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ABSTRACT

Presented is the 1972-73 report of the second year of the Essential Early Education Project in two Vermont school districts to identify 5-year-old children eligible for special education, develop materials for dissemination, and continue the home-based parent training program. Noted is the refinement and replication of survey and testing procedures leading to the development of a census and survey manual and derivation of minimum objectives for the kindergarten year and from birth to 6 years of age. Seen to be essential to home-based services are 10 steps such as defining target behaviors and specifying and implementing teaching/learning procedures. Also reported is research on the effects of variables related to training parents, the validity of survey and testing procedures, and estimated incidences of eligible children. The major portion of the document consists of appendixes containing the following information: case studies, procedural guidelines for surveying parents and identifying children eligible for essential early education services, minimum objectives for entering first graders, procedures for the social and self-care inventory, the minimum objectives sequenced for the kindergarten year, minimum objectives sequenced for first 6 years, and an article on the effects of feedback in parent training. (DB)

# 1972-1973 REPORT

of the

ESSENTIAL EARLY EDUCATION PROJECT

of the

UNIVERSITY of VERMONT

SPECIAL EDUCATION AREA

COLLEGE of EDUCATION and SOCIAL SERVICES

in cooperation with the

COLCHESTER SCHOOL DISTRICT,

the

CHITTENDEN SOUTH SCHOOL DISTRICT

and the

DIVISION of SPECIAL EDUCATION

and PUPIL PERSONNEL SERVICES

of the

VERMONT STATE DEPARTMENT

of EDUCATION





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ESSENTIAL EARLY EDUCATION PROJECT

The materials in this report apply to the five year old child.and are to be used only for those children living in the district for which minimum objectives and test materials were derived. While it is possible that the basic procedures can be replicated successfully in other areas and for other age groups, sufficient data is not available at this time to support this.

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# INTRODUCTION

In the second year of the Essential Early Education Project, two major efforts were identification of five year old children eligible for special education and development of materials for dissemination. Survey and testing procedures initiated during the first year, 1971-1972, were refined and replicated in the Colchester and Chittenden South School Districts during 1972-1973. These replications enabled the development of a census and survey manual; the refinement of testing procedures; and the derivation of minimum objectives sequenced for the kindergarten year and from birth to six years of age. Refinement of testing procedures included the addition of an entry level test for the social/self-care areas. This test and the language/motor test provided the measures needed for comprehensive assessment of four and five year old children.

A third effort was the continuation of home-based service through parent training. Procedures were refined such that ten steps were identified as essential to provide home-based service. Effective teaching/learning procedures were identified and described in case study form.

The final efforts were researching the effects of variables related to training parents, researching the validity of survey and testing procedures and estimating percentages of eligible children in a given population.

SURVEY AND TESTING



Colchester

Letters of explanation and parent questionnaires (see Appendix ii) were mailed in October, 1972, to 207 parents living in Colchester, A second mailing to parents not responding to the initial mailing was made in November. By February 1973, all parents had responded to the questionnaire.

Twenty-four questionaires indicated that special help might be needed before entering first grade. These children were tested on the language/motor test by EEEP staff members during January, 1973.

Williston

The results of the 1971 Williston census identified 66 residents as parents of five year old children. Letters of explanation and parent questionnaires (see Appendix ii) were mailed in December, 1972 to these parents. Returned questionnaires revealed that only 57 parents had five year old children and nine parents had moved or did not have a five year old child. Eight parents indicated on the questionnaire that special help might be needed before entiring first grade. By the end of January, 1973 these children were tested.

In May, 1973, parents of four and five year old children were sent questionnaires so that testing of children who might need special help could be conducted. Testing was completed in June, 1973. Five of these children were determined eligible and are currently receiving service.

## SERVICE

During 1972-1973 a total of nine children, six from Colchester* and three from Williston, were served. (See appendix i) A team of seven consulting teachers-in-training and two project technicians acted as parent trainers visiting the homes at least weekly. The two coordinators of the project conferred with the parent trainers at least weekly to review the data and suggest alternatives. All parent trainers followed the service procedures specified below.

Step I: Survey

Parent receives an explanatory letter and completes questionnaire indicating whether or not their child needs special help in learning language, motor, social, or self-care skills prior to first grade entry.

Step II: Referral

Parent returns the questionnaire indicating their child may need special help in one or more of the four skills areas.

Step III: Entry Level Measures

The parent trainer administers an entry level test in the home.

Step IV: Eligibility for Service

The parent trainer and the parent review the entry level test results. If the child has not achieved

* Service to the sixth child in Colchester was implemented in March, 1973. (See case study Kenneth in Appendix i.)

criterion on each test item and if the parent trainer estimates that the child will not achieve criterion by the time he enters first grade, the child is eligible for special education service. The parent signs a permission form indicating informed consent.

Step V: Target Behavior(s) Defined and Measurement Procedure(s) Specified

The parent trainer and parent define the behavior(s) of concern (target behavior) and the minimum objectives to be achieved. Measurement procedures and learning materials are specified and incorporated into the home routine.

Step VI: Home Observation(s)

The parent trainer observes the baseline procedures and obtains second observer measures. Possible teaching/learning procedures that may accelerate progress toward objectives are noted. (This observation procedure is repeated at weekly intervals.)

Step VII: Teaching/Learning Procedures Specified and Implemented

Teaching/learning procedures are specified and implemented on a daily basis in the home setting.

Step VIII: Evaluation

Teaching/learning procedures are evaluated in terms of accelerated progress so that the child achieves minimum objectives by the time he enters first grade.

Step IX: Continuation of Service

Steps V through VIII are repeated for each minimum objective.

Step X: Follow-up

Periodic testing is conducted to assess continued progress. Referral for special education services in the school setting are arranged if minimum objectives are not achieved by that time.

## Manual of Procedures for Surveying Parents and Identifying Eligible Children

A manual of procedural guidelines for surveying parents and identifying children eligible for essential early education services was compiled. (see Appendix ii) Two general procedures are presented in the manual. One survey procedure was developed for use in school districts which conduct an annual school census (e.g., Chittenden Central School District and Colchester School District). The other survey procedure was developed for use in a school district for which an annual school census is not conducted (e.g., Williston Central School in the Chittenden South Supervisory District).

## Minimum Objectives

During October and November, 1972, all first grade teachers in the Colchester elementary schools and primary unit teachers in the Williston Central School cooperated in the revision of minimum objectives for entering first graders. All first grade teachers in Colchester and Williston met with the EEEP coordinators to revise objectives that had been derived in co-operation with Chittenden Central School District first grade teachers in 1971-1972. This resulted in a revised set of minimum objectives (see Appendix iii)

## Entry Level Tests

The entry level test for measuring language and motor skills was revised by November, 1972 and field tested at the Taft School, Winooski Day Care Center and in the South Burlington School District. (see Appendix ii) In

addition, an entry level test for measuring social and self-care skills was developed by April 1973 and field tested in Colchester and Williston homes. These two tests provide a comprehensive system for measuring all the minimum objectives used in determining eligibility for four and five year old children. (see Appensix iv)

Minimum Objectives Sequenced for Kindergarten and Estimated from Birth to Six Years of Age

The minimum objectives derived for entering first graders served as a basis for sequencing monthly objectives to be achieved during the kindergarten year. These kindergarten objectives and the developmental lists of other early education programs* served as the basis for estimating a sequence of minimum objectives to be achieved from birth to the sixth year. (see Appendix vi)

Parent Training Research

Members of the Essential Early Education Project staff met weekly to develop research strategies and to review results of the implemented research procedures. One proposal developed and implemented by consulting-teacher-in-training, Rosemary Getsie, assessed the role of feedback for initiating and maintaining parent performance. The dependent variables measured were parent

* Sequences used were
The Special Children's Center Developmental Chart, Ithaca, N.Y.,
The Denver Developmental Screening Test.
The Vermont Association for Crippled Children Developmental Activities (ages 2-5)
The West Central Illinois Special Education Cooperative Developmental Tests

behaviors of presenting stimulus cards, recording child responses, prompting the child at specified times and praising the child's correct responses. The independent variable assessed was the frequency of feedback delivered during home visits. The quality and quantity of feedback remained constant while the frequency of feedback varied from weekly to daily across four conditions in an ABAB design.

Parent behaviors were consistently low during weekly feedback conditions and high during daily feedback conditions indicating that frequent feedback is necessary in training parents to implement teaching/learning procedures in the home. (see Appendix viii)

Case Studies 1971-1972

During the 1971-1972 school year eight children residing in the Chittenden Central School District were served. (see Appendix vii) Six of these children were five years of age and were referred by their parents after completing the EEEP parent questionnaire. One of the remaining children was six years old and referred by the Chittenden Central School District Elementary Supervisor; the other was four years old and referred by her mother.

RESEARCH

Before evaluating the following data and conclusions, consideration should be given to at least two assumptions inherent in the program and data gathering procedures. The first assumption, upon which service to four and five-year-olds is based, is that the eligible child has deficits to such an extent that it would be more costly to ameliorate the deficits after the child enters first grade. This assumption is based on the cumulative deficit rationale which proposes that without intervention, the child who is deficit will become more deficit over time. As deficits increase, it is assumed that more time and more extensive specialist skills are necessary to provide services. If deficits are identified early, service time can be shortened and less extensive skills can be employed. Rather than allow deficits to cumulate and thus, further handicap a child it would appear most humane as well as more financially feasible to intervene as early as possible. Thus, the least costly means for serving the child would be provision of special services at the time of identification.

In Spring, 1973, first grade teachers were asked to estimate second grade placement for each first grade child. The estimates were categorized as "average or above" second grade placement and "low" second grade placement. The second assumption is associated with these placement estimates. When a first grade teacher predicts that a child will be placed in a "low" second grade, we are assuming that the child did not achieve a set of minimum objectives necessary for entry into an "average" second grade. Since there are no minimum objectives required for the first or second grades in the Colchester schools, teacher prediction of second grade place-

ment has [illegible] with [illegible] of minimum objectives. Furthermore, [illegible] minimum objectives during the first [illegible] year [illegible] first grade "success".

A Description [illegible]

Based on [illegible] children in the Chittenden [illegible] were expected to enroll in first grade in Sept[illegible] 2. [illegible] these children were surveyed by mail [illegible] (See Appendix [illegible]) [illegible] their child needed special help before [illegible] first gr[illegible]. Table 1 shows the results of the survey.

| | # of Parents | % of Parents Surveyed |
|---|---|---|
| [illegible] | 535 | 100% |
| [illegible] | [illegible] | 91% |
| [illegible] | [illegible] | [illegible] |
| [illegible] | 17 | 4% |

[illegible] parents surveyed, returned [illegible] in the Chittenden [illegible] District in 1971-1972.

Follow-[illegible] and information indicating first grade [illegible] of the 491 children whose parents returned the [illegible] the following research pertaining [illegible] internal agents and the [illegible] based [illegible] this follow-up data.

The Relationship [illegible] Parent Perceptions as Compared to the [illegible] Test [illegible]:

One of [illegible] which [illegible] survey procedures [illegible] the parent is an accurate observer [illegible] and a [illegible] of his child's

success. In order to answer the question 'Is the parent a good predictor of his child's success?' follow-up data obtained for 54 first grade children enrolled in the Joint Primary School in Colchester* was used.

In September of 1971, these 54 entering first grade children were assessed using the EEEP entry level test. Children scoring 77 percent correct or below were considered eligible for special help. Table 7 shows the results of this assessment.

| | # Children Tested | # Children Eligible | # Children Not Eligible |
|---|---|---|---|
| Parents indicated no special help needed | 46 | 9 | 37 |
| Parents indicated special help needed | 8 | 5 | 3 |

Table 7: Eligibility results for September 1972 using EEEP Test Scores as criterion.

Table 8 shows the percent of accurate parent predictors based on the 77 percent criterion for the EEEP test. Of the 46 parents who indicated that their child did not need special help 37 parents were accurate predictors using the 77 percent correct test score as a criterion for eligibility. Nine parents were inaccurate. Thus, 80 percent of the parents were accurate predictors.

Of the eight parents who indicated that their child needed special help, five parents were accurate predictors and three parents

* The Colchester School District was part of the Chittenden Central School District during 1971-1972.

were inaccurate predictors. Thus 60 percent of the parents were accurate predictors.

| | Total No. Parents | No. of Accurate Predictors | Percent of Accurate Predictors |
|---|---|---|---|
| Parents indicated no special help needed | 46 | 37 | 80% (37/46) |
| Parents indicate special help needed | 8 | 5 | 63% (5/8) |
| TOTAL GROUP | 54 | 42 | 78% (42/54) |

Table 1. Accuracy of parent prediction using EEEP test as criterion.

Of the 54 parent predictions, 42 were accurate. Thus, 78 percent of the total group of parents were accurate predictors.

Since the EEEP entry level test is only one possible indicator of a child's success in first grade, parent predictions were also compared with the child's estimated placement at the end of the first grade year.

Accuracy of Parent Prediction to Child's Success with Second Grade Placement [illegible]

In May, 1973, teacher estimates of the level of second grade placement were obtained for the 54 children tested in September, 1972. Teachers were asked to indicate the level of placement in terms of above average, average or below average second grade grouping.

Children for whom teachers estimated average or above average second grade placement were considered successful in first grade. Children for whom teachers estimated low second grade placement or first grade placement were considered not successful in first grade.

| | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|
| Parents indicated no special help needed | 46 | 37 | 9 | 37 | 80% $\left(\frac{37}{46}\right)$ |
| Parents indicated special help needed | 8 | [illegible] | 5 | 5 | 63% $\left(\frac{5}{8}\right)$ |
| Total group | 54 | | | 42 | 78% $\left(\frac{42}{54}\right)$ |

Table 4: Accuracy of parent prediction using second grade placement as criterion.

Parent predictions were compared to teachers' estimates for second grade placement for each child.

Table 4 indicates that 80 percent of the parents who predicted their children did not need special help were accurate and 63 percent of parents who predicted their children did need special help were accurate. The percent of accurate parent predictors is 78 percent for the entire group.

| | # parents | % of accurate predictions using test scores | % of accurate predictions using 2nd grade placement |
|---|---|---|---|
| Parents indicated no special help needed | 46 | 80% $\left(\frac{37}{46}\right)$ | 80% $\left(\frac{37}{46}\right)$ |
| Parents indicated special help needed | 8 | 63% $\left(\frac{5}{8}\right)$ | 63% $\left(\frac{5}{8}\right)$ |
| TOTAL GROUP | 54 | 78% $\left(\frac{42}{54}\right)$ | 78% $\left(\frac{42}{54}\right)$ |

Table 5: Comparison of accurate parent prediction using test scores and 2nd grade placement as criteria.

[illegible]

who indicated [illegible] when [illegible] interest. The [illegible] are [illegible] the criterion [illegible] criterion).

[illegible] parent [illegible] (/[illegible]) [illegible] criteria.

<u>[illegible] Parent/Child Interaction</u>

[illegible] swer the [illegible] with the [illegible]

| [illegible] | [illegible] |
|---|---|
| Above average [illegible] | 15 |
| [illegible] | 15 |
| Below average [illegible] | 6 |

Table [illegible] Second grade placement for children determined not eligible through test.

[illegible] average or above average second grade placement as criterion [illegible] 34 children were successful and six children were [illegible]. Thus the percent of accurate test predictions [illegible] second grade placement was 85 percent.

[illegible] September 1971, 14 children were [illegible] 87 percent correct criteria. These [illegible] second grade placement [illegible] the 14 children.

| [illegible] | [illegible] |
|---|---|
| [illegible] | [illegible] |
| [illegible] | [illegible] |
| [illegible] | [illegible] |

Table [illegible] Second grade placement [illegible] determined [illegible] through [illegible] test.

[illegible] average or above average second grade placement as criterion [illegible] children were successful. Thus the percent [illegible] accurate predictions [illegible] based on [illegible] test scores was 87 percent.

Summary of [illegible] Relative to the Validity of Survey and Testing Procedures

Table [illegible] shows percentages of accuracy for parent predictions based on [illegible], parent predictions based on second grade placement, and test predictions based on second grade placement.

| [illegible] | [illegible] parent predictions based on [illegible] | [illegible] parent predictions based on second grade placement | [illegible] test predictions based on second grade placement |
|---|---|---|---|
| [illegible] | [illegible] | [illegible] | 85% (34/[illegible]) |
| [illegible] | [illegible] | 63% (5/[illegible]) | 57% (4/14) |
| [illegible] | [illegible] | [illegible] | 78% (42/54) |

[illegible] parent predictions for 54 children [illegible]

For the group of children whose parents indicate their children do not need special help, parent prediction accuracy is 80% using either test scores or second grade placement as the criteria. For the same group of children, test prediction accuracy using second grade placement as the criterion is somewhat higher (85%).

From this parent prediction data, it appears that 20% of the children may be eligible for special services, though the parents' reports do not indicate the possible need for such services. One strategy to "find" the 20% children eligible but not so reported by parents would be testing all five-year-olds. However, the discrepancy between parent prediction accuracy and test prediction accuracy does not appear large enough to warrant the increase in personnel and financial support necessary to test all children.

[illegible] given to specifying behaviors more [illegible] providing more examples in which to [illegible] present problem, thus avoiding [illegible] analysis of test items should be [illegible] items might be identified as "best" predictors [illegible] first grade. Such an analysis would provide information for redesigning the parent questionnaire as suggested above, as well as provide information for increasing test prediction accuracy.

For the group of children whose parents indicate their children need special help, parent prediction accuracy is 68% using either test scores or second grade placement as the criteria. For the same group of children test prediction accuracy using second grade placement as the criterion is somewhat lower (67%).

Service to all children reported by parents as needing special help is indicated since parent prediction accuracy is higher than test prediction accuracy. Although only 65% of these children may actually need special services, such a procedure insures that service is provided to a maximum number of eligible children. Thus, the possibility of the occurrence of cumulative deficits for a child and the resulting increased costs for serving the child would be avoided. In addition, administration of the social/self care test is indicated for all children reported by their parents as needing special services since such children may have measured deficits on the social/self care test rather than on the language/motor LDEP entry test. The data obtained from the two groups of children [illegible] and those whose parents indicate special help is needed) indicate that modifi-

[illegible] of the parent questionnaire is necessary. To "find" the 20% children eligible but not reported by parents is of primary importance if any children, [illegible] children are to be identified.

While it is necessary to increase parent prediction accuracy for this group of children, parent prediction accuracy may decrease for the group of children whose parents report special help is needed. This may be tolerated since: 1) if 100% of eligible children were reported by parents as needing special services, then testing all children in the population would not be necessary and thus financial savings could be achieved and 2) although there would be some children identified as eligible who may not need services, no eligible child would be denied service. Thus, appropriate modification of the parent questionnaire should allow for identification of every eligible child in the least costly manner.

In summary, to find all eligible children, the parent questionnaire must be modified. To provide information as to how the questionnaire should be changed, an analysis of test items must be completed. To assure that all eligible children are provided service, all children reported by their parents as needing special help must be tested. And finally, to increase Ehlh test prediction accuracy, the continued use of the audio self-care test for children reported eligible by their parents is warranted.

Effectiveness of Intervention Information

An evaluation of intervention was measured by comparing following first grade and second grade placement for six children served by the project with ten children who were not served by the project. Initial [illegible] test scores for all children in both

groups were [illegible] 78' with the served group averaging ten points lower [illegible] kindergarten experience, test scores, [illegible] and second grade placement for both groups are shown in Table 3.

The [illegible] children achieved an average of six objectives during the [illegible] period while the [illegible] children not served achieved [illegible] of these objectives during the same period indicating that [illegible] intervention was provided for the served group. The [illegible] the pre-post PPVT language/motor test during [illegible] served group averaged an eight point gain [illegible]. The average point gain during the [illegible] for the served group and six for [illegible] increased dramatically during intervention [illegible] equal gains were made for the served group [illegible] first grade. Fifty percent [illegible] served group were [illegible] placement. The greater proportion [illegible] served group may have been due [illegible] children, and one [illegible].

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[illegible]

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|---|---|---|
| [illegible] | | | | | [illegible] | [illegible] | [illegible] |
| [illegible] | | | [illegible] | | | [illegible] | [illegible] |
| [illegible] | | | [illegible] | | [illegible] | [illegible] | low |
| [illegible] | | | [illegible] | | [illegible] | [illegible] | average |
| [illegible] | | | | | [illegible] | [illegible] | average |
| [illegible] | | | [illegible] | | [illegible] | [illegible] | average |
| | | | ◯ | ◯ | ◯ | ◯ | |
| [illegible] | | | | | | | |
| [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | low |
| [illegible] | | | [illegible] | [illegible] | 4 | | low |
| [illegible] | | | [illegible] | [illegible] | [illegible] | | low |
| [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | low |
| [illegible] | | | [illegible] | | [illegible] | | average |
| [illegible] | | | [illegible] | [illegible] | [illegible] | [illegible] | average |
| Betty | | | [illegible] | [illegible] | [illegible] | | average |
| [illegible] | | | [illegible] | [illegible] | 13 | | average |
| [illegible] | | x | [illegible] | [illegible] | 17 | | average |
| [illegible] | | | [illegible] | [illegible] | 12 | | average |
| | | | ◯ | ◯ | ◯ | ◯ | |

*[illegible] 1972.

**[illegible]

◯ Overall [illegible]

Incidence of Handicapped Children in the Chittenden Central School District

Incidence of children eligible for special education among the 391 district children whose parents responded to the EHEP questionnaire in January 1972 was estimated using parental reports to indicate eligibility. Parental reports indicated that 19% of the 391 children were eligible. In the separate towns and/or schools 17% of Point Primary School children, 16% of Union Memorial School children, 16% of Essex Junction children, [illegible] of Essex Center children and 35% of Westford children were eligible as indicated by parental reports. (see Table 10)

For the 54 children in the Point Primary School whose parents responded to the EHEP questionnaire, incidence was further estimated using test scores of below 78% on the EHEP language/motor test administered during September of the first grade year; the first grade teacher's recommendation for low second grade placement; and provision of special speech, remedial reading and consulting teacher services in first grade as indicators. Test scores indicated 26% were eligible, low second grade placement indicated 27% were eligible and provision of special education services indicated 24% were eligible. (See Table 11)

The estimates of eligibility reported herein are higher than those generally reported for preschool children.* This discrepancy may be due to several variables. The first has to do with the

*The State Department of Education, Division of Special Educational and Pupil Services [illegible] estimated that 5 percent of children prior to legal school age are eligible for special education services.

| | [illegible] | [illegible] | [illegible] | Essex Jct. | Westford | Chittenden Central School District |
|---|---|---|---|---|---|---|
| % children [illegible] reported [illegible] | [illegible] = [illegible] | [illegible] = 16% | [illegible] = 16% | [illegible] = 24% | $\frac{6}{17}$ = 35% | $\frac{75}{391}$ = 19% |
| % of children [illegible] 77% or below [illegible] | [illegible] = [illegible] | | | | | |
| % of children with low second grade placement | [illegible] = 26% | | | | | |
| % of children [illegible] with special [illegible] services (speech, remedial reading and [illegible] services) | [illegible] = [illegible] | | | | | |
| % receiving [illegible] services | [illegible] = [illegible] | | | | | |
| % receiving [illegible] | [illegible] = [illegible] | | | | | |
| % receiving [illegible] services | [illegible] = [illegible] | | | | | |

Table 10 [illegible] on special education in the Chittenden [illegible] separate school district in at the [illegible] 1[illegible]-197[illegible] [illegible] moved.

criteria used to estimate eligibility. The criterion used by this project [illegible] age. Parental reports, test scores, [illegible] were used to predict [illegible] while second grade placement and [illegible] of special services were used as indicators of this [illegible]. The [illegible] of this criterion, while insuring that a [illegible] number of eligible children will be identified, [illegible] of some eligible children. The inclusion of [illegible] children may be justified if it enables the [illegible] identification of all eligible children.

