development Index, is a standardized, normal scale with a mean of 100 for a nonhandicapped population. Similarly, the PDI--Performance Development Index, gives a quotient for motoric functioning.

Table 17 summarizes the changes made by the students in each of the three year groups. As can be seen in Table 17, there were significant gains in YEAR ONE and in YEAR TWO. Data presented for YEAR THREE is complicated by the increased number of students with severe handicaps. Many of the more severely impaired children who started out the year in the program had their quotients decrease because, although they made gains, they failed to keep up with expected rate change which resulted in a lower developmental quotient.

Figure 8 plots the mean MDI scores for each year group and presents them in relation to the norm of 100. Figure 9 shows similar plots for the PDI mean scores.

Further examination of the raw scores show that there is significant improvement for both the second and third year groups in both the mental and motor scales. There is an average sixteen point gain on the mental scale and a seven point gain on the motor scale. Unfortunately, the gains made in the third year group are, at this time, not large enough to be significant when adjusted for normal growth.

TABLE 17

MEANS CHANGE AND T-TESTS FOR TODDLER CLASSROOM STUDENTS ON THE BAYLEY SCALES

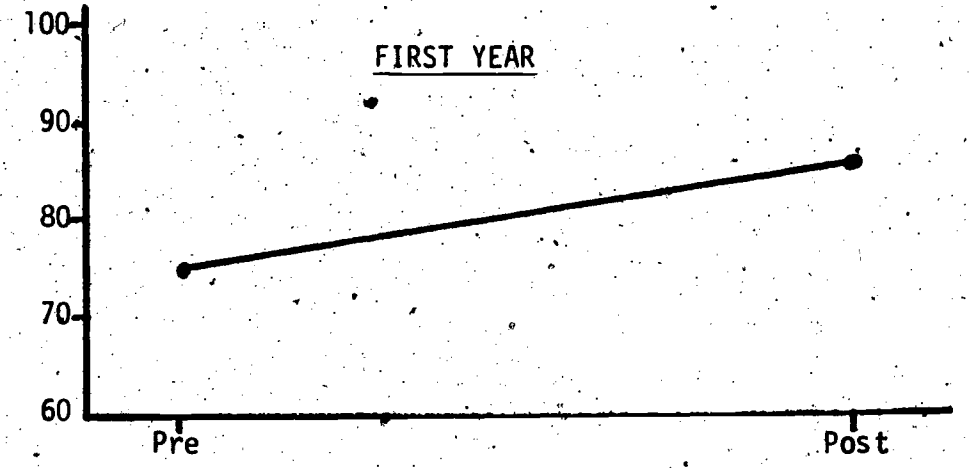
Mental Development Index

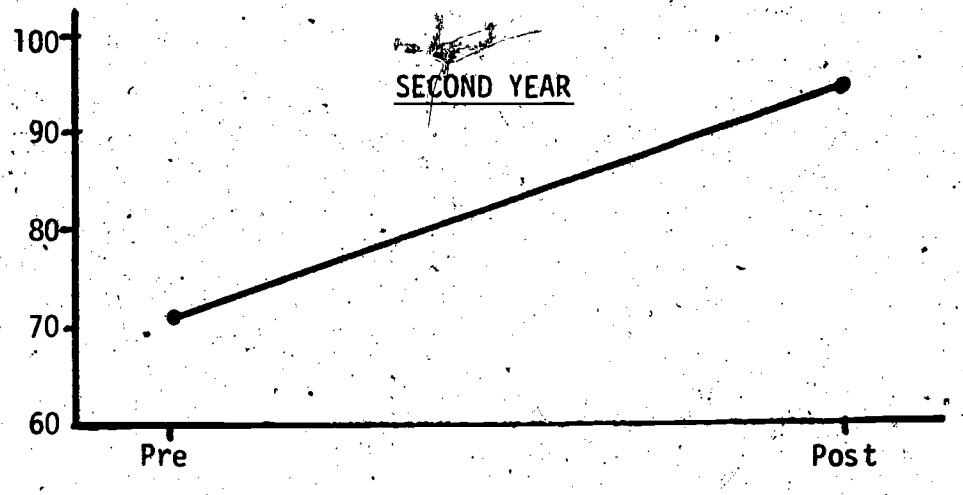
| Group | Mean Difference | t | df | p |
|---|---|---|---|---|
| First Year | 11.6 | 3.19 | 7 | <.05 |
| Second Year | 8.0 | 1.83 | 5 | <.06 |
| Third Year | 3.0 | 0.83 | 10 | N.S. |