Another variable has to do with the reliability of the measurement instruments used to predict [illegible]. Refinement of the parent questionnaire, [illegible] language/motor test items, and inclusion of social/self-[illegible] test items may increase reliability of these measurement devices.

# Appendix i

## CASE STUDIES
## 1972-1973

EEEP Colchester
Rosemary Getsie
B.J. Lates
Martha Knight
1972-1973

# BRAD

## CHILD AND REFERRAL PROBLEM

Brad was a five year old boy who mother indicated that Brad might need special help in the lnaguage area before entering school in the fall. Brad did not participate in a nursery or kindergarten program.

On the EEEP entry level test administered in January, 1973, Brad obtained an overall score of 43% correct. Areas in which Brad scored zero included counting to ten, reciting the alphabet, prirting first name, placing pictures in sequential order, predicting a likely outcome, naming upper and lower case letters, saying initial consonant sounds, cutting out a circle, jumping, skipping, hopping on one foot, and naming shapes.

## OBJECTIVE

| | | |
|---|---|---|
| Given 26 upper case alphabet letters and 26 lower case letters printed on flash-cards | Brad will identify each letter by saying its name | within 3 seconds for at least 90% of the letters. |

## MEASUREMENT PROCEDURES

A response was considered correct when Brad's first verbal response matched the symbol on the flashcard and was emitted

within three seconds. A response was considered incorrect if the verbal response did not match the symbol on the flashcard or was not the first response, or was not made within 3 seconds.

The mother marked a "+" on the data sheet next to the correct letter when Brad emitted a correct response and she marked a "0" on the data sheet for an incorrect response.

A letter name was considered learned when 3 correct responses were emitted consecutively within one session. The number of letters learned daily was graphed cumulatively.

## TEACHING/LEARNING PROCEDURES

### Baseline$_1$:

A flashcard teaching/learning procedure was introduced. Five letters were presented in order during each session three times each. When Brad emitted a correct response, his mother praised him by saying, "Good for you," or "That's right." When Brad emitted an incorrect response or no response his mother said, "The letter is __. Say __." When Brad repeated the letter name correctly, his mother said, "Good."

### Contingency$_1$:

When Brad emitted correct responses, a piece of candy was given to him by his mother.

### Baseline$_2$:

During this condition, Brad's mother carried out the procedures as described in Baseline$_1$.

## RESULTS

During 15 sessions of baseline$_1$ procedures, 11 letters were learned.

Five letters were learned over 13 days during $Contingency_1$. Three letters were learned over 14 days during $Baseline_2$.

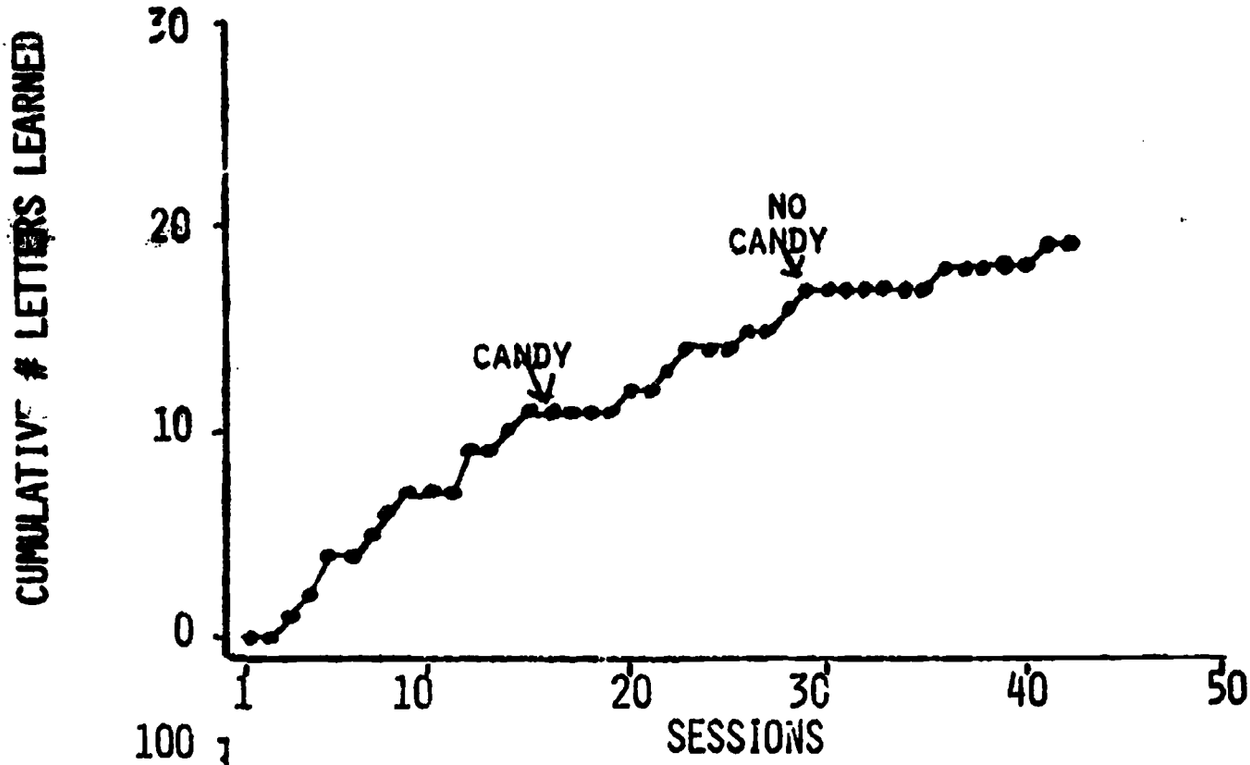
RATE OF ACHIEVING MINIMUM OBJECTIVES

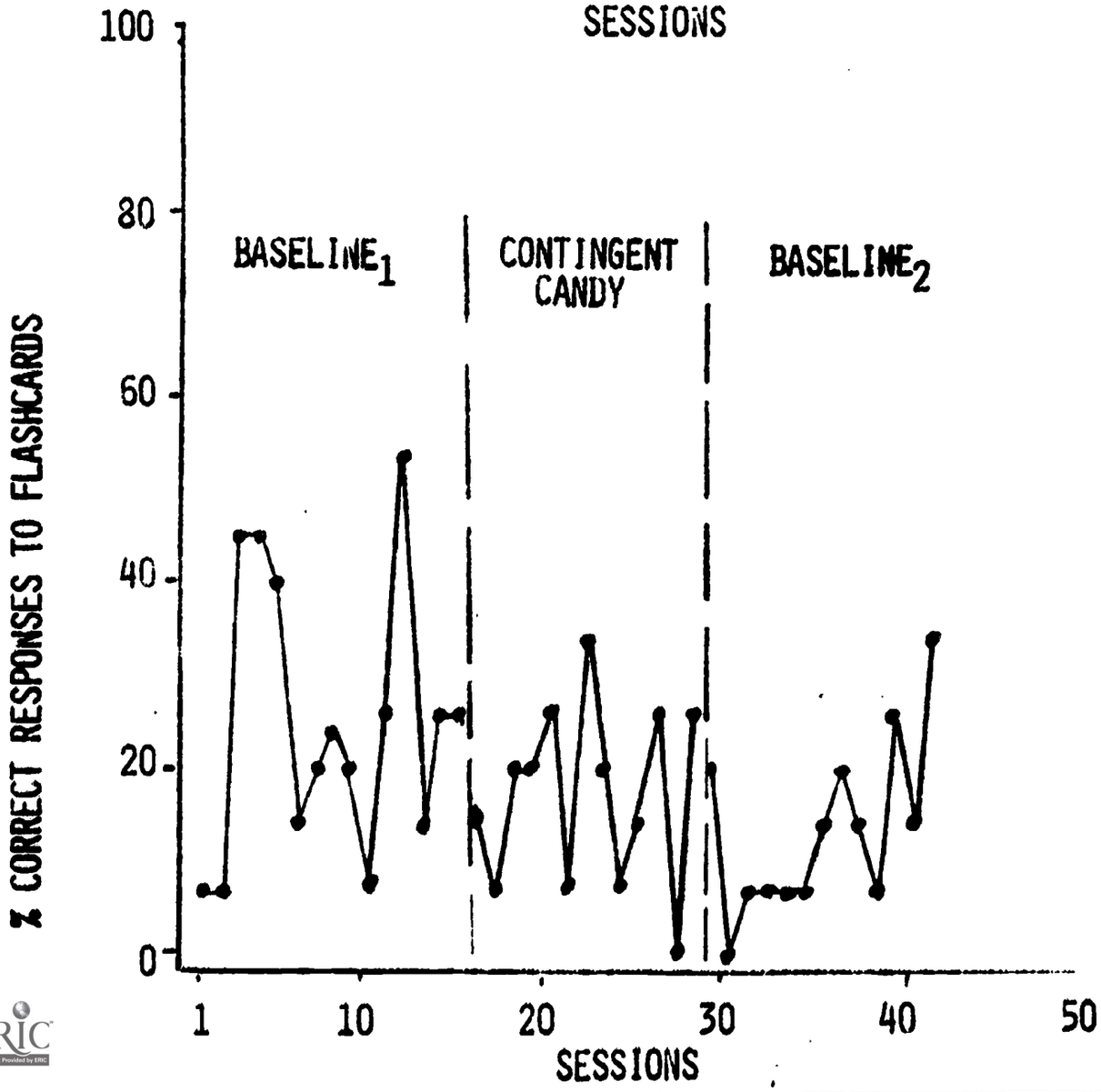
Table 1 shows the scores obtained for specific objectives over eight months.

| | Jan. | Mar. | May | June | July | Aug |
|---|---|---|---|---|---|---|
| Alphabet Recognition-Upper Case | .00 | .88 | .23 | .00 | .64 | .72 |
| Alphabet Recognition-Lower Case | .00 | .00 | .09 | .17 | .42 | .39 |

Table 2 shows the overall scores for the EEEP entry level test over eight months.

| Jan. | Mar. | May | June | July | Aug. |
|---|---|---|---|---|---|
| 43% | 43% | 64% | 57% | 57% | 59% |



EEEP Colchester
James Burns
B.J. Lates
Martha Knight
1972-1973

ERIC

## CHILD AND REFERRAL PROBLEM

Eric, a five year old boy attended a day care center on an intermittent basis. His mother returned the EEEP referral form indicating that Eric needed special help in language and that some of his speech was difficult to understand.

The EEEP entry level test was administered in January, 1973. Eric scored an overall 42% correct. The most deficit areas, for which no points were scored, were writing his name, placing pictures in sequential order, speaking in complete sentences, predicting a logical outcome, saying initial consonate sounds, cutting out a circle, walking in a straight line, galloping, skipping, hopping, catching a ball and imitating rhythm patterns.

## OBJECTIVE 1

| | | |
|---|---|---|
| Given sets of objects of one through 20 | Eric will tell how many objects are in each set | 100% correctly and within 3 seconds. |

## MEASUREMENT PROCEDURES

Five unlearned sets of objects were presented three times during each session. A plus (+) was recorded when Eric named the total number of objects in the presented set within 3 seconds. The set was learned when three consecutive correct responses were recorded in one session. No response or an incorrect response was scored as an error(0).

On at least one occasion during each condition an outside observer simultaneously recorded correct and incorrect responses, the percentage of agreement between observers was calculated.

## TEACHING/LEARNING PROCEDURES

### Baseline$_1$

During baseline conditions Eric was not praised for correct responses. Incorrect responses were followed by instructions to count the objects with the parent and repeat the final correct response independently.

### Contingency$_1$

Eric was praised for each correct response. Incorrect responses were treated as in baseline.

### Baseline$_2$

Baseline$_1$ conditions were in effect.

### Contingency$_2$

Contingency$_1$ conditions were in effect.

## RESULTS

### Baseline$_1$

Three sets were learned during the four days, an average of .75 sets per day.

### Contingency$_1$

Five sets were learned during the five days, an average of 1.00 sets per day.

### Baseline$_2$

No sets were learned during the two days.

Contingency$_2$

Five sets were learned during the seven days, an average of .71 sets per day.

RELIABILITY OF MEASURES

Second observer measures agreed with parent measures with 100% agreement.

---

OBJECTIVE 2

| | | |
|---|---|---|
| Given upper and lower case letters and numerals printed on 3"x5" cards | Eric will recognize the letter or numeral presented | within 3 seconds and on three consecutive occasions. |

MEASUREMENT PROCEDURES

Six unlearned letters (three upper case and three lower case) were presented three times during each session. A correct response was defined as correctly recognizing the presented letter or numeral within 3 seconds. The letter or numeral was learned when three consecutive correct responses were recorded during a single session.

On at least one occasion during each condition an outside observer simultaneously recorded correct and incorrect responses. Percentages of agreement between observers were calculated.

TEACHING/LEARNING PROCEDURES

If Eric named the letter correctly within 3 seconds of presentation he was praised. If the letter was not named or named incorrectly the mother named the letter, Eric imitated her and Eric was praised for his correct imitative response.

## RESULTS

Thirteen upper case letters were learned druing nine days of teaching/learning procedures and nine lower case letters were learned during eight days of teaching/learning procedures.

Second observer measures agreed with parent measures with 100% agreement.

## RATE OF ACHIEVING MINIMUM OBJECTIVES

Table 1 shows the scores obtained for specific objectives over eight months.

| | Jan | March | May | Jun | Jul | Aug | | |
|---|---|---|---|---|---|---|---|---|
| Counting sets 1-10 | .30 | 1.00 | 1.00 | -- | -- | -- | | |
| Alphabet Recognition-upper case | .51 | .80 | .81 | .81 | .60 | .89 | | |
| Alphabet recognition-lower case | .26 | .46 | .68 | .64 | .55 | .45 | | |

Table 1

Table 2 shows the overall scores for the EEEP entry level test over eight months.

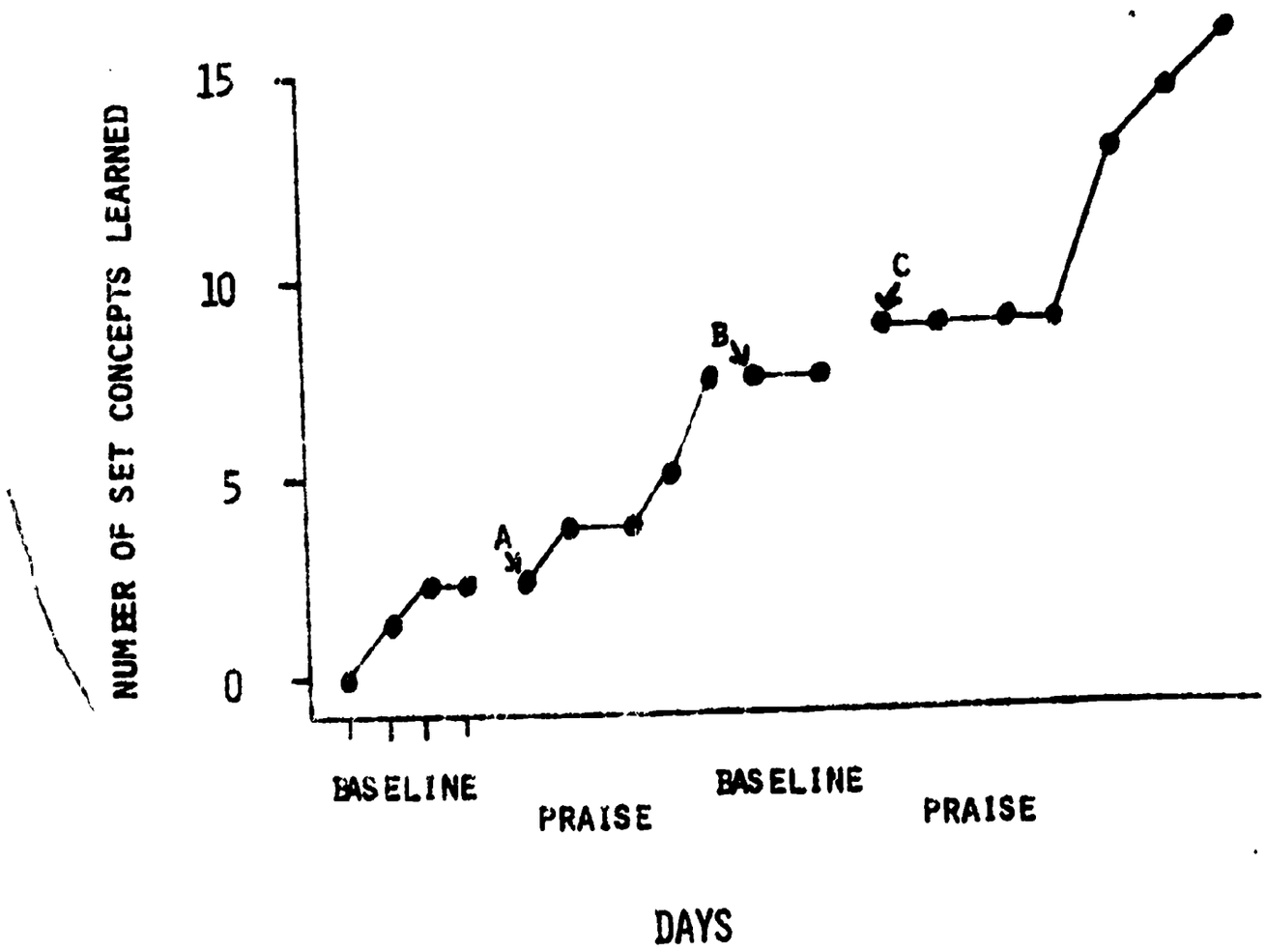
| Jan | Mar | May | Jun | Jul | Aug |
|---|---|---|---|---|---|
| 42% | 47% | 79% | 67% | 70% | 74% |

CUMULATIVE NUMBER OF NUMBER CONCEPTS LEARNED

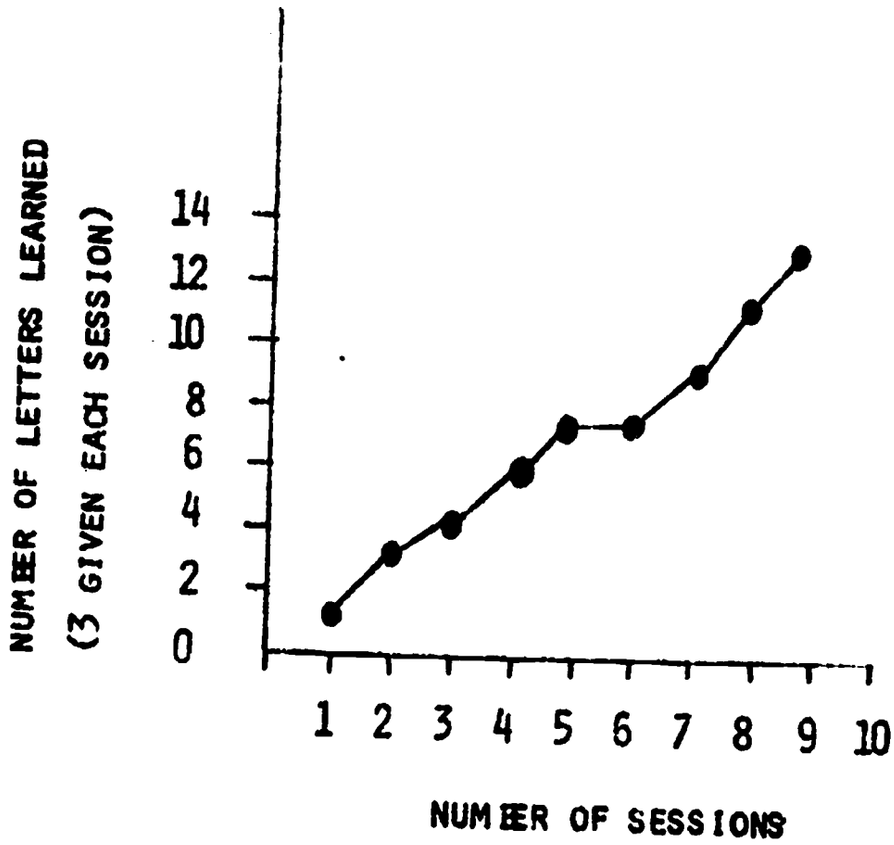
A = CONTINGENT PRAISE INTRODUCED

B = BASELINE, NO PRAISE

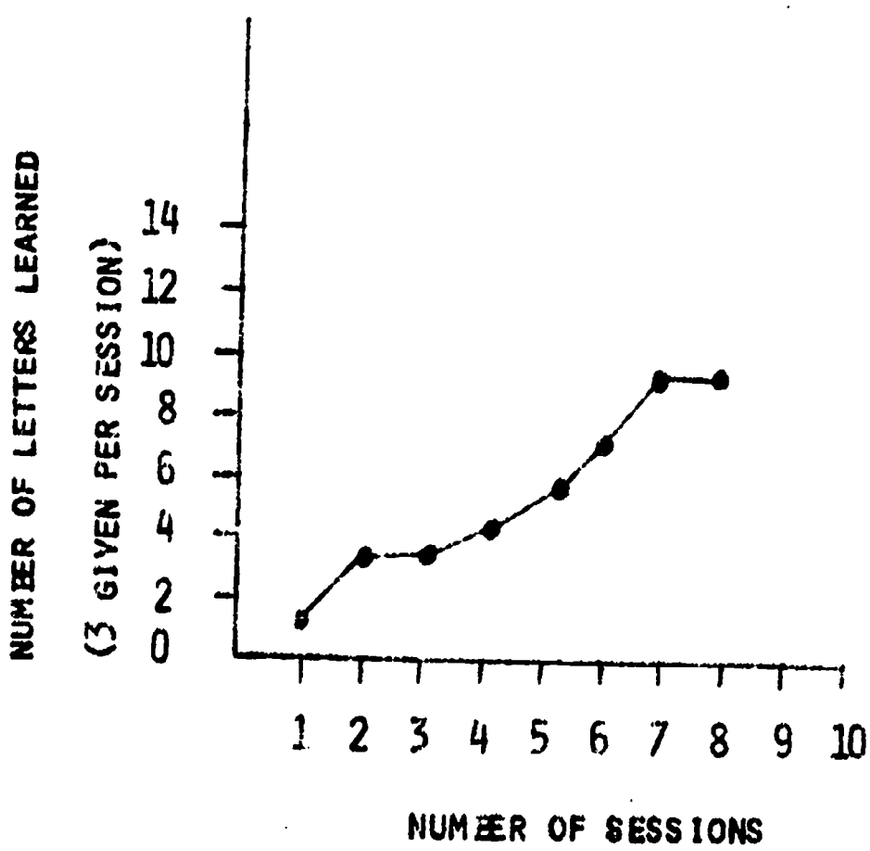
C = CONTINGENT PRAISE



MULATIVE RATE) ALPHABET RECOGNITION UPPER CASE




MULATIVE RATE) ALPHABET RECOGNITION LOWER CASE



EEEP Williston
Martha Wade
Martha Knight
BJ Lates
1972-1973

# JOHN

## CHILD AND REFERRAL PROBLEM

John, a five year old boy, attended nursery school and was attending kindergarten at the time of referral. His mother returned the EEEP referral form indicating that both she and John's teacher found him "very stubborn" and "hard to motivate".

The EEEP entry level test was administered in January, 1973. John scored an overall 65% correct. The most deficit areas, for which no points were scored, were placing pictures in sequential order, predicting a logical outcome, saying initial consonant sounds, galloping, skipping and catching a ball.

## OBJECTIVES

| | | |
|---|---|---|
| Given five pictures representing words with different initial sounds and instructions to select the picture matching a specific initial sound (mother says "b") | John will select the appropriate picture and say the word it represents | within 3 seconds and for 24 initial sounds. |
| Given five pictures representing words with different initial sounds and instructions to select the picture matching a specific initial letter (eg Mother holds up card with b printed on it.) | John will select the appropriate picture and say the word it represents | within 3 seconds and for 24 initial sounds. |

## MEASUREMENT PROCEDURES

A correct response was defined as the selection of a picture which matched the auditory (e.g., "b" spoken) or visual cue (e.g., "b" printed) within three seconds. A response was incorrect when no picture was selected or the picture selected did not match the auditory or visual cue within three seconds.

The sound was considered learned when three consecutive correct responses were emitted for the picture or letter card during a single session.

On at least one occasion during each condition an outside observer simultaneously recorded correct and incorrect responses. Percent of agreement between observers was calculated.

## TEACHING/LEARNING PROCEDURES

### Baseline$_1$

During baseline conditions, John was not praised when the correct picture was selected.

### Contingency$_1$

During contingency$_1$ John was praised following every correct matching response (FR1).

### Baseline$_2$

As in baseline$_1$, John was not praised.

### Contingency$_2$

During this condition, John was praised following every correct matching response (FR1) and beginning on the fourth day of this condition was praised only for every two responses (FR2).

## RESULTS

### Baseline$_1$

John learned no sounds during the three baseline$_1$ sessions.

### Contingency$_1$

Eight sounds were learned during the five sessions, 1.6 sounds per session.

### Baseline$_2$

Four sounds were learned during the five sessions, .8 sounds per session.

### Contingency$_2$

Twelve sounds were learned during the five sessions, 2.4 sounds per session.

### Reliability of Measures

Second observer measures during each condition agreed with parent measures for every response, 100% agreement.

## DISCUSSION

Although John learned to select the printed letter which matched the spoken sound during daily teaching learning sessions, monthly probes indicated that John could not consistently say the beginning sounds of words presented in the test situation. It is hoped that this generality will be effected this summer.

John's mother did succeed in thinning the schedule of reinforcement for an increasing rate of responses during contingency$_2$.

## RATE OF ACHIEVING MINIMUM OBJECTIVES

Table 1 shows the scores obtained for specific objectives over eight months.

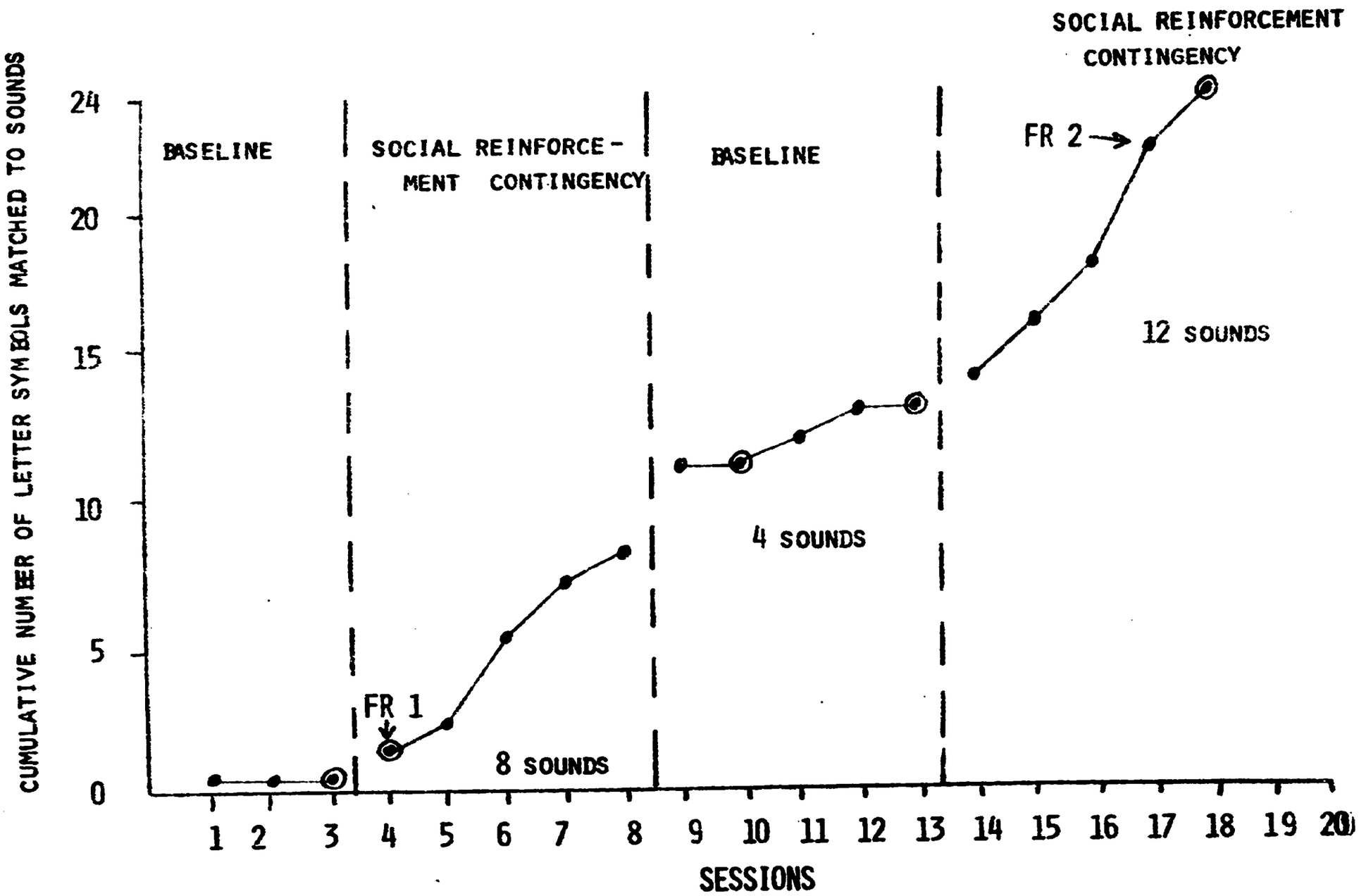
| | Jan. | March | May | June | July | August |
|---|---|---|---|---|---|---|
| Consonant Sounds | .00 | .22 | .00 | .00 | .22 | .11 |

Table 1

Table 2 shows the overall scores for the EEEP entry level test over eight months.

| Jan. | March | April | May | June | July | Aug. |
|---|---|---|---|---|---|---|
| 65% | 67% | | 70% | 64% | 86% | 82% |

Table 2




MATCHING THE LETTER SYMBOL WITH A BEGINNING SOUND

EEEP Colchester
Mary Carter, Nancy Friedman
B.J. Lates, Martha Knight
1972-1973

# JOSEPH

## CHILD AND REFERRAL PROBLEM

Joseph was a six year old boy whose mother indicated he might need special help before entering first grade in the motor skills area. The mother was particularly concerned because Joseph had lost a portion of his left foot, the bottom and arch, in a lawn mower accident at the age of four. Joseph did not participate in a nursery school or kindergarten.

Information obtained from the EEEP entry level test given in January, 1973 indicated that Joseph scored "0" for specific skills including writing name, placing pictures in sequential order, predicting a logical event, recognizing upper and lower case letters, naming consonant sounds, cutting out a circle, walking, galloping, skipping, and naming shapes.

## OBJECTIVE 1

| | | |
|---|---|---|
| Given a pencil, a piece of paper with a horizontal line on it, a model of the child's name and a cue ("Trace your name with this pencil.") | Joseph will trace his first name | such that it is parallel to or on the horizontal line, and conforms to the letter model. |

## MEASUREMENT PROCEDURES

A letter was counted as correct when it did not go outside of the form and all lines and curves were complete. The mother marked the number of letters completed and the number correct on

the data sheet. A percent correct was calculated using the formula $\frac{\text{number correct}}{\text{number complete}} \times 100$.

TEACHING/LEARNING PROCEDURES

At the beginning of each session Joseph was provided a sheet of paper with his name printed 18 times, three times on each of six lines. The mother marked the date on the sheet and gave Joseph five minutes to trace his name. She then instructed Joseph to begin the first letter on the left. Joseph was instructed to trace each letter using the correct stroking. When Joseph did not use proper stroking, his pencil marks went outside of the lines or the lines were not connected, Joseph's mother said, "Please erase and try again." When Joseph traced the letter correctly on the first try he was praised. At the end of five minutes, the mother drew a line after the last letter was completed. Joseph began writing the next letter on the next session.

Contingency 1:

When Joseph traced a letter correctly his mother marked a "+" over the correct letter.

Contingency 2:

When Joseph traced a letter correctly his mother placed a colored star over the correct letter.

Contingency 1:

The same procedures were used as described above in Contingency 1.

Contingency 3:

When Joseph traced a letter correctly his mother marked a "+" above the letter and placed a colored star above the letter.

RESULTS

During 11 days of baseline procedures the average percent correct of letters traced was 19% with a range of 0% to 60%. During six days of Contingency 1 procedures the average percent correct was 52% with a range from 20% correct to 85% correct. During Contingency 2 procedures, the average percent correct was 79%, with a range from 60% correct to 100% correct. During the return to Contingency 1 procedures of eight days, the average percent correct was 58% with a range of 8% to 83%. During Contingency 3 procedures the average percent correct was 69% with a range from 41% to 100% over 11 days.

---

OBJECTIVE 2

| | | |
|---|---|---|
| Given the upper case letters of the alphabet | Joseph will name each letter | within three seconds correctly. |

MEASUREMENT PROCEDURES

When Joseph emitted a correct response his mother recorded a "+" on the data sheet. When Joseph emitted an incorrect response, she recorded a "0". A letter was considered learned when there were three consecutive correct responses in one session. The number of letters learned daily was graphed.

TEACHING/LEARNING PROCEDURES

Five flashcards, each with a letter of the alphabet were presented three times in each session. Joseph's mother said,

"What letter is this?" When Joseph answered correctly he was praised. When Joseph emitted an incorrect response, his mother said, "This letter is __. Say __." When Joseph imitated his mother, his mother praised him. When a letter was learned the flashcard was removed from the pack and a new card was added for the next day.

RESULTS

Twenty-six upper case letters were learned during 25 sessions.

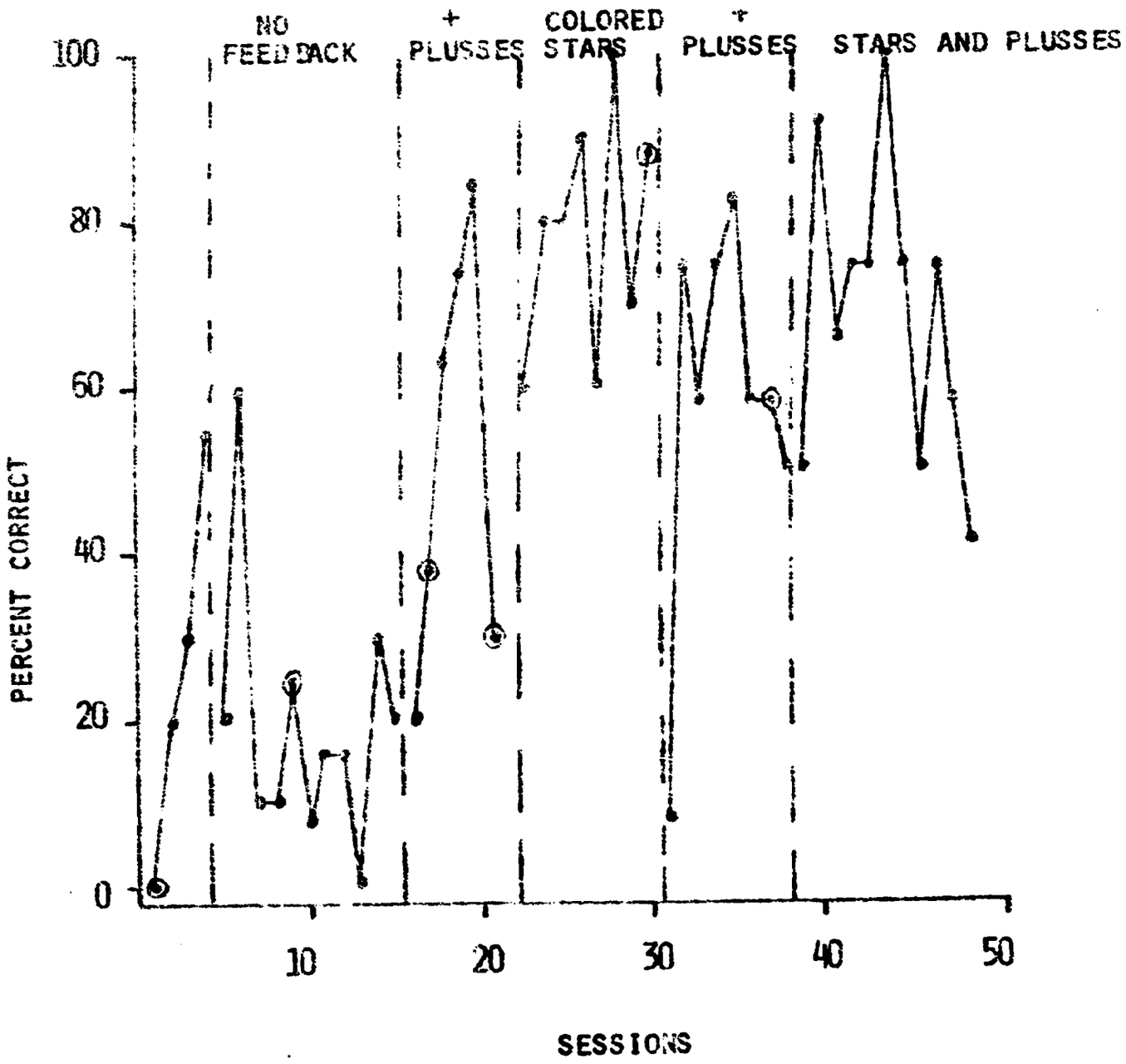
RATE OF ACHIEVING MINIMUM OBJECTIVES

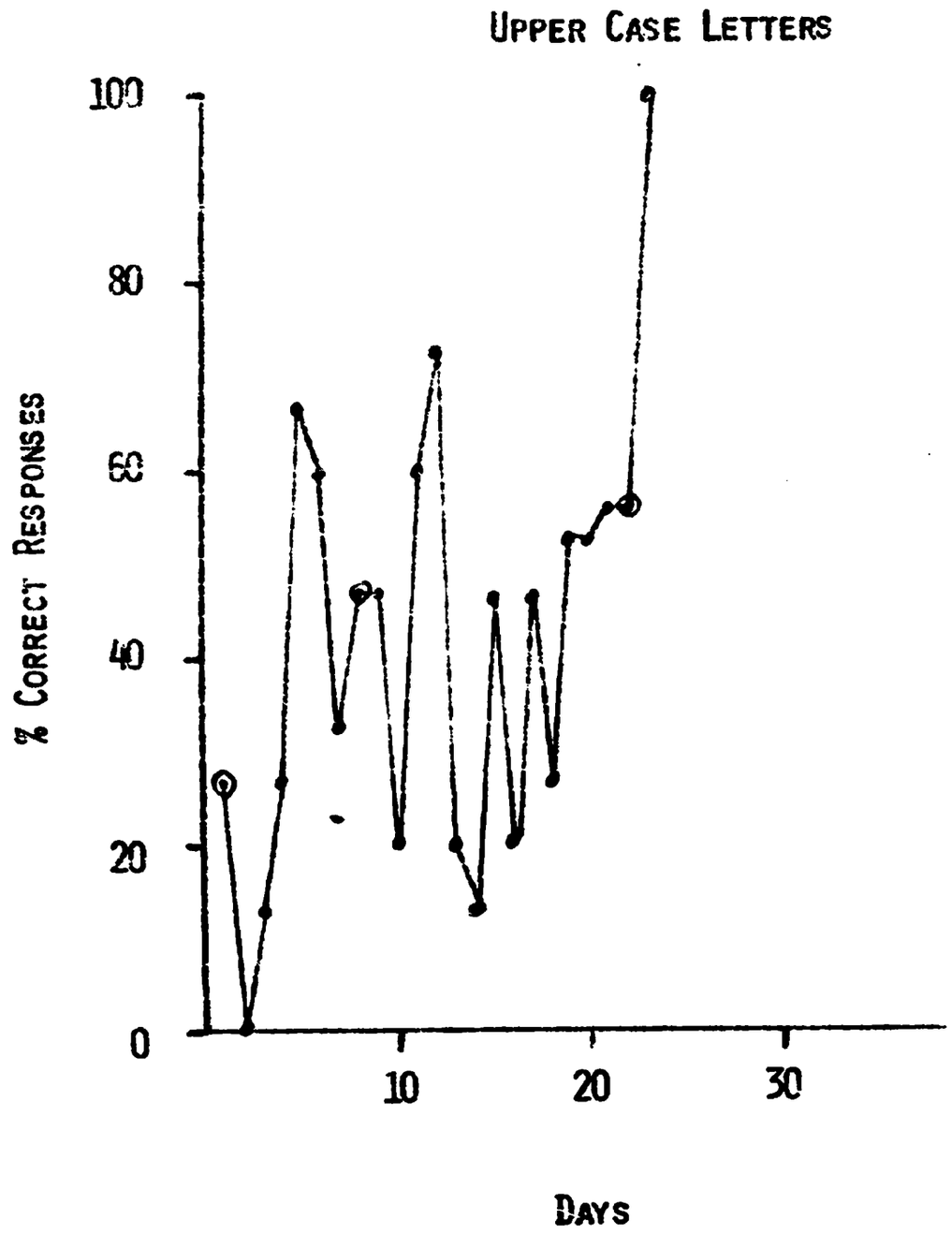
Table 1 shows the scores for individual objectives on probe tests over eight months.

| | Jan. | March | Apr. | May | Jul. | Aug |
|---|---|---|---|---|---|---|
| Writing Name | .00 | .00 | 1.00 | 1.00 | -- | 1.00 |
| Alphabet Recognition Upper Case | .00 | .00 | .31 | .42 | 1.00 | .51 |

Table 2 shows the overall scores for EEEP entry level tests administered over eight months.

| Jan. | Mar. | April | May | July | Aug. |
|---|---|---|---|---|---|
| 47% | 45% | 53% | 62% | 69% | 68% |




UPPER CASE LETTERS
100
80
60
40
20
0
% CORRECT RESPONSES
10
20
30
DAYS

EEEP Colchester
Nancy Friedman, Mary Carte
B.J. Lates, Martha Knight
1972-1973

KENNETH

CHILD AND REFERRAL PROBLEM

Kenneth was a five year old boy who had no previous nursery school or kindergarten experience. Kenneth's mother received the initial EEEP referral form and returned it indicating Kenneth needed help in none of the four areas. When Kenneth's mother met two EEEP staff members in her sister's home she asked if she might work with Kenneth. She said that she had not understood the EEEP survey form. Kenneth obtained an overall score of 35% correct on the EEEP entry level test given in March, 1973. The areas in which Kenneth scored 0% included: counting to ten, reciting the alphabet, repeating a seven word sentence, printing his first name, placing pictures in sequential order, speaking in a complete sentence, predicting a logical outcome, recognizing upper and lower case letters, recognizing numerals, naming consonant sounds, jumping, galloping, skipping, hopping on one foot, walking on tape.

OBJECTIVE 1

| | | |
|---|---|---|
| Given the upper case letters of the alphabet | Kenneth will name each letter | within three seconds correctly. |

MEASUREMENT PROCEDURES

When Kenneth emitted a correct response to a flashcard his mother marked a plus on the data sheet. When he emitted an in-

correct response she marked a 0. When there were three correct responses consecutively during one session, the letter was considered learned.

TEACHING/LEARNING PROCEDURES

Five flashcards, each with a letter of the alphabet, were presented three times each during a session. Kenneth's mother asked, "What letter is this?" When Kenneth emitted the correct response, his mother praised him. When Kenneth emitted an incorrect response or did not respond within three seconds, his mother said, "This letter is __. Say __." When Kenneth imitated his mother, he was praised. When a letter was learned, it was removed from the pack of flashcards. A new flashcard was added to the pack for the next session.

RESULTS

After 15 sessions, the 26 upper case letters of the alphabet were learned.

OBJECTIVE 2

| | | |
|---|---|---|
| Given the numerals 1 through 10 | Kenneth will name each numeral | within 3 seconds correctly. |

MEASUREMENT PROCEDURES

When Kenneth made a correct response to a flashcard his mother marked a plus on the data sheet. When Kenneth emitted an incorrect response she marked a 0. Three consecutive plusses during one session was the criteria for a learned numeral.

## TEACHING/LEARNING PROCEDURES

Flashcards with the numerals were presented as in the above section. The numerals, however, were presented in numerical sequence. Later the flashcards were presented in non-systematic order.

## RESULTS

After five sessions, numerals one through ten were learned.

## RATE OF ACHIEVING MINIMUM OBJECTIVES

Table 1 shows the scores for individual objectives on probe tests over eight months.