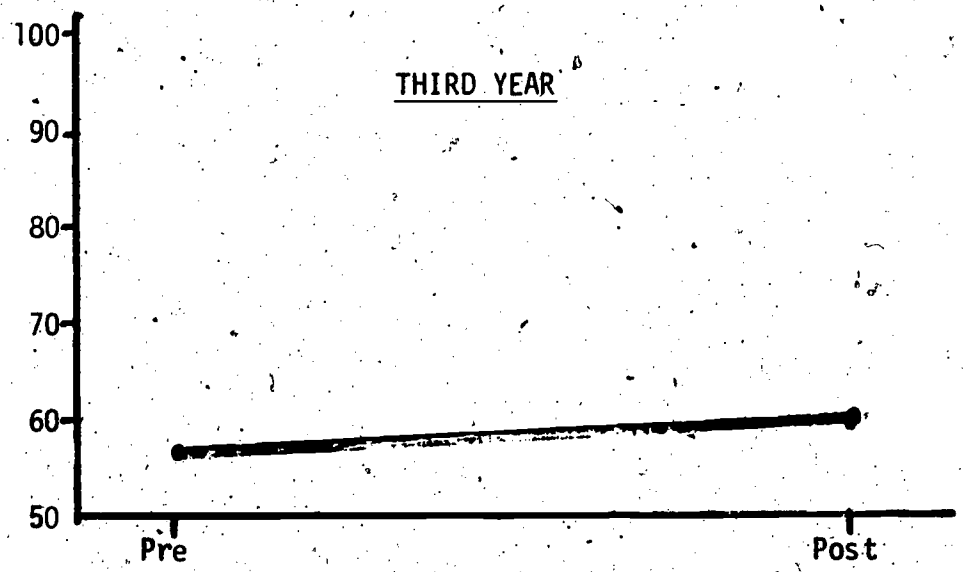
Performance Development Index

| Group | Mean Difference | t | df | p |
|---|---|---|---|---|
| First Year | 16.3 | 3.40 | 7 | <.05 |
| Second Year | 7.0 | 2.24 | 5 | <.05 |
| Third Year | 0.0 | 0.00 | 9 | N.S. |