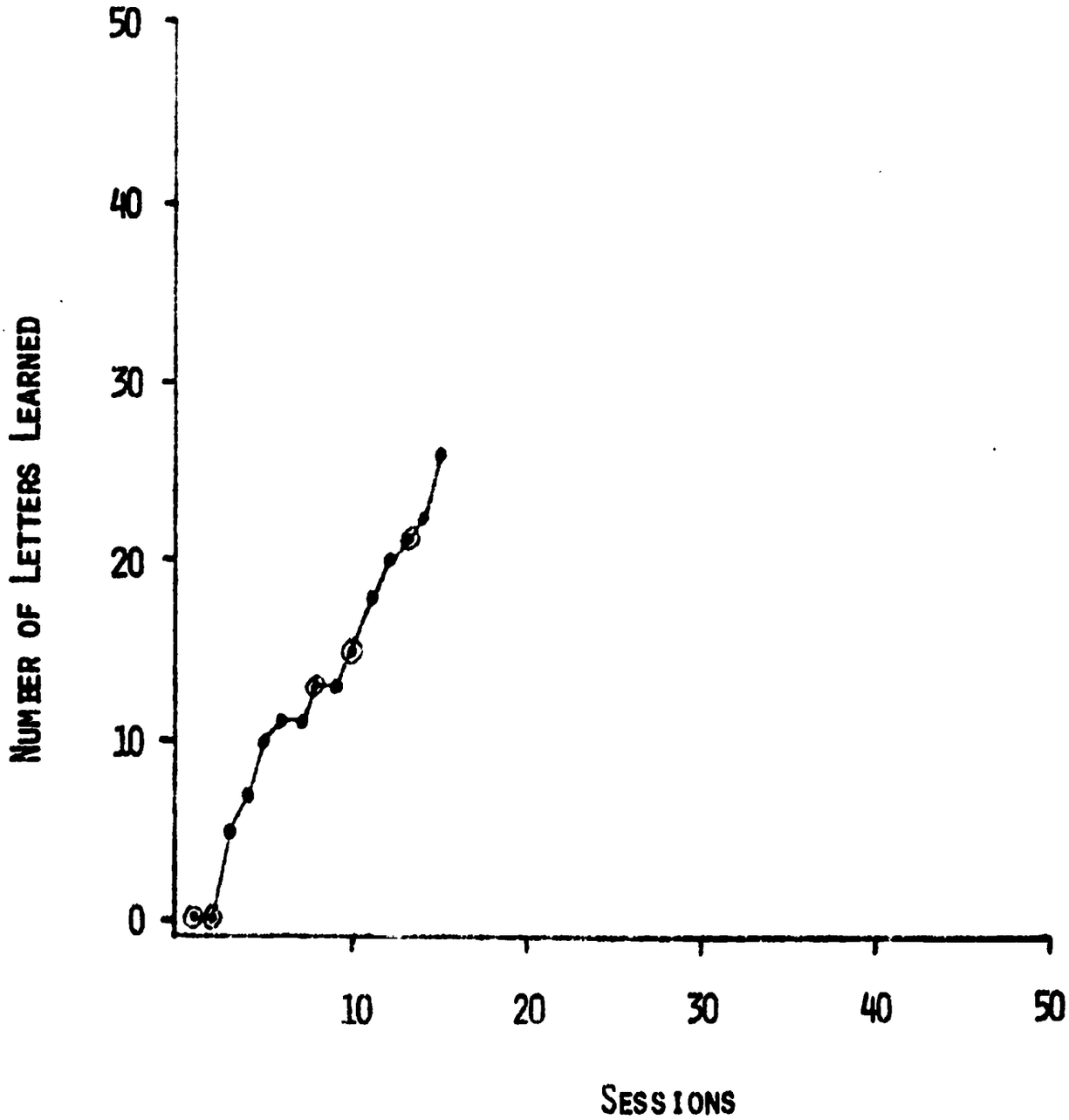
| | Mar. | Apr. | May | June | July | Aug. |
|---|---|---|---|---|---|---|
| Alphabet Recognition Upper Case | .00 | .51 | 1.00 | 1.00 | -- | 1.00 |
| Numeral Recognition 1 - 10 | .00 | .70 | .00 | .90 | .90 | 1.00 |

Table 2 shows the overall scores for EEEP entry level tests administered over eight months.

| Mar. | Apr. | May | June | July | Aug. |
|---|---|---|---|---|---|
| 35% | 43% | 59% | 57% | 69% | 72% |

KENNETH

CUMULATIVE NUMBER OF UPPER CASE LETTERS LEARNED



EEEP Colchester
Judy Dunbar
B.J. Lates
Martha Knight
1972-1973

# KEVIN

## CHILD AND REFERRAL PROBLEM

Kevin was a five year old boy who had attended nursery school and was attending a private kindergartem when his mother returnedthe EEEP survey form indicating that Kevin might need special help in the language area. Information gained from the parent questionnaire indicated parental concern about Kevin's speech. Kevin was evaluated twice at the Medical Center.

The EEEP entry level test administered in January, 1973, yielded an overall score of 51% correct. Activities for which Kevin received no points included reciting the alphabet, printing first name, placing pictures in sequential order, predicting a logical outcome, recognizing initial consonant sounds, cutting out a circle, running, galloping, skipping, walking on tape, and naming colors.

## OBJECTIVES

| | | |
|---|---|---|
| Given any object of any of the 8 basic colors | the student will say the color | within 3 seconds and with 100% accuracy. |
| Given any of 10 flashcards each with a numeral from 1-10 | the student will say the number | within 3 seconds and with 100% accuracy. |
| Given 26 flashcards each with a lower case letter | the student will name the letter | within 3 seconds and with 100% accuracy. |

| | | |
|---|---|---|
| Given 26 flashcards each with an upper case letter | the student will name the letter | within 3 seconds and with 100% accuracy. |

MEASUREMENT PROCEDURES

A correct response was defined as the first color name, number, or letter name matching the flashcard symbol emitted within 3 seconds. For each correct response the mother marked a "+" on the data sheet next to the appropriate symbol. For each incorrect response the mother marked a "0".

A color, number, or letter was considered learned after three consecutive correct responses within one session. The frequency of learned colors, numbers, and letters were graphed separately each day.

TEACHING/LEARNING PROCEDURES

Baseline:

Each day the mother began the teaching/learning session by presenting four color cubes one at a time to Kevin. She said, "I am going to show you some blocks. When I show you one, please tell me the correct color of the block." When Kevin emitted a correct response, the mother marked a "+" on the data sheet, but made no verbal responses. When Kevin emitted an incorrect response, the mother said, "This color is _____. Say _____." This same procedure was used for flashcards which were marked with numerals and upper and lower case letters. Five cards were presented for lower case letters, another five for upper case letters and another five for numerals. When any color, letter, or numeral was learned, the cube or flashcard was removed from

the stack and a new cube or flashcard was added. Each cube or flashcard was presented three times each session in the same order.

Contingency$_1$:

When Kevin emitted a correct response, his mother praised him. She said, "Good for you" or "That's right."

Contingency$_2$:

When Kevin emitted a correct response, an M & M was placed in a cup in front of Kevin. At the end of the session, Kevin counted the M & M's with his mother and was free to eat them.

RESULTS

Colors:

During 6 days of baseline, Kevin learned two colors. During 14 days of contingency$_1$, procedures Kevin learned six colors.

Lower Case Letters:

During 13 days of baseline procedures, Kevin learned three letters. During 12 days of contingency$_1$ procedures, Kevin learned three letters. During 11 days of contingency$_2$ procedures, Kevin learned two letters.

Upper Case Letters:

During 24 days of baseline procedures, Kevin learned eight letters. During 12 days of contingency$_2$ procedures, Kevin learned three letters.

Numerals:

During 25 days of baseline procedures, Kevin learned three numerals. During 12 days of contingency$_2$ procedures, Kevin

learned three numerals.

## DISCUSSION

Apparently neither contingent parental praise nor M & M's were effective variables for increasing the rate of learning numerals, or letter names.

## RATE OF ACHIEVING MINIMUM OBJECTIVES

Table 1 shows the scores obtained for specific objectives over eight months.

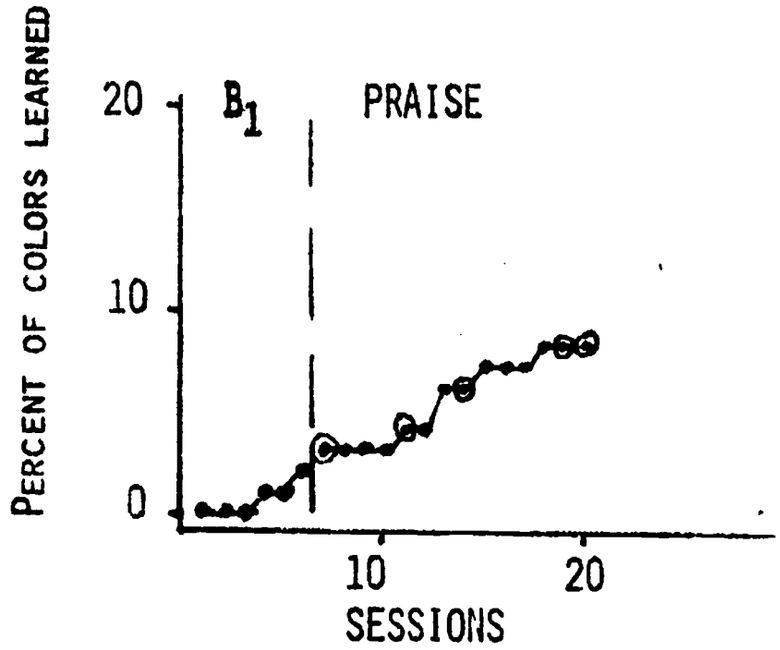
| | Jan. | Mar. | April | June | July | Aug. |
|---|---|---|---|---|---|---|
| Color Recognition | .00 | -- | .75 | .88 | 1.00 | 1.00 |
| Numeral Recognition | .20 | .40 | .30 | .60 | .60 | .60 |
| Alphabet Recognition Lower Case | .15 | -- | .09 | .13 | .13 | .13 |
| Alphabet Recognition Upper Case | .19 | -- | .25 | .26 | .26 | .17 |

Table 2 shows the overall scores for the EEEP entry level test over eight months.

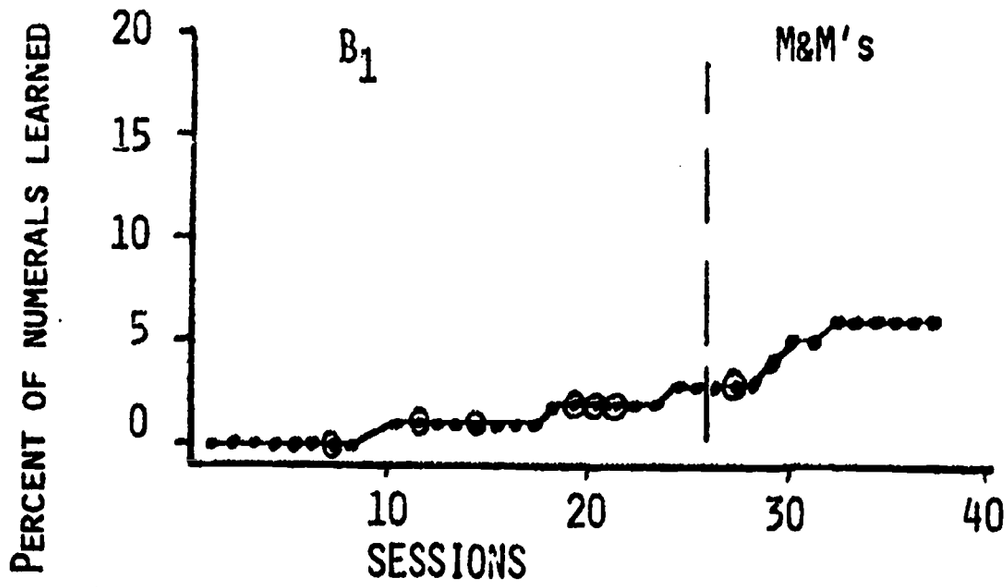
| Jan | Mar | April | June | July | Aug. |
|---|---|---|---|---|---|
| 51% | 67% | 60% | 67% | 74% | 68% |

⊙ - RELIABILITY CHECK

KEVIN DUNBAR

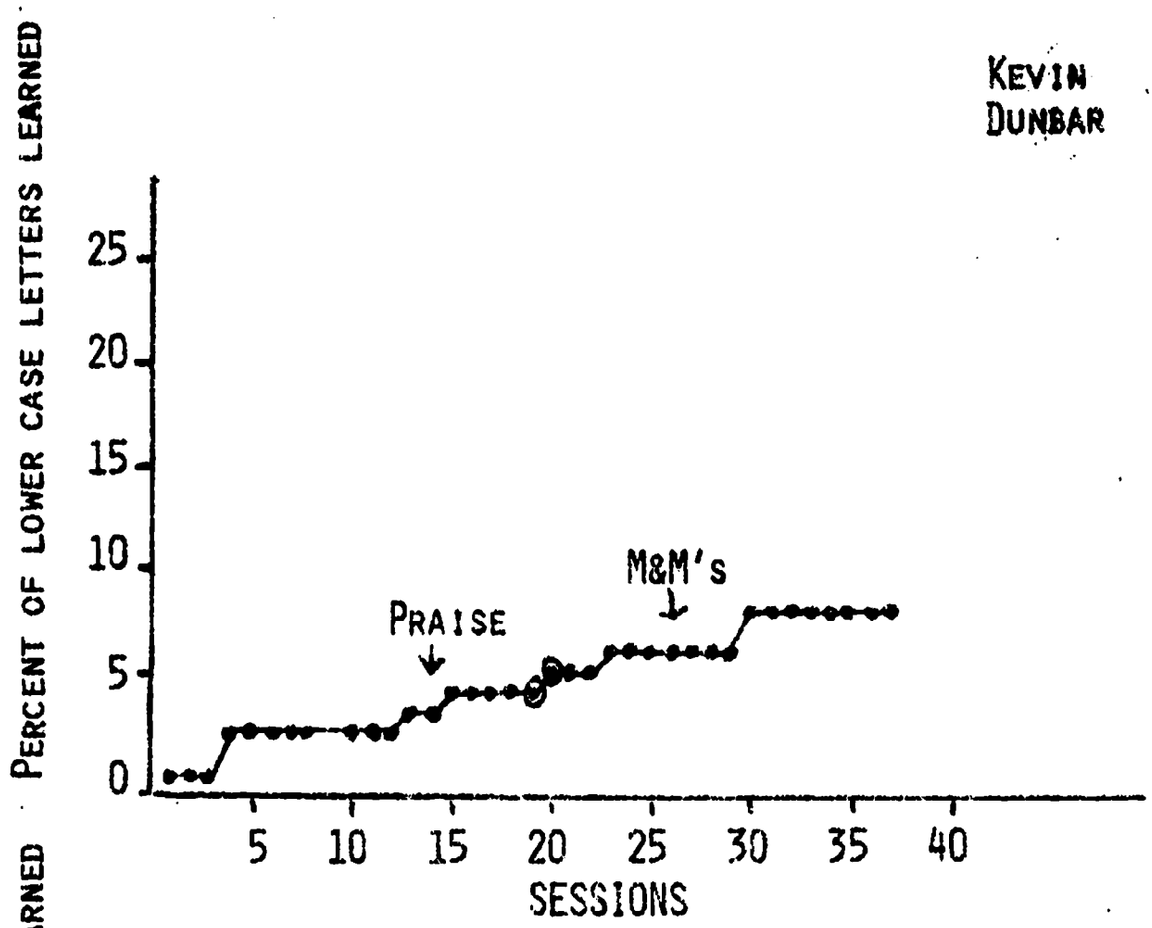



A CUMULATIVE RECORD OF THE NUMBER OF COLORS LEARNED

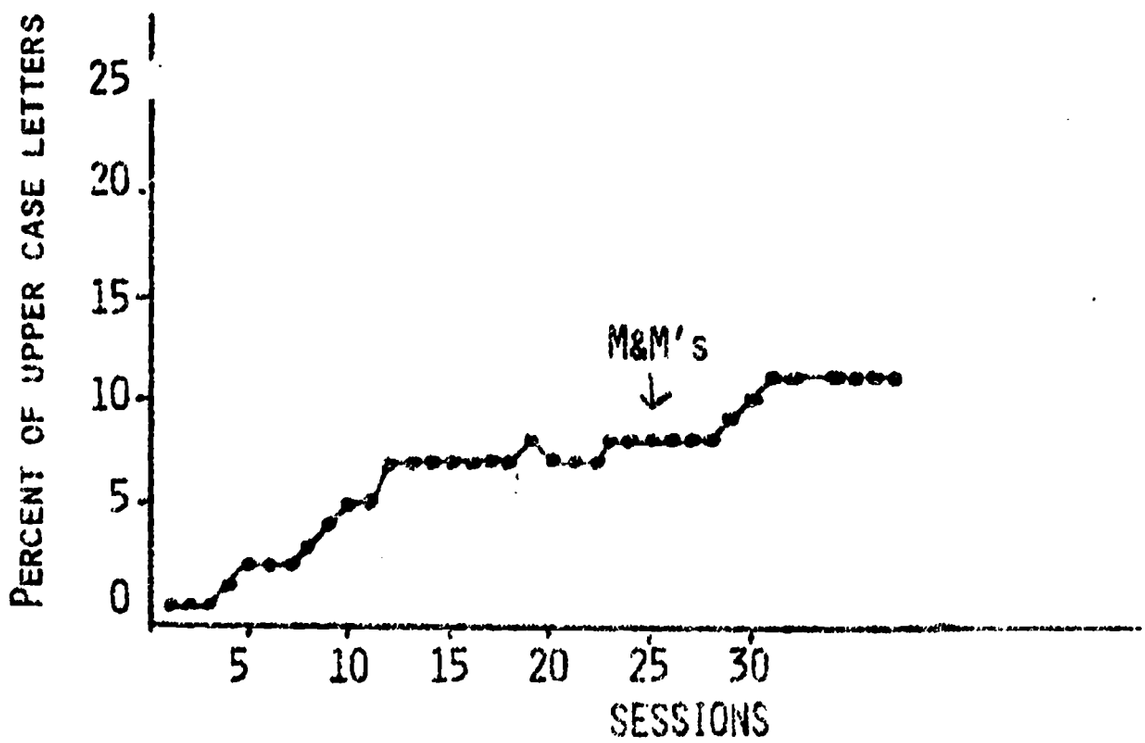



A CUMULATIVE RECORD OF THE FREQUENCY OF NUMERALS LEARNED

KEVIN
DUNBAR




A CUMULATIVE RECORD OF THE NUMBER OF LOWER CASE LETTERS LEARNED




A CUMULATIVE RECORD OF THE NUMBER OF UPPER CASE LETTERS LEARNED

EEEP Colchester
Cathy Homan
B.J. Lates
Martha Knight
1972-1973

# KIM

## CHILD AND REFERRAL PROBLEM

Kim was a five year old girl whose mother indicated she might need special help before entering first grade in the language area. Kim's mother stated that Kim was bashful with strangers and did not attend nursery school or kindergarten. The EEEP entry level test given in January yielded an overall score of 31% correct. Areas in which she scored 0% included counting to ten, reciting the alphabet, repeating a seven word sentence, printing her first name, placing pictures in sequential order, predicting a logical outcome, recognizing upper and lower case letters, naming consonant sounds, cutting out a circle, holding scissors, jumping, galloping, skipping, hopping on one foot, walking on tape, and naming shapes.

## OBJECTIVE 1

| | | |
|---|---|---|
| Given the upper case alphabet letters on flashcards | the child will say the letters | with 100% accuracy. |

## MEASUREMENT PROCEDURES

The mother marked a "+" on the data sheet when Kim emitted a correct response to the flashcard. She marked a "0" on the data sheet when Kim emitted an incorrect response. A letter was considered learned when there were three consecutive "+'s" during one session. The number of letters learned daily were graphed.

## TEACHING/LEARNING PROCEDURES

Five flashcards were presented to Kim during each session. Each card was presented three times. When Kim emitted a correct response her mother praised her. When Kim emitted an incorrect response her mother said, "The letter is _. Say _."

Condition A. During this condition, Kim earned a star for each letter learned.

Condition B. During this condition, Kim earned a penny and a star for each letter learned.

Condition $A_2$. During this condition the mother returned to the procedures described in Condition A.

Condition C. During this condition, Kim earned a star for each letter learned and she was allowed to record the number of letters learned during each session.

## RESULTS

During the two days of Condition A no letters were learned. During six sessions for Condition B, one letter was learned. During five sessions for Condition $A_2$, no letters were learned. During Condition C, 16 letters were learned in 24 days. Over 37 sessions, 17 letters were learned.

---

## OBJECTIVE 2

| | | |
|---|---|---|
| Given mother's directions for jumping, galloping, hopping on one foot, skipping, and walking on tape | the child will engage in these behaviors | for ten feet and meeting all criteria set in EEEP test. |

MEASUREMENT PROCEDURES

The mother marked each activity as "+" or "0" according to the criteria listed in the EEEP entry level test.

TEACHING/LEARNING PROCEDURES

Each motor skill was modeled by the mother for the child during the first session. The child was asked to imitate each behavior. In subsequent sessions the mother simply said, "Kim, jump down the hall. Make sure both feet are together." "Kim, now gallop. Remember, put one foot out first and bring the other up." "Kim, skip down the hall. Remember, it is like hopping on the same foot you step with." "Now hop down the hall on one foot." "Now Kim, walk in a straight line putting one foot in front of the other so that your heel touches your toes each time."

RESULTS

During three entry level measures on all motor behaviors Kim obtained an average of 24% correct with a range of 14% correct to 29% correct. On four weekly probe tests given concurrent with the mother's daily teaching procedures, Kim obtained 100% correct for each of the four probes in all motor areas.

---

OBJECTIVE 3

| | | |
|---|---|---|
| Given a paper with a circle drawn on it and a pair of scissors | the child will cut the circle out | so that it fits the criteria pattern for the EEEP test. |

MEASUREMENT PROCEDURES

The EEEP staff member marked a "+" for each circle which met EEEP entry level test criteria. A "0" was marked for each circle not meeting those specified criteria.

TEACHING/LEARNING PROCEDURES

During each session, Kim's mother said, "Kim, cut out the circle. Cut it out on the line and do it slowly and carefully."

RESULTS

During three entry level tests, Kim obtained a score of 0 for cutting out the circle each time. After the daily teaching/learning procedures, Kim obtained scores of 100% correct during three weekly test probes.

---

OBJECTIVES 4 and 5

| | | |
|---|---|---|
| Given a child, a tutor and the question, "Where is your _____?" concerning parts of the body | the child will point to the named part of the body | with 100% accuracy. |
| Given a child, a tutor and the question, "What is this?" with the tutor pointing to a part of his body | the child will orally name the part of the body | with 100% accuracy. |

MEASUREMENT PROCEDURES

During each session the mother marked a "+" on the data sheet for each correct response. A "0" was marked on the data sheet for each incorrect response.

TEACHING/LEARNING PROCEDURES

During each session Kim's mother pointed to a part of her body and said, "Kim, what is this?" The parts of the body pointed to are listed in the entry level test. Later she asked, "Kim, point to your _____." These body parts are listed in the EEEP Entry Level Test.

RESULTS

During two entry level tests on pointing to and naming body parts, Kim averaged 72% correct. On two probes given weekly after the mother began teaching/learning procedures, Kim averaged 91% correct.

---

OBJECTIVE 6

| | | |
|---|---|---|
| Given models in the shapes of a circle, triangle, square, and rectangle | the child will orally name the shapes | with 100% accuracy. |

MEASUREMENT PROCEDURES

During each session the mother marked a "+" on the data sheet for each correct response. A "0" was marked on the data sheet for each incorrect response.

TEACHING/LEARNING PROCEDURES

During each session, Kim's mother held up one of the four paper shapes and asked, "What is this called?" When Kim answered correctly, she would praise her. When Kim emitted an incorrect response, her mother told her, "The answer is _____.", and then asked the name of the next shape.

## RESULTS

During two entry level tests on naming shapes, Kim scored 0% correct on each test. On weekly probe tests, after teaching/learning procedures were introduced. Kim scored 25% correct and 0% correct.