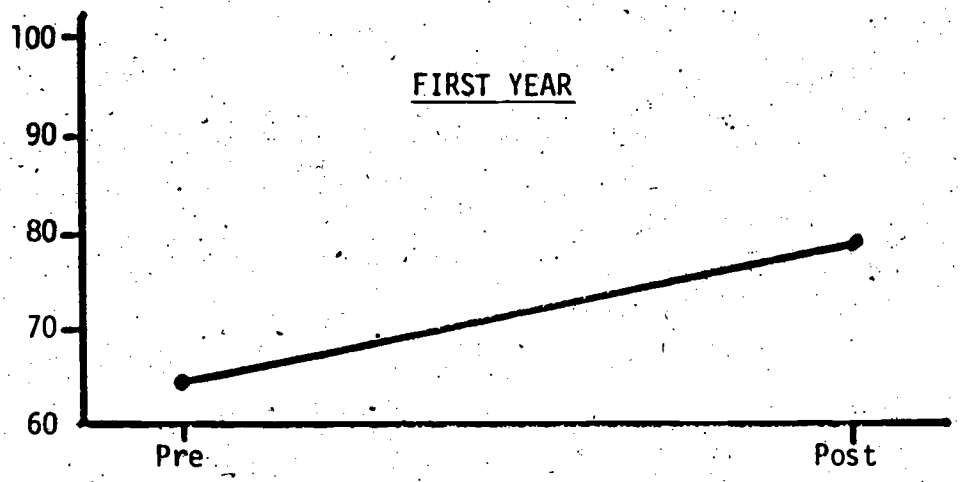
Plots of Mean Bayley MDI Scores by Year

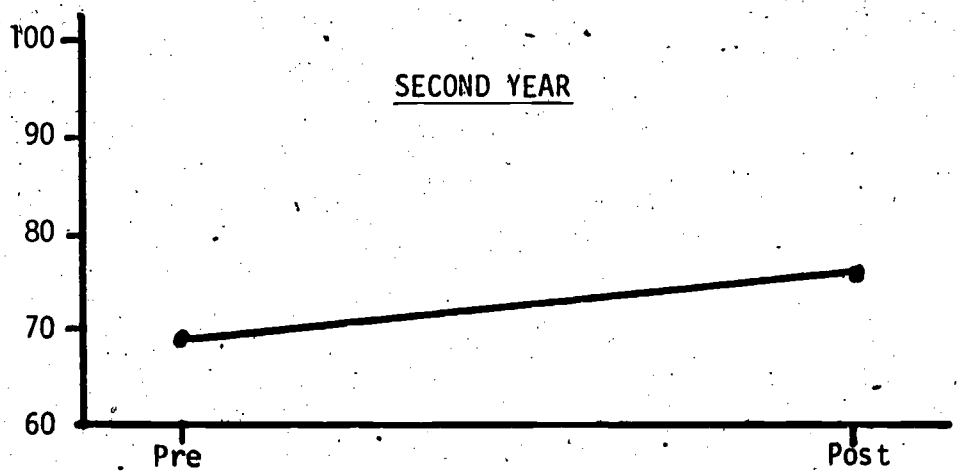


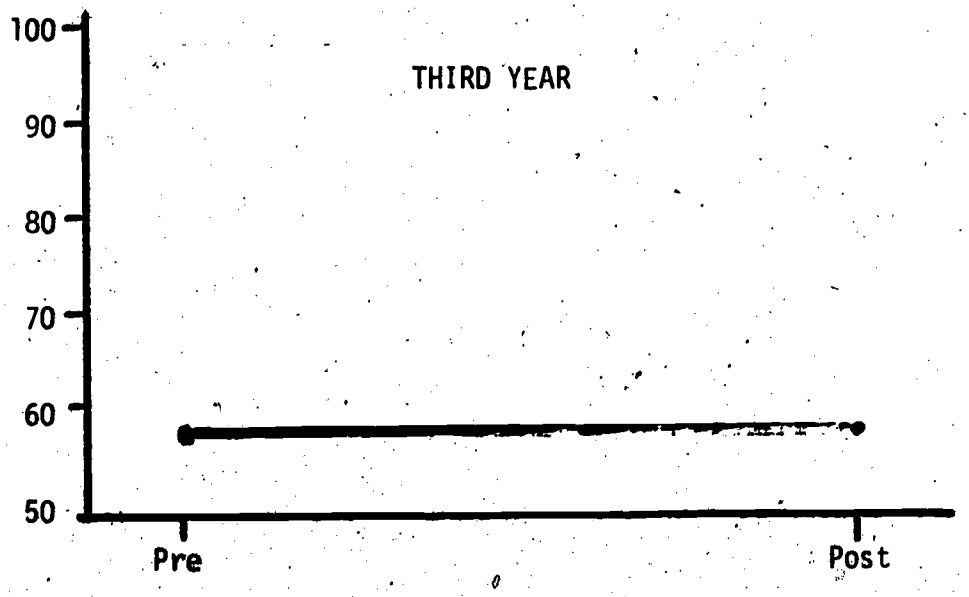



Plots of Mean Bayley PDI Scores by Year



D. Infants: Home Intervention Program

Handicapped children aged from birth through seventeen months are assessed with the Bayley Scales of Infant Development. They and their families receive home instruction. The home teacher works with the parents training them to be their child's primary teacher.

Again, it should be noted that, as these children are found to be handicapped at a very young age, the severity of their impairment is probably greater. One of these children with a central nervous system degeneration disease passed away in March 1981. Impairment is sometimes so severe that the infants score below the bottom range of the Bayley scales, giving developmental quotients (MDI and PDI) scores of less than 50.

Too few of those infants were identified, assessed, and involved in a home program during the first project year to allow statistical analysis.

During the second project year, pre-post test data was obtained from seven students, although two of these children were below the scale range at both pre-test and post-tests. The mean scores on the MDI was 83.6 at pre-test, and 79.4 at post-test, clearly no indication of significant improvement as measured in this manner. The PDI socres showed an initial mean of 70.9 and a follow-up average of 67.1. Again, not a gain for the group. The four children added to this group in the third year show the same pattern. However, analysis of the raw data does show significant gains in the second and third year groups on the mental scale. The average gain on the mental raw scores is 23 points.

Neither groups show significant gains on the motor scale. This is due to the fact that the scale does not contain many items that assess the smaller steps in motor development and that many of these infants who have been identified at this early age have severe motor impairment (e.g., cerebral palsy) in which change is slow or in quality of performance rather than rapid attainment of major motor milestones.

The following paragraphs briefly give a profile of three students and the progress that they have made which is not reflected in group statistical data using a standardized assessment instrument such as the Bayley.

Child #1

B. is a 22 month old male showing developmental delay and generalized hypotonia of unknown etiology. Although B's assessment profile represents

a declining MDI score in all areas, he continues to progress with marked peaks and plateaus. Up to the present time, B has not shown one area of definite strength. At one assessment, his cognitive performance might surpass the others, while at the next assessment, his social development may be the area of most improvement. The one area that has been and continues to be a deficit area is his expressive language development when viewed in relation to his cognitive abilities.

B's fine motor development in September 1980, was at an exploratory level, shaking and banging a toy. He currently effectively releases a square object into a square opening, stacks three four-inch blocks and places two pegs into a pegboard. In September 1980, he was at an early creeping level. He currently climbs any object he can, crawls rapidly around obstacles, rises to stand in the middle of a room, and takes up to twelve independent steps. In September 1980, B was finger feeding only small dry pieces of food and drinking from a held bottle. He currently accepts, chews and swallows most table foods, drinks unassisted from a cup and has attempted spoon feeding himself.

Child #2

Child 2 is a 2 year, 7 month old girl. She was born with a cleft lip/palate and currently exhibits overall developmental delays coupled with a retinal coloboma. She has a combination of abnormalities that are syndrome suspicious, though no classification has been found for her. While her PDI scores have decreased, her raw motor scores have improved from 33 to 44 and her raw mental scores have increased from 74 to 94. She has made the following gains which Bayley testing is not sensitive enough to capture:

1) She can now motor plan and crawl effectively under and around obstacles
2) She can maintain a standing position for up to ten minutes without tiring
3) She has reduced her time in self stimulatory behavior and has increased her time in focusing on an object and exploring its qualities in a purposeful and goal directed manner.

Child #3

Child 3 is a 2 year, 2 month old girl. She and her twin sister are suspected of having Early Infantile Autism. Her Bayley MDI and PDI scores did not change. However, her raw score on the mental and motor scales did show improvement.

Mental Scale: 84 to 90

Motor Scale: 44 to 53

This child has made dramatic improvements that cannot be measured by testing. The following are a few examples:

1) She now will maintain eye contact for at least one minute without turning away when in a 1 on 1 situation
2) She has reduced the number of self biting episodes when in a 1 on 1 situation
3) She will reach for her parents
4) She is an independent walker
5) She will allow for an adult to manually assist her in a task without breaking into a rage on a fairly consistent level.

E. High-risk Infant Longitudinal Follow-up

The development of several high risk infants has been followed by assessments at three month intervals on the Bayley Scales of Infant Development. The purpose has been to identify children at an early age so that intervention could begin as soon as needed. At the present time, there are five infants in the high-risk screening program. During the first year, there were nine, and ten in the second year. From this population, five children have been enrolled in the Me Too home or classroom programs and five have been or will be referred to special education programs in other areas. Hearteningly, the other fifteen are no longer considered to be at risk and/or do not appear to have any handicapping conditions and have been graduated from the program.