## RATE OF ACHIEVING MINIMUM OBJECTIVES

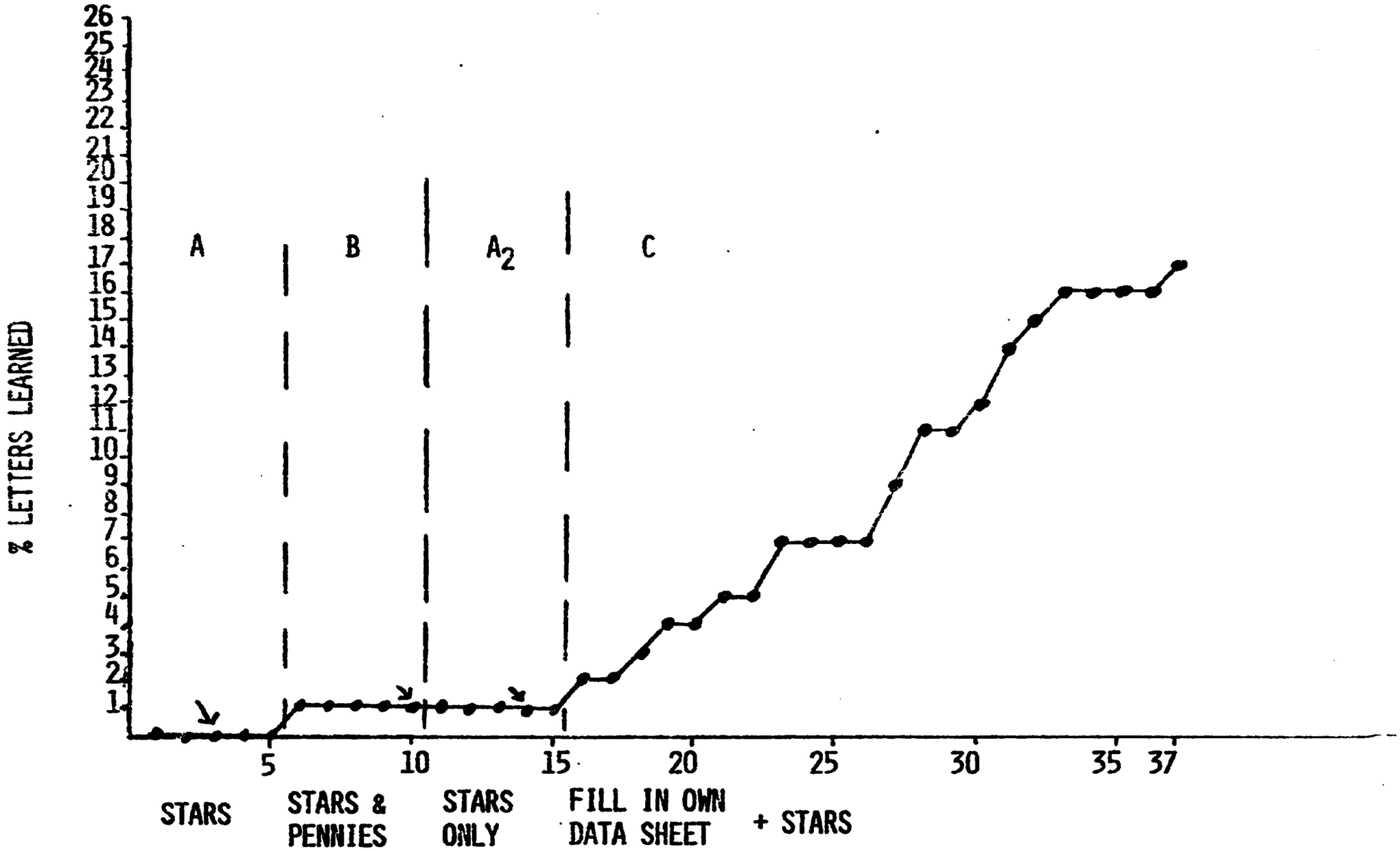
Table 1 shows the scores obtained for specific objectives over eight months.

| | Jan. | March | May | June | August |
|---|---|---|---|---|---|
| phabet recognition-per case | .00 | .14 | .64 | .67 | .91 |
| mping | .00 | .00 | 1.00 | .00 | 1.00 |
| lloping | .00 | .00 | 1.00 | 1.00 | 1.00 |
| pping on one foot | .00 | .00 | 1.00 | .00 | 1.00 |
| ipping | .00 | .00 | 1.00 | .00 | 1.00 |
| lking on tape | .00 | .00 | 1.00 | 1.00 | 1.00 |
| cting out a circle | .00 | .00 | 1.00 | 1.00 | 1.00 |
| mes body parts | .58 | .86 | 1.00 | 1.00 | 1.00 |
| cognizes shapes | .00 | .00 | .00 | .33 | .67 |

Table 2 shows the overall scores for the EEEP entry level test over eight months.

| Jan. | Mar. | May | June | Aug. |
|---|---|---|---|---|
| 31% | 34% | 66% | 44% | 80% |

CUMULATIVE GRAPH OF UPPER CASE LETTERS LEARNED



EEEP Williston
Robert Bradley
B.J. Lates - Martha Knight
1972-1973

# DALE

## CHILD AND REFERRAL PROBLEM

Dale was a five year old girl whose mother indicated Dale might need special help before entering first grade in the language area. Dale did not attend nursery school or kindergarten.

Dale obtained an overall score of 44% correct on the EEEP entry level test administered in January. Activities for which Dale received no points included counting to ten, reciting the alphabet, printing her first name, arranging pictures in sequential order, speaking a complete sentence, predicting a logical outcome, naming upper and lower case letters, naming consonant sounds, galloping, skipping, walking on tape, and naming shapes.

## OBJECTIVE 1

| | | |
|---|---|---|
| Given verbal instructions to count to ten | the child will count from one to ten orally in numerical order | within 20 seconds without error, every time. |

## MEASUREMENT PROCEDURES

When Dale emitted a correct response to a flashcard her mother marked a "+" on the data sheet. When Dale emitted an incorrect response, her mother marked a "0". A number was considered learned when Dale emitted three consecutive correct responses in each of two consecutive sessions.

## TEACHING/LEARNING PROCEDURES

### Baseline:

3 x 5 flashcards with the numerals 1 through 10 were placed in numerical order in front of Dale. Four numerals at a time were presented. Each card was presented in numerical sequence three times each session. The mother made no comment following correct responses.

When Dale emitted an incorrect response, her mother said the correct response and Dale imitated it. A learned numeral was removed from the set of four cards only when it was the lowest numeral in the set. Thus, when a numeral was learned out of sequence, the card remained in the set of cards and the next numeral to be learned was added.

### Contingency 1:

The procedures were the same as described in baseline except that the mother praised correct responses with such phrases as, "Excellent", "very good", or "You've got it!"

## RESULTS

During five days of baseline, the number "1" was learned.

During 18 days of contingency 1, counting from two to ten was learned.

---

## OBJECTIVE 2

| | | |
|---|---|---|
| Given any set of objects not exceeding ten | the child will tell how many objects are in the set | within 20 seconds without error every time. |

MEASUREMENT PROCEDURES

When Dale emitted a correct response to a set of objects, her mother marked a "+" on the data sheet. Incorrect responses were indicated with a "0" on the data sheet.

TEACHING/LEARNING PROCEDURES

The mother asked Dale to count sets of objects such as blocks, books, fingers, ears and nose. The number of objects in a set did not exceed the highest learned numeral from the counting procedure. When Dale emitted correct responses her mother praised her.

RESULTS

In 23 sessions, Dale could count any set from one to ten.

---

OBJECTIVE 3

| | | |
|---|---|---|
| Given Arabic numbers on flashcards from 1-10 presented | the child will name the number | within three seconds without error. |

MEASUREMENT PROCEDURES

When Dale emitted a correct response to a flashcard, her mother marked a "+" on the data sheet. An incorrect response was indicated with a "0" on the data sheet. A numeral was considered learned where there were three correct responses on two consecutive days.

TEACHING/LEARNING PROCEDURES

Random Order:

Four flashcards of numerals in random order were presented

three times each to Dale in the manner described by Burdett-Fox (1972). However, the mother did not provide praise for correct responses.

Numerical Order and Praise:

Procedures were the same as above except numerals were presented in sequential order and the mother praised Dale for correct responses. During this condition the mother continued to praise correct responses. However, the numerals were presented in random order.

RESULTS

During six days of random order flashcard presentation, the average percent correct was 38.

During 17 days of numerical order flashcard presentation and praise, her average percent correct was 79. During ten days of random order flashcard presentation and praise, the average percent correct was 93.

---

OBJECTIVE 4

| | | |
|---|---|---|
| Given verbal directions to say the alphabet | the child will repeat the alphabet in order | with no more than a three second delay between letters without error every time. |

MEASUREMENT AND TEACHING/LEARNING PROCEDURES

Phase I:

During the first sessions, Dale and her mother sang the alphabet song together and then Dale was asked to sing it alone.

The mother noted the last letter sung correctly on the data sheet. Praise was given for correct responses.

Phase 2:

Later Dale was asked to sing the alphabet song by herself with mother humming. The mother marked the last letter sung correctly on the data sheet. Then Dale and her mother sang the song together. When Dale made an error, the mother sang very slowly. Dale imitated her mother. The mother praised Dale for correct responses and imitations.

RESULTS

Dale could recite the alphabet at the end of 20 sessions.

---

OBJECTIVE 5

| | | |
|---|---|---|
| Given printed flashcard alphabet letters, upper and lower case | the child will orally name the letters | within three seconds with 90-100% accuracy. |

MEASUREMENT PROCEDURES

When Dale emitted a correct response to a flashcard, her mother marked a "+" on the data sheet. An incorrect response was indicated with a "0".

TEACHING/LEARNING PROCEDURES

The 26 alphabet letters were divided in half in a non-systematic fashion. Each group of 13 letters was increased to 26 by using both the upper and lower case letter symbols. Each pack of 26 letters was again arranged in a non-systematic fashion. The

first group of 26 letters was used for session 1, with the second group of 26 letters being used in session 2.

Baseline:

During each session, the mother presented five cards using the Burdett-Fox flashcard procedure. However, no praise was given the child for correct responses.

Contingent Praise:

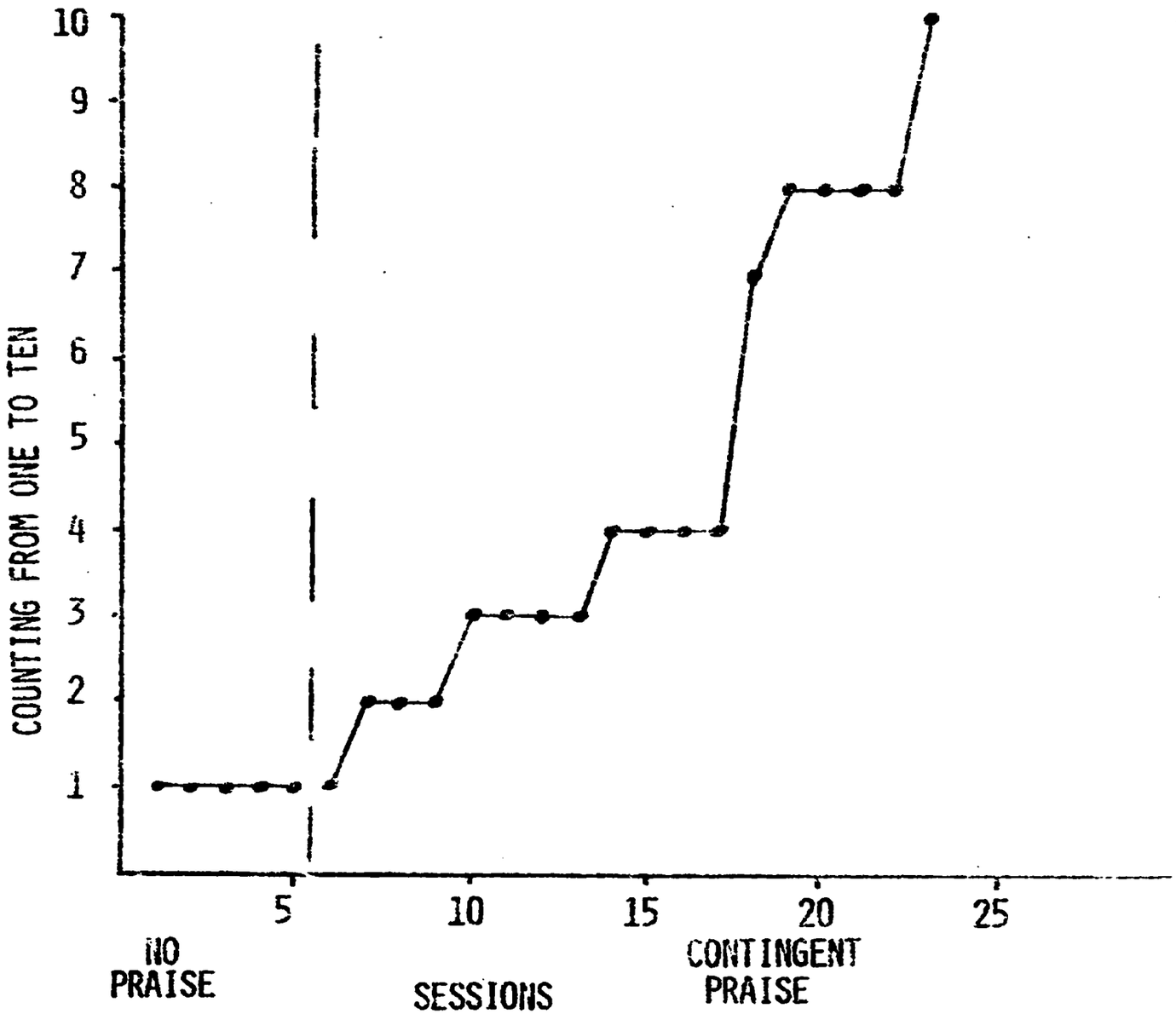
The mother continued the procedures described in baseline, but praised Dale for correct responses using such phrases as "Good", "Wonderful", or "You've got it!".

RESULTS

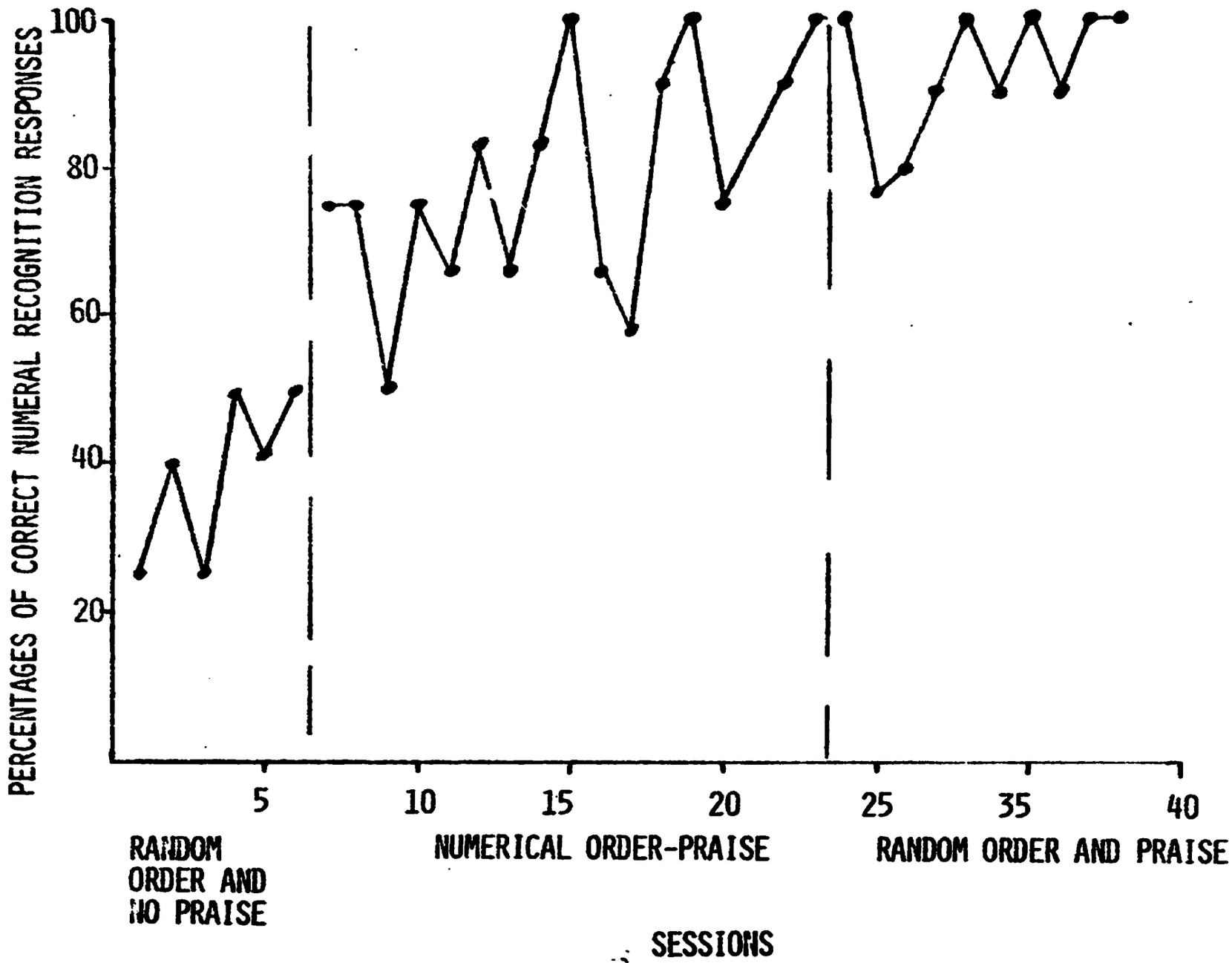
During 12 days of baseline in session 1, Dale emitted two correct responses. During 12 days of contingent praise, Dale emitted 24 correct responses and learned one letter.

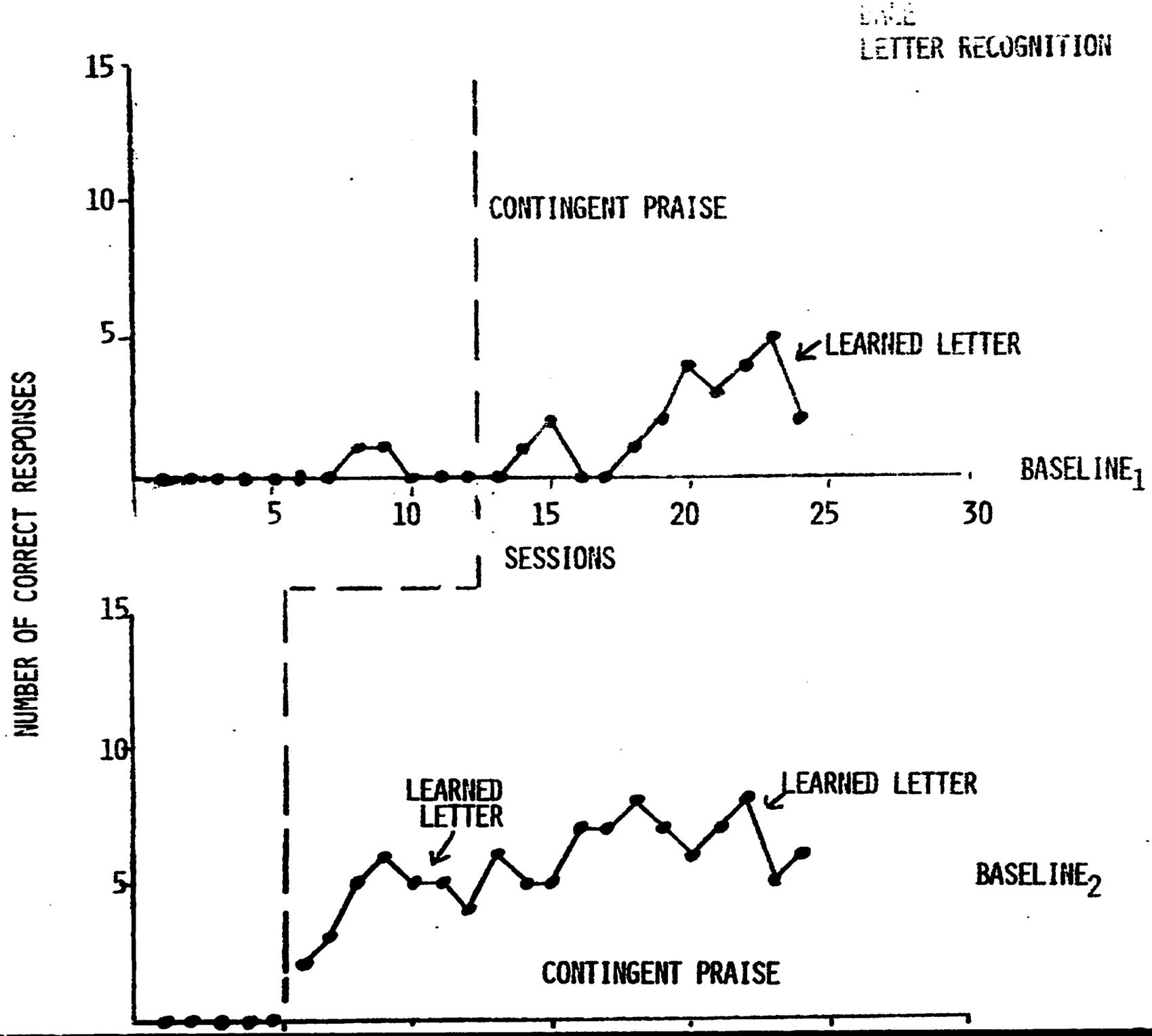
During five days of baseline in session 2, Dale emitted no correct responses. During 19 days of contingent praise, Dale emitted 107 correct responses and learned two letters.

CUMULATIVE NUMBERS LEARNED IN SEQUENCE



DALE


PERCENTAGES OF CORRECT NUMERAL RECOGNITION RESPONSES
100
80
60
40
20
5
10
15
20
25
35
40
RANDOM ORDER AND NO PRAISE
NUMERICAL ORDER-PRAISE
RANDOM ORDER AND PRAISE
SESSIONS


LETTER RECOGNITION
NUMBER OF CORRECT RESPONSES
15
10
5
CONTINGENT PRAISE
LEARNED LETTER
BASELINE1
5
10
15
20
25
30
SESSIONS
15
10
5
LEARNED LETTER
LEARNED LETTER
BASELINE2
CONTINGENT PRAISE

## RATE OF ACHIEVING MINIMUM OBJECTIVES

Table 1 shows the scores obtained for each of the behaviors discussed in this study over eight months.

| | Jan. | March | May | June | July | August |
|---|---|---|---|---|---|---|
| Countings from 1-10 | .00 | 1.00 | 1.00 | - | - | 1.00 |
| Counting sets of objects | .30 | .70 | .90 | .40 | .60 | .40 |
| Numeral recognition (1-10) | .20 | .20 | .30 | .00 | .00 | .20 |
| Reciting the alphabet | .00 | .00 | .81 | .73 | .81 | .81 |
| Alphabet recognition upper | .00 | .00 | .21 | .04 | .00 | .04 |
| Alphabet recognition lower | .00 | .00 | .17 | .09 | .04 | .09 |

Table 2 shows the overall scores for the EEEP entry level test over eight months.

| Jan. | March | May | June | July | August |
|---|---|---|---|---|---|
| 44% | 52% | 73% | 51% | 64% | 66% |

EEEP Williston
Carmen Marcy
Martha Knight
B.J. Lates
1972-1973

# PAUL

## CHILD AND REFERRAL PROBLEM

Paul was a six year old child in Williston, Vermont. His parents referred him because of suspected deficits in language and social skills. Paul underwent surgery for a lazy eye condition and continued to wear a patch over one eye at the time of referral. On the initial home visit, the mother told the EEEP staff member that she was considering not sending Paul to school until September, 1974. She referred to him as her "slow" child.

The Essential Early Education Program entry level test was administered on January 22, 1973. Paul scored an average of 49% correct on all items tested.

Problem areas included counting, reciting alphabet and recognizing letters and numerals.

## OBJECTIVES

| | | |
|---|---|---|
| Given 26 upper and 26 lower case alphabet letters printed on flash cards | Paul will identify each letter by saying its name | within three seconds with 90-100% accuracy. |
| Given 20 consonants and 15 consonant blends printed on flash-cards | Paul will orally state the phoneme sound that corresponds to each consonant, vowel, or blend | within three seconds, with 90-100% accuracy. |

| | | |
|---|---|---|
| Given a spoken word and a cue | Paul will name the initial consonant or consonant blend of that word | within three seconds, at least 30 of 33 words. |
| Given printed numbers one through ten | Paul will orally state how many objects are in each set | within five seconds per set, with 100% accuracy. |
| Given a cue | Paul will orally state the names of the four basic shapes (circle, square, triangle, rectangle) | within five seconds with 100% accuracy. |
| Given a three and four beat rhythm pattern | Paul will imitate each pattern | within five seconds, with 100% accuracy. |

MEASUREMENT PROCEDURES

For each correct response, the mother marked a "+" on the data sheet. For each incorrect response, the mother recorded a "0". An item was considered learned when there were three consecutive "+'s" in one session.

The parent and EEEP staff member graphed the cumulative number of items learned in each session and the percent of correct responses to 30 items presented in each session.

Retention probes were administered using the same measurement system as described above was maintained.

TEACHING/LEARNING PROCEDURES

Pre-baseline:

Upper case alphabet letters:

The mother followed the procedures described by Burdett, Fox (1972) to teach Paul the 26 upper case alphabet letters.

Baseline:

All other skills were taught consecutively in a similar manner during two daily teaching/learning sessions. Session I took place after lunch and Session II occurred after dinner.

(Order of presented items is included following this study.)

Differences from the normal flashcard procedure included:

1. the actual shapes were used instead of flashcards when teaching shapes.
2. blocks were used instead of flashcards when Paul was asked to count objects in a set.
3. the rhythm was tapped by hand on the table.
4. the parent orally stated each of the words and asked Paul to tell the sound of the letter or letters that the word begins with for the naming initial sounds of words procedure.

Contingency:

During Session I, the mother presented a poker chip to Paul immediately after each correct response. At the end of the session, Paul was allowed to exchange his poker chips for special items or activities kept in a "fun box." Some of the items included marbles (2 poker chips), one piece of gum or candy (1 poker chip), and five minutes of bubble blowing (5 poker chips). The poker chips were spent daily with no opportunity to save chips from one day to the next.

Return to Baseline:

The same teaching/learning procedures were used as described under Baseline conditions.

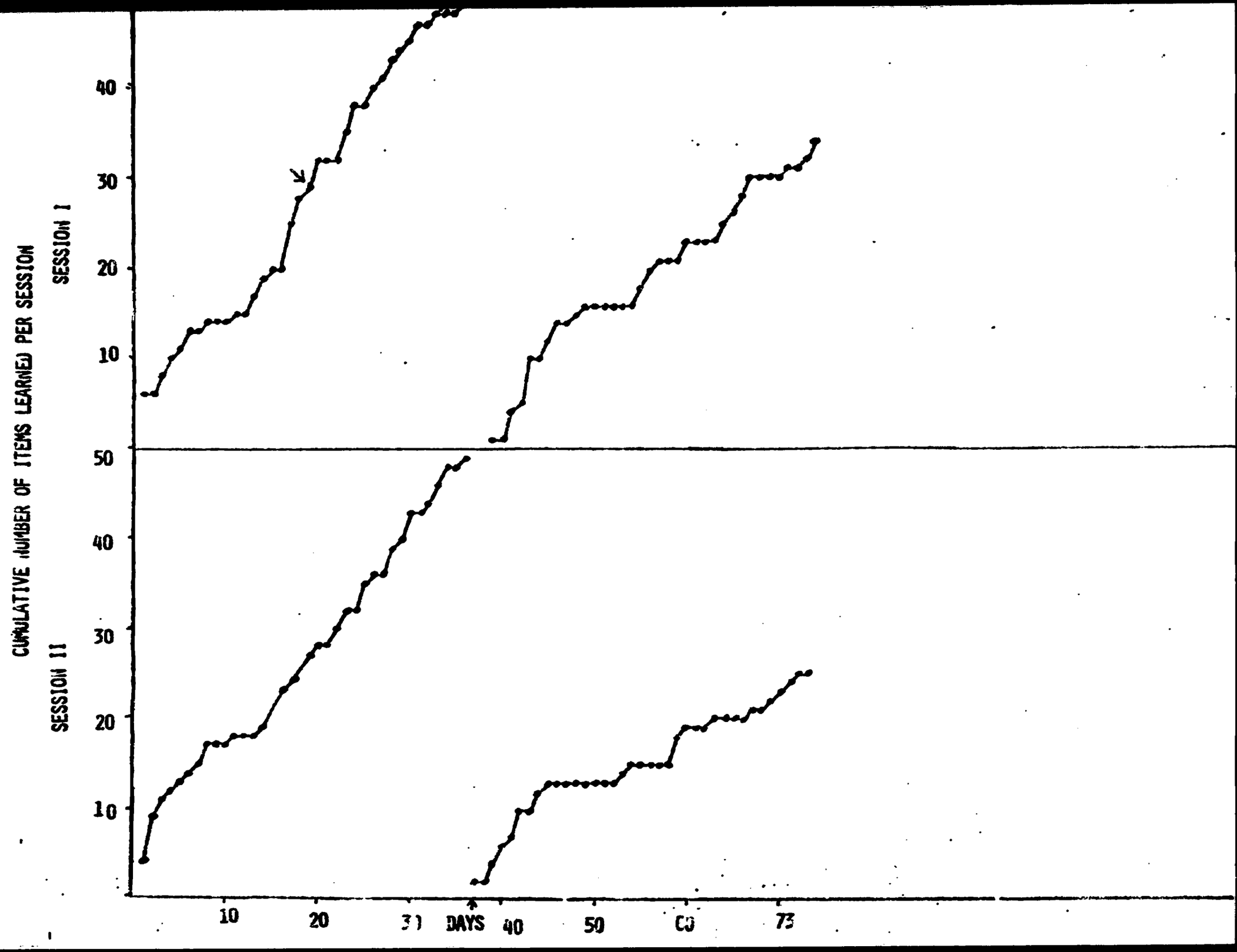
Retention Probes:

All "Learned" cards were shuffled and the top 20 cards were presented in the same manner as the Burdett-Fox procedure. Twice each week after Paul learned approximately 40 items.

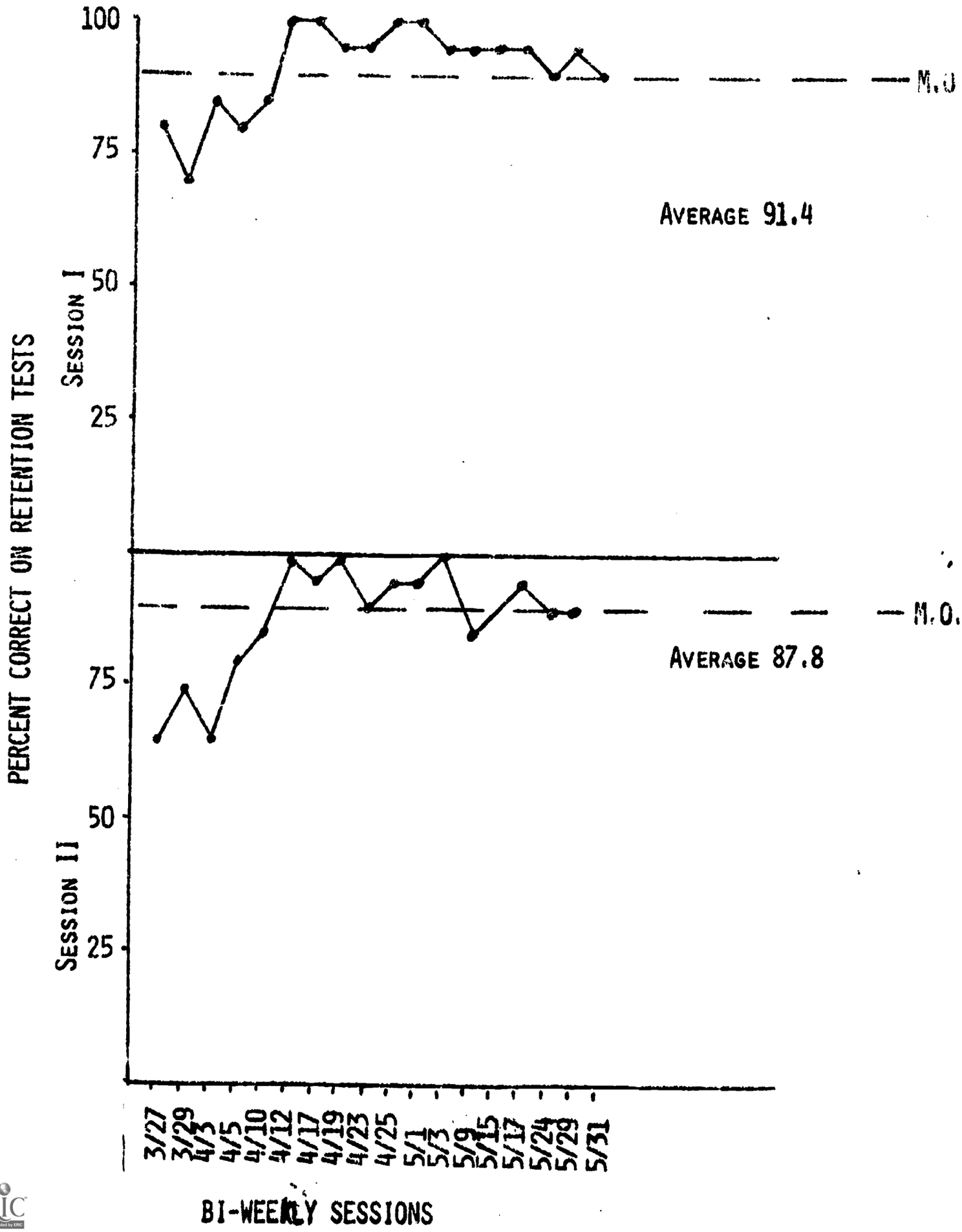
RESULTS

The cumulative graph shows that Paul learned 84 items in Session I over 74 sessions. His rate was 1.13 learned items per session. During Session II, he learned 75 items in 72 sessions for a rate of 1.04.

The overall average of retention of learned items for Session I was 91.4% for 18 sessions. The average for Session II was 87.8%.


CUMULATIVE NUMBER OF ITEMS LEARNED PER SESSION
SESSION I
SESSION II
10
20
30
40
50
10
20
30
40
50
60
73
DAYS

PAUL
RETENTION TEST (2X/WEEK)



## RATE OF ACHIEVING MINIMUM OBJECTIVES

Table 1 shows the scores obtained for specific objectives over eight months.

| | January | March | April | May | June | July | August |
|---|---|---|---|---|---|---|---|
| Alphabet recognition (upper case) | .13 | .69 | .77 | .81 | .67 | .60 | .21 |
| Alphabet recognition (lower case) | .00 | .47 | .21 | .60 | .46 | .34 | .14 |
| Consonant sounds | .00 | .00 | .44 | 1.00 | .00 | .11 | .22 |
| Numural recognition | .00 | .10 | .30 | .60 | .50 | .60 | .20 |
| Counting sets (1-10) | .30 | .20 | .50 | .70 | 1.00 | .70 | .60 |
| Recognition of shapes | .67 | 1.00 | 1.00 | - | 1.00 | - | 1.00 |
| Rhythm pattern imitation | .50 | .00 | .00 | .50 | .50 | 1.00 | 1.00 |

Table 1

Table 2 shows the overall scores for the EEEP entry level test over eight months.

| January | March | April | May | June | July | August |
|---|---|---|---|---|---|---|
| 49% | 44% | 56% | 71% | 69% | 73% | 70% |

Table 2

# APPENDIX A

## ORDER OF ITEMS FOR EACH SESSION

### SESSION #1

1. Lower Case Alphabet

w
l
d
y
m
b
i
a
k
p
v
r
j

2. Numerals

8
2
6
10
3

3. Initial Consonant Sounds

| Consonant | Example |
|---|---|
| p | pet |
| b | bed |
| t | tan |
| d | do |
| k | kite |
| g | go |
| f | fold |
| v | visit |
| s | say |
| z | zip |

### SESSION #2

1. Lower Case Alphabet

c
e
t
g
z
f
u
h
o
s
q
x
n

Numerals

7
4
1
9
5

Initial Consonant Sounds

| Consonant | Example |
|---|---|
| l | lull |
| m | man |
| n | none |
| r | roar |
| y | you |
| h | his |
| w | wave |
| j | jump |
| c | cow |
| h | hat |

4. SHAPES

| | |
|---|---|
| circle | triangle |
| square | rectangle |

5. VOWEL SOUNDS

| | | | | | |
|---|---|---|---|---|---|
| e | as in | item | a | as in | drama |
| o | as in | button | u | as in | circus |
| i | as in | devil | | | |

6. COUNTING OBJECTS IN SETS

| Session #1 | Session #2 |
|---|---|
| 2 | 3 |
| 5 | 1 |
| 9 | 6 |
| 7 | 8 |
| 10 | 4 |

7. CONSONANT BLENDS

| Session #1 | | Session #2 | |
|---|---|---|---|
| Blend | Example | Blend | Example |
| ch | Church | sw | swing |
| sh | show | tw | twin |
| sk | skate | br | brew |
| sm | small | bl | black |
| sn | snow | gl | glue |
| sp | spell | pl | play |
| st | stand | fr | front |
| | | tr | train |

8. RHYTHMS

three beat

four beat

9. NAMING INITIAL SOUNDS OF WORDS

| Session #1 | Session #2 |
|---|---|
| king | zoo |
| mat | gost |
| church | lamb |
| dog | stairs |
| shoe | twin |
| sky | fine |
| pig | jump |
| wet | brown |
| yes | sign |
| small | vest |
| snow | glue |
| speak | blue |
| ten | hot |
| nest | run |
| train | boy |
| plane | swim |
| front | |

10. Word Recognition

Session I

1. some
2. of
3. this
4. a
5. less
6. dab
7. pond
8. Dan
9. Ellen
10. said
11. not
12. right
13. I
14. Ned
15. Nell
16. Ted
17. Nan
18. crash
19. dress
20. stood
21. bend
22. danced
23. be
24. stand
25. bent
26. sit
27. sat
28. shoe
29. don't
30. off
31. three
32. ticks
33. close
34. tie
35. five
36. late
37. it's
38. open
39. eight
40. take

Session II

1. little
2. bread
3. that
4. and
5. bit
6. the
7. is
8. at
9. too
10. big
11. just
12. tent
13. led
14. to
15. Bill
16. Al
17. Nat
18. ballerina
19. in
20. dance
21. it
22. Bess
23. want
24. red
25. wants
26. satin
27. one
28. clock
29. ten
30. two
31. door
32. count
33. bed
34. four
35. seven
36. again
37. your
38. six
39. nine
40. getting

Appendix ii

# PROCEDURAL GUIDELINES FOR SURVEYING PARENTS AND IDENTIFYING CHILDREN ELIGIBLE FOR ESSENTIAL EARLY EDUCATION SERVICES

Essential Early Education Project
Special Education Program
College of Education
University of Vermont
March, 1973

Martha Knight
B. J. Lates
Mary Carter
Nancy Friedman
Marcia Grad

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D: Entry Level Test

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Acknowledgement

The project reported herein was performed pursuant to Title VI, ESEA funding made available through the Vermont State Department of Education, Division of Special Educational and Pupil Personnel Services to the Colchester and Chittenden South School Districts.

# Introduction

The Essential Early Education Project has developed and implemented two procedures for surveying a school district in order to identify children who need special help learning fundamental skills before they enter first grade. The first procedure was developed for a school district which conducts a school census each year; it was implemented in Colchester in 1971 and replicated in 1972. The second procedure was developed for a school district with no annual census and was implemented in Williston in 1972.

This year (1972-1973) the project staff was concerned primarily with the identification of children expected to enter first grade in the fall of 1973. Survey and identification procedures were initiated in September, 1972 and were to be completed by December 15, 1972. However, lack of a school census in one district, extensive follow-up measures and revision of entry level measures delayed completion of the task until February 1, 1973. Descriptions of the two survey procedures with recommendations for implementation in other school districts are included in this report.

SURVEY AND REFERRAL PROCEDURES FOR A DISTRICT WITH A SCHOOL CENSUS

1) The E.E.E.P. staff first contacted the person in charge of school census and arranged to have use of census cards for several hours.

2) In Colchester census cards were arranged by street. Recorded on each card were the parent's name, address, phone number, and the name, age, and date of birth of each child in the family. A list of children expected to enter first grade in the fall was developed by copying the above information on a separate 3" x 5" card for children born in a particular year (i.e., 1967). These cards were then filed alphabetically.

3) After a master list of all children born in 1967 was compiled, parents were surveyed as to whether their child might need special help in first grade. A skills survey with a self-addressed, stamped envelope and letter of explanation were sent to parents of each child. (Appendix A)

4) Parent survey responses were recorded on each child's card. Responses indicating a possible deficit (i.e., parent indicated child needed help, child was not entering first grade, parent wrote note indicating possible problem) were filed separately.

5) A second letter and survey form were sent to parents who did not respond within two weeks.

6) Parents who did not return the second survey form were contacted by telephone.

7) If there was no telephone, a third letter and survey form were sent. If again there was no response names and addresses were verified with the post office. Those parents who could not be contacted in any other way were finally visited by an E.E.E.P. staff member at their home.

SURVEY PROCEDURES FOR A DISTRICT WITHOUT A SCHOOL CENSUS

1) The E.E.E.P. staff first contacted the school and obtained a list of school families. The names and addresses were put on 3" x 5" cards and arranged in alphabetical order.

2) The Town Clerk was then contacted and poll tax cards, property ownership lists, and voter registration lists were obtained.

3) Names and addresses of all persons not on the school list were placed on 3" x 5" cards with a note indicating source of information (P=poll tax, etc.). Also included were the birthdate of the person, if available, and marital status. Some poll tax cards included names and birthdates of children. This information was transferred to 3" x 5" cards also. When all possible sources of information had been checked, cards were filed alphabetically.

4) A letter of explanation was then sent to all residents with a stamped, self-addressed post card (see Appendix B) asking whether or not there was a five year old child in the household, and if yes, the name and birthdate of the child and name of the parent.

5) Responses from the survey were recorded on each card. Separate cards were made for five year old children and filed alphabetically.

6) A second mailing was sent to those people who did not respond within two weeks.

7) Those who did not respond to the second letter were called and the information obtained by telephone.

8) For each person who could not be contacted by phone, the staff checked with the Town Clerk's office to determine if the person still lived in town, if they were the spouse, son, or daughter of a person who had already responded, if they might have a five year old child, or how they might be contacted.

9) When no further information was available from the Town Clerk, the staff contacted the post office to see if the persons were still residing in the town at that address. An urgent letter was sent requesting a response

10) In addition to the survey pro[illegible]s, all private kindergartens in the area were contacted an[illegible]st of five year old children who resided in the target school district was obtained from them.

11), 12), 13), 14), 15) Once a list of five year old children had been compiled, procedures for obtaining referrals from parents were the same as described in the procedures for a school district with a school census (Steps 3-7).

## RECOMMENDATIONS FOR IMPLEMENTATION OF SURVEY PROCEDURES

The first method of obtaining a list of entering first graders took two people approximately four hours to complete. The second method proved to be extremely expensive and time consuming. Obtaining the list of town residents took two people approximately one full week to complete. In addition, the response to the mailings was poor and the follow-up phone calls and necessary leg work tracking down people took an enormous amount of time. School officials estimated that between 80 and 100 children were expected to enter school the following fall. Only 60 names were obtained by the survey procedures, including the kindergartens idenitification. A public notice was put in the paper but this yielded no new information.

Obviously, it would be ideal if each school district conducted a survey of preschool aged children. The poll tax listers could be given a card to be filled out by each household asking the names of all children ages 0 to 21 years. This would provide the school with a more accurate estimate of the incoming number of first graders and would enable the townspeople to better plan for such things as additional classroom space and additional teachers.

An alternative proposal for the identification of five year olds would be to ask parents of five year olds to pre-register for first grade at a specified time (preferably one year before expected first grade entry) and a specified place through the local news media (i.e., newspaper, radio, T. V.).

If neither of the above described methods could be used, possibly the school parent organization could be enlisted to conduct a house to house canvas.

## TESTING PROCEDURES

When all responses had been obtained, parents who reported a possible problem were contacted and an appointment made to visit the home and administer the skills inventory (entry level test) to the child. (See Appendix C for example of telephone conversation for this purpose.)

A critical concern of the Essential Early Education Project staff in the fall of 1972 was that all tests be administered uniformly and reliably checked. As a result, testing procedures were refined and instructions given to testers prior to their first testing situation. (See Appendix D, pages 1 and 2.) In addition, each tester was required to give a practice test to a child with 100% procedural reliability before visiting a home. All tests are tape recorded so that reliability of verbal responses can be checked.

To further refine the test, defined social behaviors are observed and tallied by the tester during the testing situation (pages 3 and 4 of the test, Appendix D). All eligible children are further assessed in social and self-care areas.

## SCORING PROCEDURES

A second concern of the project staff was the refinement of the test scoring procedures. To insure the most reliable score possible, procedures were outlined (see Appendix E) and criteria agreed upon. All tests are first scored by the tester as he listens to the tape recording of the testing situation and the results are recorded on the scoring sheet. Then an observer independently listens to the tape and records the score he obtains. The scores of the tester and the observer must agree if the data are to be considered reliable.

The parents are sent a checklist of the skills tested which indicates the skills the child achieved.

## ELIGIBILITY

Children scoring lowest on the entry level test in each school district are considered eligible for Essential Early Education services.

# APPENDIX A

# COLCHESTER PUBLIC SCHOOLS

ADMINISTRATION OFFICES
P.O. BOX 115
COLCHESTER, VERMONT 05446
TEL. 802/658-4047

Richard T. Grimley
Superintendent

John T. Gutman
Business Manager


Essential Early Education Project

October 25, 1972

Dear Parent,

In cooperation with the State Department of Education, the Colchester School District is surveying all parents of children expected to enter first grade next September, 1973.

This survey is being conducted in order to estimate the number of children who might need special help in learning skills necessary for achievement in school. We would appreciate your answering these questions.

Please return this form in the enclosed envelope at the earliest possible date. Thank you for your help.

Sincerely,

B. J. Lates

(Mrs.) B. J. Lates

656-2936

Colchester School District

Child's Name_____ Date of Birth_____

1. Does your child attend a nursery school, day care center, or kindergarten on a regular basis?

YES NO

2. Will your child be entering first grade next fall?

YES NO

3. Do you feel that your child needs special help before entering school in any of the following areas?

| | | |
|---|---|---|
| LANGUAGE SKILLS (Speaking, Listening to stories, Following directions, etc.) | YES | NO |
| MOTOR SKILLS (Cutting with scissors, Drawing, Running, Jumping, Walking, etc.) | YES | NO |
| SELF-CARE SKILLS (Using toilet, Dressing self, Feeding self, etc.) | YES | NO |
| SOCIAL SKILLS (Playing with others, Playing by himself, Talking with adults, etc.) | YES | NO |

APPENDIX B

ESSENTIAL EARLY EDUCATION PROJECT

2 Colchester Avenue

Burlington, Vermont 05401

October 23, 1972

Dear Resident of Williston,

In cooperation with the State Department of Education, we are surveying residents of Williston in order to identify children eligible to attend first grade in September, 1973.

Please check on the enclosed card whether or not there is a child born during 1967 in your family, and if so, list the child's name and birth date, and the name of the child's parent or guardian.

Even if you do not have a child born in 1967, your cooperation in returning the enclosed, stamped post card is vital to the success of this project, and will save us a follow up phone call. Thank you very much for your help.

Sincerely,

Martha F. Knight

Martha F. Knight

Coordinator

656-2936

APPENDIX C

MEMO

TO: Rosie, Jim, Carmen, Marcia, B. J., Nancy

FROM: Martha and Mary

RE: Making appointments with Colchester parents

DATE: December 18, 1972

Please call your assigned people by Friday, December 22nd and have appointments made for the week after New Years (beginning January 2nd). Turn cards in to Mary on Friday with the date called and the date and time of the appointment. Be sure you have directions to the person's house.

Objective: Given a parent of a child who will enter first grade and/or who was born in 1967 and who has reported that his/her child may need special help prior to school in one or more skills areas, the caller will arrange an appointment to have the child tested in his home.

Sample conversation: My name is _____ and I'm calling from the Essential Early Education Project. Do you remember returning a survey form we sent you several weeks ago about _____'s entering first grade next fall? On the form you indicated he/she might need special help with ___(area)___ skills before entering school.

Our project is trying to gather more information about children who need special help before starting school in order for the School District to plan a way to help these children.

Would it be possible for me to visit your home and give _____ a simple skills test which would help us in this process? Would (date,time) be convenient for you?

The test will take about half an hour and I'll need a table and two chairs near an electrical outlet for a tape recorder. The kitchen table might be a good place.

It is important that I be alone with _____ at this time because the presence of another person might affect his answers. The test involves asking the child to do some simple things most children do by first grade. These are activities like cutting with scissors, naming colors, jumping and catching a ball. Children really seem to enjoy the test; it's really fun. I'll need part of the kitchen or a hall for a few of these things where I could lay down a 10 foot tape. Is that all right?

Can you give me directions to your house? Thank you very much. I'll look forward to seeting you and _____ on (date, time) and I'll call you the day before just to confirm our appointment.

Possible questions parents might ask:

Q. What's going to happen to the results? (How will I know how well he does on the test?)

A. The results will be shared with you and _____'s first grade teacher. This information will help her in planning an instructional program for him/her.

Q. What if he needs speech therapy?

A. There is a speech therapist in the Colchester schools who checks all the first graders at the beginning of the year. She would certainly provide help for _____ if she thought he needed it.

Q. I'm afraid _____ is going to have trouble in first grade.

A. If the test results indicate this, we will call it to the attention of the school and recommend that his/her teacher work with the consulting teacher to plan a special program for _____.

Q. Is this absolutely necessary?

A. Yes, we really would like to have this information on all children whose parents returned forms indicating their child might need help. The test only takes about half an hour to give and the information will really help us.

Q. What will you need the tape recorder for?

A. Some of the answers will be difficult to write down, so if we record everything our results can be really accurate.

Q. What if the tape recorder makes him shy?

A. Children seem to adapt very quickly to this situation and even find it fun. It won't be that noticeable to the child.

APPENDIX D

# The University of Vermont

COLLEGE OF EDUCATION, SPECIAL EDUCATION PROGRAM
CONSULTING TEACHER PROGRAM, 2 COLCHESTER AVENUE
BURLINGTON, VERMONT 05401


## Letter of Permission

I give my consent for _____ to be tested by the Essential Early Education Project, an educational service and research program of the Special Education Program of the University of Vermont under the sponsership of the _____ School District and the Vermont State Department of Education.

I understand that the results of this testing will be used for scientific purposes and that the strictest standards of confidence will be maintained in regard to all information.

Signature: _____
parent or guardian

_____
EEEP coordinator

Date: _____

APPENDIX E

CHILD'S NAME _____ DATE _____

ADMINISTERED BY _____ START TIME _____

FINISH TIME _____

## GENERAL PROCEDURES FOR ADMINISTERING SKILLS TEST

1. Start cassette when you sit down and are alone with the child. Record start time on test booklet.

2. For about three minutes, chat with the child before the test begins. Ask him questions like "What's your favorite T.V. show?" and "What do you like to play with?". Respond to what the child says. It is important to establish yourself as a reinforcer. If child does not respond after three questions, begin test anyway.

3. Keep skills test on a clipboard so that the child cannot see you recording his responses.

4. Empty out test materials and place them near you, but not in close reach of the child. This will allow you to obtain the needed materials easily.

5. Remember to put the child's name and date on the test booklet and the cassette tape, as well as on the picture he draws, and on the circle he will cut out. The tester should also put his name on the test.

6. Speak slowly and clearly. State the directions exactly as they appear on the test.

7. Give no prompts unless they are indicated in the procedures on the test. If the child says, "What" or "Huh", etc., repeat the directions exactly as stated on the test.

8. Praise the child for correct responses and appropriate verbalizations as you go through the test. Say things like, "That's right", "Good", "Fine", or "Terrific". Praise can be given after an item is finished and you are recording the response. Ignore all incorrect responses and aggressive speech or inappropriate verbalizations. For transition between items and to retain child's attention, it is appropriate to say "Now" or "Are you ready" or say child's name.

9. Remember to lay down the 10 foot tape from the test materials before the test begins. A measuring tape is provided to mark six feet for throwing and catching.

10. Memorize codes of behaviors to be directly observed by tester. During each item on the test, tally in the column marked "tester observation" the frequency of behaviors emitted by the child during that item. Note also in the column any times you have to instruct the child to return to the testing area or to sit down because he left his seat.

11. Use a stopwatch to measure the length of time it takes the child to recite the alphabet, count to ten, write his name, cut out the circle, and draw a man.

12. Keep the stopwatch in the palm of your hand so that it is not in full view of the child.

## DEFINITIONS AND OBSERVATION SHEET FOR TESTER

1. LA = LOOKING AROUND
   How many times did the child look around the room or look out the window or stare into space during the test? _____

2. OS = OUT OF SEAT
   How many times did the child leave his seat (chair) without permission during the test? _____

3. IL = INAPPROPRIATE LOCALE
   How many times did the child move 2 feet or more away from a designated test area without permission (e.g. the taped line)? _____

4. AA = AGGRESSIVE ACTION
   How many times does the child use aggressions toward the tester or test materials (e.g. hit you, or damage test materials by throwing, tearing, marking) other than as directed? _____

5. IM = INAPPROPRIATE MOTOR RESPONSE
   How many times during the test did the child emit inappropriate motor behaviors such as wiggling in chair, kicking table leg, touching test materials when not directed to, etc.? _____

6. AV = APPROPRIATE VERBALIZATION

   How many times did the child make statements that were related to the test or the test materials? _____

7. IV = INAPPROPRIATE VERBALIZATIONS
   How many times did the child make statements that were not related to the test or the test materials? _____

8. AS = AGGRESSIVE SPEECH
   How many times did the child use aggressive speech during or after the test (e.g., swearing, obscenities, threatening speech)? _____

9. R = REPEAT DIRECTIONS OR QUESTIONS TO CHILD

How many times did you have to repeat the test question or test directions to the child because he/she may have said, "What" or "Huh" or "I didn't hear you"? _____

10. Did the child have a noticeable speech deficit? If yes, check:

_____articulation problem

_____voice problem (nasal, too soft, too loud, hoarse, stuttering, hesitation)

_____other

11. Did the child engage in any self-stimulating behaviors (e.g. thumbsucking, swinging his/her foot, rubbing his nose, ears, forehead, tapping his finger, scratching) to such an extent that attention to other activities was precluded? _____

If yes, approximately how long? _____

12. Did the child cry or whine for no apparent reason before, during, or after the test? _____

Start time_____

TESTER OBSERVATION

1. COUNTS TO TEN

Say, "The first thing I'd like you to do is count. Let me hear you count to ten."
Start the stopwatch after giving the directions. Stop the stopwatch when the child finishes or after a maximum of one minute. If the child has not begun to respond within 5 seconds, record "no response" and go on to the next item. Record each number named by the child.

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

_____ TIME_____

2. RECITES ALPHABET

Say, "Now, let me hear you say the alphabet."
Start the stopwatch after giving the directions. Stop the stopwatch when the child finishes or after a maximum of one minute. If the child has not begun to respond within 5 seconds, record "no response" and go on to the next item. Record each letter named by the child.

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

_____ TIME_____

3. REPEATS SEVEN WORD SENTENCE

Say, "Now I'm going to say some words. You listen and when I am through, you say the words. The girl played outside in the snow."
Give the child 5 seconds to begin to respond. Record each word said by the child. If child does not begin to respond in 5 seconds, record "no response."

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

_____

4. WRITES FIRST NAME

Say, "Now I'd like you to write your first name in this box." Point to box on the back of test page. Give the child the primary pencil from the test materials. Start the stopwatch when the child brings the pencil in contact with the paper. Stop the stopwatch when the child finishes.

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

_____TIME_____

5. ARRANGES PICTURES IN SEQUENTIAL ORDER

Lay down the four pictures from the test materials in the following order, using the numbers on the back: 3, 1, 4, 2. Say, "Put these pictures in order so they tell a story." Give the child a maximum of 30 seconds to put the pictures in order. Say, "That's fine." Record the order in which the child arranges the pictures, using the numbers on the back.

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

_____

6. DESCRIBES PICTURES IN COMPLETE SENTENCES

Be sure pictures are in correct order. Say, "I'm going to tell you something about each picture." Point to the first picture and say, "The boy is riding his bike." Point to the second picture and say "He bumped into a log." Point to the third picture and say, "He fell off his bike." Point to the fourth picture and say, "What is happening in this picture?" Wait 5 seconds for the child to begin to respond. Record the response of the child in his own words, giving no cues or prompts other than the initial question. If the child does not begin to respond within 5 seconds, record "no response". If the child has begun to respond within 5 seconds, record his response for a maximum of 30 seconds and continue with the next item. (Use a stopwatch to measure 30 seconds.)_____

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

_____

_____

_____

7. TELLS PROBABLE OUTCOME OF PREDICTABLE EVENT

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

Point to the pictures and say, "Let's look at these pictures again. The boy is riding his bike. He bumped into a log. He fell off his bike. The boy hurt himself. What do you think will happen next?" Wait 5 seconds for the child to begin to respond. Record the response in his own words, giving no cues or prompts other than the initial question. If the child does not begin to respond within 5 seconds, record "no response" and go on to the next item.

_____

_____

8. TELLS NUMBER OF OBJECTS IN A SET

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

Place a set of blocks on the table in a line. Say, "Count these blocks and tell me how many are on the table now." When presenting the rest of the sets ask, "How many are there now?" Record a "+" or a "0" for the child's response. Present the sets in the following order: 2, 5, 9, 7, 10, 3, 1, 6, 8, 4.

_____2 _____9 _____10 _____1 _____8

_____5 _____7 _____3 _____6 _____4

9. NAMES UPPER CASE LETTERS IN NON-SYSTEMATIC ORDER

Say, "I am going to show you some letters. If you know what the letter is, tell me. If you don't know, say 'I don't know'". Present the cards in the order indicated below. Wait 3 seconds for a response. Mark a "+" if the child answers correctly. If the child answers incorrectly, or does not respond within 3 seconds or says, "I don't know," record a "0".

| | |
|---|---|
| LA_____ | AV_____ |
| OS_____ | IV_____ |
| IL_____ | AS_____ |
| AA_____ | R_____ |
| IM_____ | |

| | |
|---|---|
| _____W | _____C |
| _____L | _____E |
| _____D | _____T |
| _____Y | _____G |
| _____M | _____Z |
| _____B | _____F |
| _____I | _____U |
| _____A | _____H |
| _____K | _____O |
| _____P | _____S |
| _____V | _____Q |
| _____R | _____X |
| _____J | _____N |

10. NAMES LOWER CASE LETTERS IN NON-SYSTEMATIC ORDER

(Procedures same as for upper case.)

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

_____w
_____l
_____d
_____y
_____m
_____b
_____i
_____a
_____k
_____p
_____v
_____r
_____j

_____c
_____e
_____t
_____g
_____z
_____f
_____u
_____h
_____o
_____s
_____q
_____x
_____n

11. NAMES NUMERALS IN NON-SYSTEMATIC ORDER

Say, "I am going to show you some numbers." "If you know what the number is, tell me. If you don't know, say, 'I don't know.'" Present the cards in the order indicated below. Wait 3 seconds for a response. Mark a "+" if the child answers correctly. If the child answers incorrectly or does not respond within 3 seconds or says "I don't know", mark a "0".

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

_____8
_____2
_____6
_____10
_____3

_____7
_____4
_____1
_____9
_____5

12. TELLS INITIAL CONSONANT SOUNDS OF WORDS

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

Say, "Now I'm going to say some words. Listen carefully and tell me what sounds the words start with. The word "dad" starts with the sound "d". Say, "d". What sound does (word) start with?" Wait 3 seconds for a response after saying the word. Repeat the question for each word. Mark a "+" if the child gives the correct consonant sound only. Mark a "0" if the child gives the incorrect sound or does not respond within 3 seconds.

| | |
|---|---|
| _____king | _____ghost |
| _____mat | _____lamb |
| _____pig | _____fine |
| _____dog | _____jump |
| _____wet | _____sign |
| _____yes | _____vest |
| _____ten | _____hat |
| _____nest | _____run |
| _____zoo | _____boy |

13. CUTS OUT CIRCLE

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

Give the child the scissors from the test materials and the circle from the back of this test packet. Say, "Let me see you cut out this circle. Try to stay on the line." Put the child's name and date on the circle. Keep all scraps of paper in the test folder. Use a stopwatch to measure the time it takes the child to cut out the circle. TIME_____

14. HOLDS SCISSORS CORRECTLY

Record a "+" if child holds scissors with thumb in top hole and index or index and middle finger in the bottom hole. Record a "0" if the child holds scissors in any other way.

GROSS MOTOR SKILLS

General Procedures: Say, "Now let's stand up and go over here." Point to spot next to one end of tape and say, "Stand right here," (if child is not already in appropriate place). Stand next to child, but not on tape.

15. WALKS

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

Say, "Watch me walk. Now you do it." Record a "+" if child performs the following movements:

_____1. pushes off ground with ball and toes of one foot
_____2. swings knee and ankle forward
_____3. transfers weight to ball and toe of other foot
_____4. alternates right/left without breaking sequence
_____5. swings arms freely in opposition to legs
_____6. points toes straight ahead

Record a "0" if child does not include all of the above movements.

16. RUNS:

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

Say, "Watch me run. Now you do it." Record a "+" if child performs the following movements:

_____1. pushes off ground with ball and toe of one foot
_____2. raises knee of foot moving forward
_____3. both feet leave ground
_____4. alternates right/left without breaking sequence
_____5. swings arms freely in opposition to legs
_____6. points toes straight ahead

Record a "0" if child does not include all of the above movements.

17. JUMPS:

Say, "Watch me jump. Now you do it." Record a "+" if child hops with both feet leaving the floor and landing simultaneously for the entire 10 feet. Record a "0" if child does not hop on two feet with both feet leaving the floor and landing simultaneously for the length of the tape.

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

18. GALLOPS:

Say, "Watch me gallop. Now you do it." Record a "+" if child includes all of the following movements:

_____1. steps forward on one foot
_____2. draws other foot to side of supporting foot and puts weight on it
_____3. same foot always leads

Record a "0" if child does not include all movements.

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

19. SKIPS:

Say, "Watch me skip. Now you do it." Record a "+" if child includes all of the following movements:

_____1. steps forward on one foot
_____2. hops on same foot
_____3. steps forward on opposite foot
_____4. hops on that foot
_____5. swings arms in opposition to legs

Record a "0" if child does not include all movements.

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

20. HOPS ON ONE FOOT:

Say, "Watch me hop three times. Now you do it." Record a "+" if child hops three consecutive times with the same foot leaving the floor and landing, and the other remaining in the air. If the child does not hop three consecutive times, record a 0, 1, or 2 for the number of correct consecutive hops.

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

21. WALKS ON TAPE:

Say, "Watch me walk on this tape. I put one foot in front of the other. I touch my toe on one foot (point to toe) to my heel of the other foot (point to heel) so they touch, like this. I do not hold on to anything with my hands. Now, you do it." Mark a "+" if the child walks on the tape with heel and toe touching and the tape is covered by foot. Mark a "0" if the child does not touch heel and toe and tape is not covered.

LA____ AV____
OS____ IV____
IL____ AS____
AA____ R____
IM____

22. & 23, THROWS AND CATCHES BALL:

Stand six feet away from child, as marked on tape. Say, "I am going to throw this ball to you. Try to catch it. Then throw it back to me. Try to hit me here." (Point to stomach.)

LA____ AV____
OS____ IV____
IL____ AS____
AA____ R____
IM____

(22) _____ Number of catches out of 5 throws. (Count as a catch if ball does not hit floor. Count as a miss if ball hits floor before catching or leaves child's hands after catching.)

(23) _____ Number of hits out of 5 throws. (Count as a hit if ball hits or will hit you between shoulders and knees, with your feet remaining in position. Count as a miss if ball does not hit between shoulders and knees or if you must move your feet to catch the ball.

On completion of motor skills section say, "Let's go sit down again."

24. POINTS TO AND NAMES PARTS OF BODY:

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

Say, "Point to your _____." Wait 5 seconds for a response. Mark a "+" for each correct response. Mark a "0" for each incorrect response, or if the child does not respond within 5 seconds.

_____head
_____eyes
_____mouth
_____stomach
_____wrist
_____knee
_____forehead
_____tongue
_____chest
_____toe
_____foot
_____lips

Say, "What's this called?" Point to your body parts in the following order, repeating the above statement each time. Wait 5 seconds for a response. Mark a "+" for each correct response and a "0" for each incorrect response, or if the child does not respond within 5 seconds.

_____chin
_____hair
_____teeth
_____eyebrow
_____cheek
_____ankle
_____elbow
_____neck
_____shoulder
_____back
_____arm
_____finger
_____leg
_____thumb

25. NAMES COLORS:

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

Say, "Tell me what color this is." Show child colored blocks from test materials in the following order, one at a time, repeating the above statement each time. Mark a "+" for each correct response. Mark a "0" for each incorrect response or if the child does not respond within 5 seconds.

_____RED
_____GREEN
_____BLUE
_____YELLOW
_____ORANGE
_____PURPLE
_____BROWN
_____BLACK

26. DEMONSTRATES DIRECTIONAL CONCEPTS:

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

Before beginning, put blocks back in the test materials packet and make sure door is open. Give child following directions, waiting 5 seconds for each response. Record a "+" if child responds correctly and a "0" if child responds incorrectly or does not respond within 5 seconds.

_____"Show me your right hand."
_____"Point up."
_____"Show me your left hand."
_____"Point down."
_____"Take a block out of here." (Hold up test materials packet.)
_____"Put the block on the table."
_____"Take the block off the table."
_____"Hold the block over the table."
_____"Hold the block under the table."
_____"Put the block in here." (Hold up test materials packet.)
_____(Hold up picture of duck and stars.) "Point to the star above the picture."
_____"Point to the star below the picture."
_____(Hold up picture of people in line.) "Point to the middle person in line."
_____"Point to the first person in line."
_____"Point to the last person in line."
_____"Walk around the table." (Child must make at least one complete circle.)
_____"Walk through the door and come back." (Child must walk completely through the doorway.)

27. NAMES SHAPES:

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

Say, "What is this called?" Hold up, one at a time in the following order, the shapes from the test materials, repeating the direction each time. Wait 5 seconds for a response. Record a "+" if the child says the correct name within the 5 seconds. Record a "0" if child responds incorrectly or does not respond within 5 seconds.

_____Circle _____Square _____Triangle _____Rectangle

28. DRAWS A MAN:

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

Give the child the piece of paper from the back of this test and the primary size pencil from the test materials. Say, "Draw me a picture of a whole person. You can draw a man, a lady, a girl or a boy." Put the child's name and the date on the picture. Measure with stopwatch the number of minutes it takes the child to draw the picture. TIME:_____

29. IMITATES THREE AND FOUR BEAT RHYTHMS:

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

Say, "Listen carefully while I tap on the table. Then tap the same number of times that I do." Wait five seconds for child to respond. Record a "+" for each correct response and a "0" for each incorrect response, or no response within 5 seconds.

_____THREE TIMES _____FOUR TIMES

30. ANSWERS QUESTIONS ABOUT A STORY READ ALOUD:

LA_____ AV_____
OS_____ IV_____
IL_____ AS_____
AA_____ R_____
IM_____

Say, "You've done such a good job, now I'm going to read you a story." Read the child Clifford's Tricks from the test materials. Read slowly and clearly, using expression. Let the child look at the pictures, but do not ask questions or point to the pictures or comment on the story while reading. After finishing, put the book away and ask the child the following questions. Wait five seconds for the child to begin to respond. Record the child's response in his/her own words. If the child does not begin to respond in 5 seconds, record "no response" and go on to the next question.

1. What is the big red dog's name?_____

_____

2. What is one trick Clifford can do?_____

_____

3. What happened to the policemen's car?_____

_____

4. What does brave mean?_____

_____

5. How did everyone feel at the end of the story?_____

_____

# ENTRY LEVEL TEST SCORE SHEET

CHILD'S NAME _____ DATE TESTED _____

TESTED BY _____ SECOND OBSERVER _____

SCORED BY _____ SCORING RELIABILITY BY _____

| SKILL | SCORE | 2ND OB. | SCORING REL. |
|---|---|---|---|
| 1. Counts to ten | | | |
| 2. Recites alphabet | | | |
| 3. Repeats seven word sentence | | | |
| 4. Writes first name | | | |
| 5. Arranges pictures in sequential order | | | |
| 6. Describes picture in complete sentence | | | |
| 7. Tells outcome of predictable event | | | |
| 8. Tells number of objects in set | | | |
| 9. Names upper case letters | | | |
| 10. Names lower case letters | | | |
| 11. Names numerals | | | |
| 12. Tells initial consonant sounds of words | | | |
| 13. Cuts out circle | | | |
| 14. Holds scissors correctly | | | |
| 15. Walks | | | |
| 16. Runs | | | |
| 17. Jumps | | | |
| 18. Gallops | | | |
| 19. Skips | | | |
| 20. Hops on one foot | | | |
| 21. Walks on tape | | | |
| 22. Catches ball | | | |
| 23. Throws ball and hits target | | | |
| 24. Points to and names body parts | | | |
| 25. Names colors | | | |
| 26. Demonstrates directional concepts | | | |
| 27. Names shapes | | | |
| 28. Draws a person | | | |
| 29. Imitates three and four beat rhythms | | | |
| 30. Answers questions about story | | | |
| SCORE | | | |

| TESTER OBSERVATIONS | TESTER | 2ND OB. |
|---|---|---|
| 1. Frequency of looking around | | |
| 2. Frequency of out of seat | | |
| 3. Frequency of inappropriate locale | | |
| 4. Frequency of aggressive action | | |
| 5. Frequency of inappropriate motor response | | |
| 6. Frequency of appropriate verbalizations | | |
| 7. Frequency of inappropriate verbalizations | | |
| 8. Frequency of aggressive speech | | |
| 9. Frequency of repeat directions to child | | |
| 10. Noticeable speech deficit | | |
| 11. Self-stimulations behavior | | |
| 12. Crying or whining | | |

# ENTRY LEVEL TEST SCORING PROCEDURES

## GENERAL PROCEDURES

1. Record all items as fraction in decimal form.
   Example: If 100% of the criteria are met, record as 1.00.

2. Round decimals to nearest one-hundredth.
   Example: .625 = .63

3. Read carefully through scoring procedures before beginning.

## SPECIFIC SCORING PROCEDURES

1. COUNTS TO TEN
   Count number of numbers named in consecutive order.
   Divide by 10.
   Record decimal, or .00 for no response.
   Example: Child says, "1, 2, 3, 10."
   3/10 = .30

2. RECITES ALPHABET
   Count number of letters named correctly in consecutive order.
   Divide by 26
   Record decimal, or .00 for no response.
   Example: Child says, "ABCDEFGHJKLM..."
   Count letters to J (8).
   Divide by 26.
   8/26 = .31

3. REPEATS SEVEN WORD SENTENCE
   Count number of words imitated correctly.
   Subtract 1 for each word added.
   Subtract 1 for each word not in consecutive order.
   Divide by 7.
   Record decimal, or .00 for no response.
   Example: Child says, "The little girl played out in snow."
   Words imitated correctly = 5 (the, girl, played, in, snow)
   Words added = 1
   5-1 = 4
   4/10 = .40

4. WRITES FIRST NAME
   Record 1.00 if child includes all of following criteria:
   a) Includes all letters of first name in order.
   b) First letter upper case, rest lower case. (Refer to letter model enclosed)
   c) On horizontal line within the box.(Parallel)
   d) No reversals of letters.
   Record .75 if child meets 3 of 4 criteria, must include a.
   Record .50 if child meets 2 of 4 criteria, must include a.
   Record .25 if child meets only "a" criteria (all letters in name).
   Record .00 if child meets none of criteria.

5. ARRANGES PICTURES IN SEQUENTIAL ORDER
Record 1.00 if the child has put the pictures in the order 1, 2, 3, 4 in 30 seconds.
Record .00 if the pictures are not in order or if there is no response.

6. DESCRIBES PICTURES IN COMPLETE SENTENCE
Record 1.00 if child responds in at least one complete sentence to the fourth picture in the series. The sentence must include a subject and a verb agreeing in number.
Acceptable answers:
a) He is crying.
b) He hurt himself (his leg, knee).
c) His bike is broken.
d) He is sitting on the ground.
e) He is sad.
Record .00 for no response.

7. TELLS OUTCOME OF PREDICTABLE EVENT
Record 1.00 if the child gives an acceptable answer as judged by two independent observers.
Acceptable answers:
a) He's going to go home to his mother (home, to his father).
b) His mother is going to fix his leg (knee), put a bandaid on it.
c) He's going to go to the hospital.
d) He's going to fix his leg, put a bandaid on it.
Record .00 if there is no response or any other response.

8. TELLS NUMBER OF OBJECTS IN SET
Count number of + responses
Divide by 10.
Record decimal.
Example: 3 correct responses
3/10 = .30

9. NAMES UPPER CASE LETTERS
Count number of + responses.
Divide by 26.
Record 1.00 if child achieves at least .90 (90%).
If child achieves less than .90, multiply decimal by 100 and divide by 90.
Record decimal.
Example: Child responds correctly to 24 letters.
24 divided by 26 = .92 (92%)
<u>Record 1.00 on score sheet.</u>

Example: Child responds correctly to 18 letters.
18 divided by 26 = .69 (69%)
62 divided by 90 = .69 (69% of criteria met)
<u>Record .69 on score sheet.</u>

10. NAMES LOWER CASE LETTERS
Use same procedure as for upper case letters.

11. NAMES NUMERALS
Count number of + responses.
Divide by 10 and record decimal.
Example: 8 correct responses
8/10 = .80
Record .80 on score sheet.

12. TELLS INITIAL CONSONANT SOUND OF WORD
Count number of correct responses.
If child achieves at least 9 correct responses, record 1.00.
If child achieves less than 9 correct responses, divide number correct by 9 and record decimal.
Example: 6 correct responses
6/9 = .67
Record .67 on score sheet.

13. CUTS OUT CIRCLE
Place circle over circle in this packet, matching centers.
Score .00 if any white shows beyond child's cutting line.
If wide color line shows beyond child's cutting line, record 1.00.

14. HOLDS SCISSORS CORRECTLY
Record 1.00 on score sheet if a + is recorded on test.
Record .00 if 0 is recorded on test.

15-19. WALKS, RUNS, JUMPS, GALLOPS, SKIPS
Record 1.00 for each item if + is recorded on test.
Record .00 if 0 is recorded on test.

20. HOPS ON ONE FOOT
Record 1.00 if + is recorded on test or if child hopped at least 3 consecutive times.
Record .67 if child hopped 2 consecutive times.
Record .33 if child hopped only once.
Record .00 if child did not hop correctly even once.

21. WALKS ON TAPE
Score 1.00 if + is recorded on test.
Score .00 if 0 is recorded on test.

22. CATCHES BALL
Score 1.00 if child caught at least 4 of 5 throws.
Score .75 if child caught 3 throws.
Score .50 if child caught 2 throws.
Score .25 if child caught 1 throw.
Score .00 if child caught no throws.

23. THROWS BALL AND HITS TARGET (PERSON)
Score 1.00 if child made 4 or 5 hits.
Score .75 if child made 3 hits.
Score .50 if child made 2 hits.
Score .25 if child made 1 hit.
Score .00 if child made no hits.

24. NAMES BODY PARTS
Count number of + responses for both sections.
Divide by 26.
If decimal is .80 or above, record 1.00 on score sheet.
If decimal is below .80, multiply by 100 and divide by 80.
Record this decimal on score sheet.
Example: Child achieved 24 + responses.
24/26 = .92
Record 1.00 on score sheet.
Example: Child achieved 13 + responses.
13/26 = .50
.50 x 100 = 50
50/80 = .625
Record .63 on score sheet.

25. NAMES COLORS
Count number of + responses.
Divide by 8.
Record decimal on score sheet.
Example: Child achieved 4 + responses.
4/8 = .50
Record .50 On score sheet.

26. DEMONSTRATES DIRECTIONAL CONCEPTS
Count number of + responses and divide by 17.
If decimal is .80 or above, record 1.00 on score sheet.
If decimal is less than .80, multiply by 100 and divide by 80.
Record that decimal on score sheet.
Example: Child achieves 12 + responses.
12/17 = .71
.71 x 100 = 71
71/ 80 = .89
Record .89 on score sheet.

27. NAMES SHAPES
Count number of + responses.
Record 1.00 if child achieves 3 or 4 + responses.
Record .67 if child achieves 2 correct responses.
Record .33 if child achieves 1 correct response.
Record .00 if child achieves no correct responses.

28. DRAWS A MAN
Record 1.00 if child includes the following body parts:
Head eyes nose mouth hair body arms legs hands(or fingers) feet(or toes)
Record .90 if child includes 9 of the above body parts.
Record .80 if child includes 8 of the above body parts.
Record .70 if child includes 7 of the above body parts.
Record .60 if child includes 6 of the above body parts.
Record .50 if child includes 5 of the above body parts.
Record .40 if child includes 4 of the above body parts.
Record .30 if child includes 3 of the above body parts.
Record .20 if child includes 2 of the above body parts.
Record .10 if child includes 1 of the above body parts.
Record .00 if child includes none of the above body parts.
No credit is given for additional body parts.

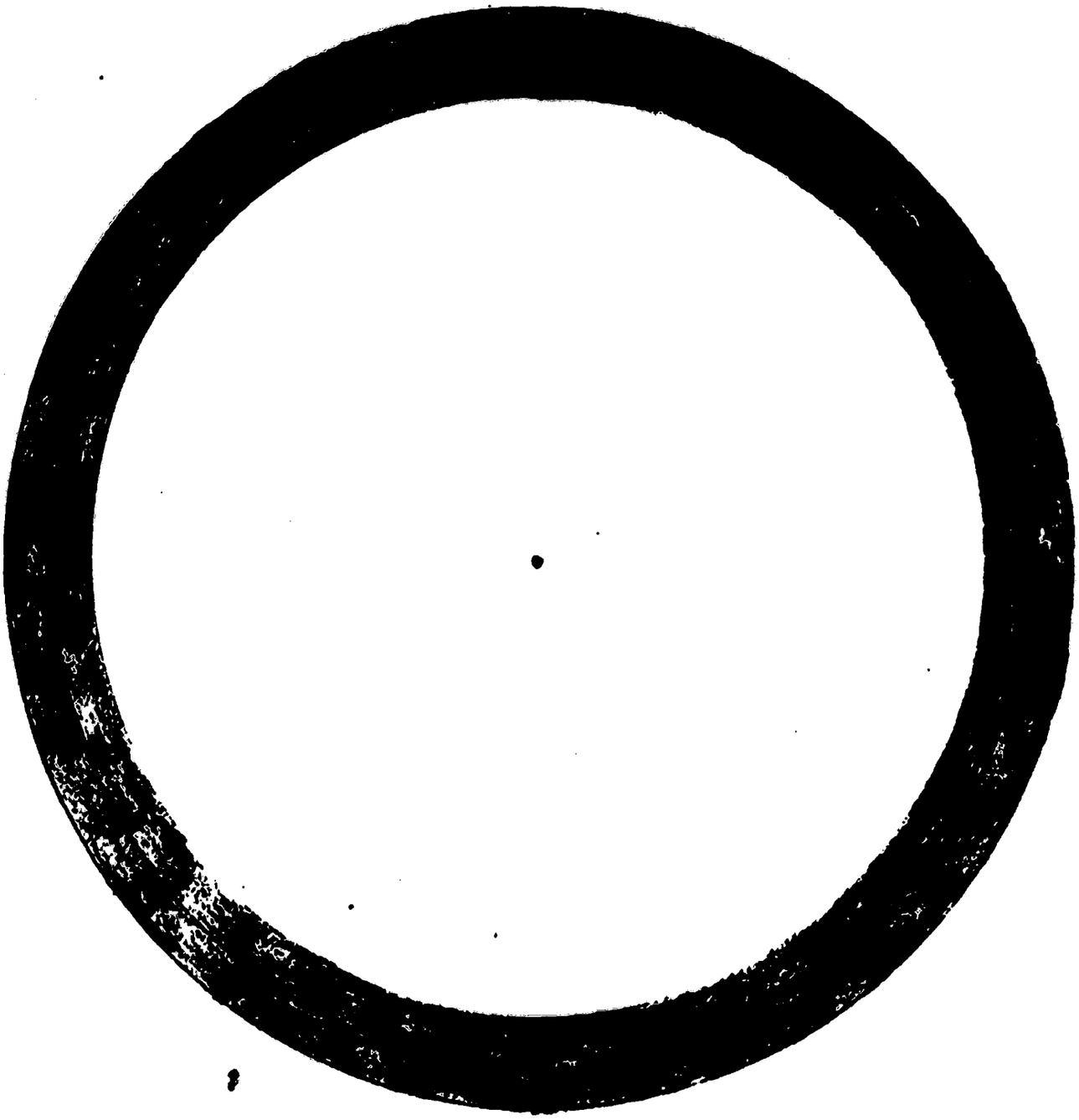
29. IMITATES THREE AND FOUR BEAT RHYTHMS
Record 1.00 if child imitates both rhythms correctly.
Record .50 if child imitates one rhythm correctly.
Record .00 if child imitates no rhythms correctly.

30. ANSWERS QUESTIONS ABOUT STORY
Record 1.00 if child gives 4 or 5 acceptable answers.
Record .75 if child gives 3 acceptable answers.
Record .50 if child gives 2 acceptable answers.
Record .25 if child gives 1 acceptable answer.
Record .00 if child gives no acceptable answers.

Acceptable answers:

1. Clifford
2. Get newspaper, get newspaper stand
   Play dead, fall down and play dead
   Speak, bark loudly
   Roll over, smashed car
   Jumped in water, saved girl
3. Clifford rolled over on it.
   It got smashed.
   Mashed, crushed, wrecked, crashed.
4. Saving the girl, people
   Like the dog, like Clifford, like Bruno
   Courageous
   Jumping in water to save someone
   Names any brave act
   Like a fireman, policeman
5. Happy
   They all liked each other.
   They were smiling.
   They loved Clifford.

TO OBTAIN ENTRY LEVEL TEST SCORE
Add decimals for the 30 items together.
Divide number by 30.
Multiply by 100 to obtain percent of test achieved.



# Letter Model

A B C D E F G

H I J K L M N

O P Q R S T

U V W X Y Z

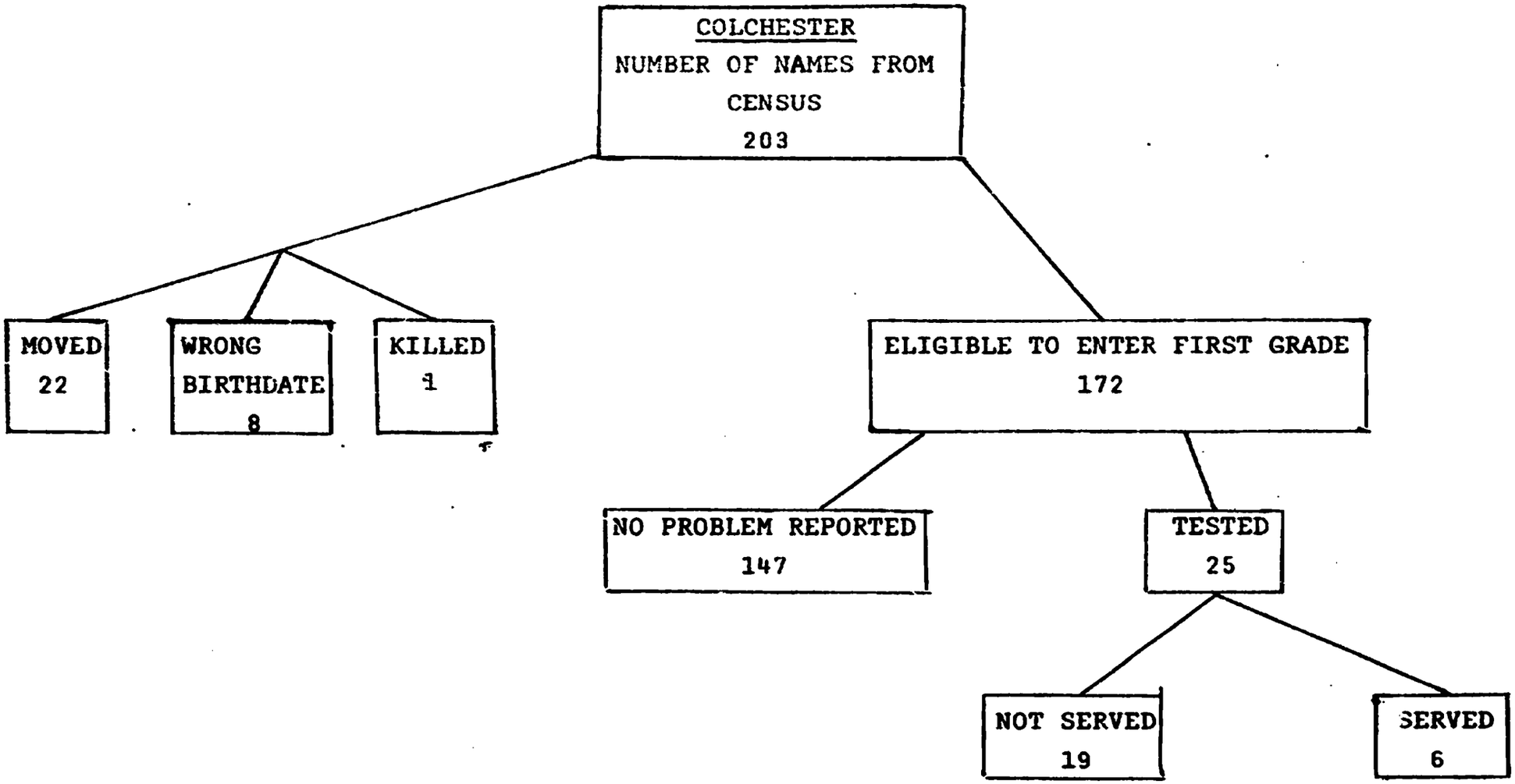
a b c d e f g h i

j k l m n o p q r

s t u v w x y z

COLCHESTER SURVEY AND IDENTIFICATION

1972-1973



SERVICE IN COLCHESTER

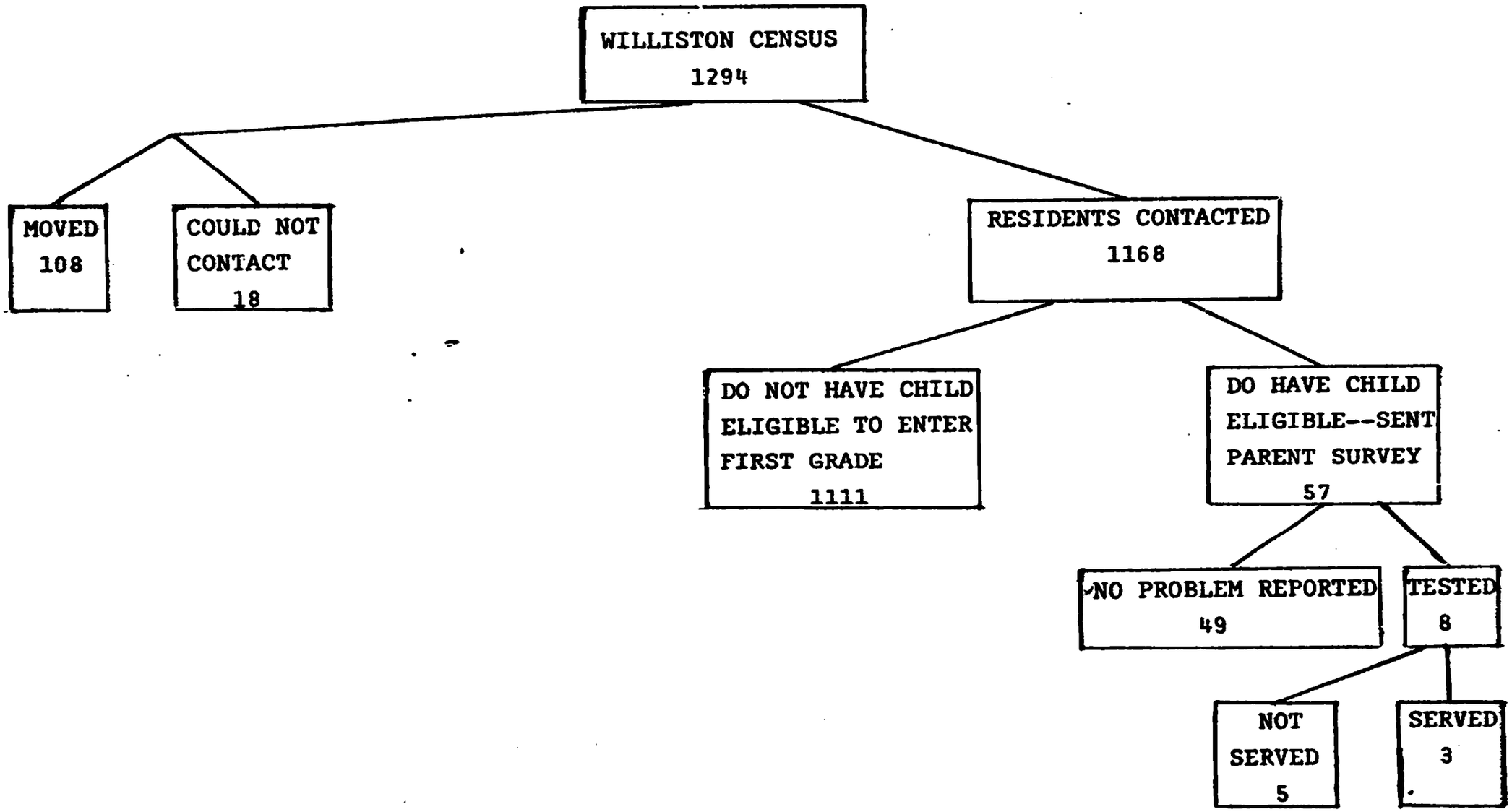
| Child | Test Score | Problem Areas Checked by Parents | Target Areas for Initial Service |
|---|---|---|---|
| 1 | 31% | Social<br>Language | Alphabet Letters |
| 2 | 35% | Language | Alphabet Letters<br>Counting |
| 3 | 42% | Language | Number concepts<br>Counting |
| 4 | 43% | Language<br>Social | Alphabet Letters<br>Consonant Sounds |
| 5 | 47% | Motor | Writing Name<br>Alphabet Letters |
| 6 | 51% | Language | Alphabet Letters<br>Colors<br>Number concepts |

SERVICE IN WILLISTON

| Child | Test Score | Problem Areas Checked by Parents | Target Areas for Initial Service |
|---|---|---|---|
| 1 | 44% | Language | Alphabet Letters<br>Counting<br>Number Concepts |
| 2 | 49% | Language<br>Social | Alphabet Letters<br>Consonant Sounds |
| 3 | 65% | Language<br>Motor | Alphabet Letters |

WILLISTON SURVEY AND IDENTIFICATION

1972-1973



Appendix iii

# MINIMUM OBJECTIVES

# FOR

# ENTERING FIRST GRADERS

PARTICIPATION SKILLS

| | | |
|---|---|---|
| When in a group | the child participates in a directed activity | for at least 80% of a 20 minute interval. |
| Given a prompt | the child attends to an independent activity | for at least 80% of a 10 minute interval. |
| Given a two-step direction | the child begins to follow the direction | within 5 seconds. |
| When in a group | the child volunteers verbal responses | at least three times per week. |
| Given two tasks to complete | the child completes one task | before beginning the next. |
| Given a group assigned task | the child works with other children to complete the assigned task | in a cooperative manner. |

SOCIAL SKILLS

| | | |
|---|---|---|
| When spoken to | the child responds verbally | on 100% of the occasions. |
| When spoken to | the child responds with eye contact | on at least 80% of the occasions. |
| When in a group | the child interrupts conversation or the ongoing activity | less than two times during a 20 minute interval. |
| During any time of the day | the child initiates aggressive speech | on no occasions. |
| During any time of the day | the child initiates aggressive actions | on no occasions. |
| During any time of the day when there is no physical reason | the child cries or whines | on no occasions. |
| During any time of the day | the child engages in self-stimulation behaviors | without precluding attention to the ongoing activity. |

SELF-CARE SKILLS

| | | |
|---|---|---|
| When necessary | the child demonstrates independent proper use of the toilet | every time. |
| When necessary | the child dresses himself | including buttoning, snapping, zipping, and tying but excluding difficult zippers and bows he cannot see. |
| During a meal or snack time | the child feeds himself and uses utensils | correctly on every occasion. |

LANGUAGE SKILLS

| | | |
|---|---|---|
| Given a cue | the child recites the alphabet | in consecutive order 100% correctly. |
| Given a cue | the child counts from one to ten | within 30 seconds. |
| After listening to a seven word sentence | the child imitates the sentence | 100% correctly. |
| Given a pencil, a piece of paper with a horizontal line on it, and a cue | the child writes his first name | on the horizontal line including all the letters of his first name, with the first letter upper case and the rest lower case, with no reversals of letters. |
| Given a series of four pictures and one complete sentence about the first 3 pictures and a prompt | the child says one complete sentence about the fourth picture | with at least a subject and verb agreeing in number, as judged acceptable by at least 2 independent observers. |
| Given a sequence of pictures leading to a predictable event and one complete sentence about each picture and a cue | the child tells the probable outcome | so that it is judged acceptable by at least 2 independent observers. |
| Given a series of four pictures in non-systematic order and a cue | the child arranges the pictures in order | within 30 seconds. |

| | | |
|---|---|---|
| Given any set of objects not exceeding ten | the child tells how many objects are in the set | 100% correctly. |
| Given printed upper case alphabet letters in non-systematic order | the child names each letter | within 3 seconds for at least 90% of the letters. |
| Given printed lower case alphabet letters in non-systematic order | the child names each letter | within 3 seconds for at least 90% of the letters. |
| Given printed numbers 1-10 | the child names each number | within 3 seconds, 100% correctly. |
| Given a spoken word and a cue | the child tells the initial consonant sound of the word | for at least 9 of the 19 words. |
| Given five questions related to a story read aloud | the child answers the questions | at least 80% correct as judged by at least 2 independent observers. |

MOTOR SKILLS

| | | |
|---|---|---|
| Given a pair of scissors and a circle outlined on a piece of paper | the child cuts out the circle | within a ½" margin of error. |
| Given a pair of scissors | the child holds the scissors | so that the thumb is in the top hole and the index or index and middle fingers are in the second hole. |
| Given a cue and a model | the child walks | for a distance of 10 feet so that he pushes off with the ball and toes of one foot, swings knee and ankle forward, transfers weight to ball and toe of foot swinging forward, alternates right and left without breaking sequence, swings arms in opposition to legs, and points toes straight ahead. |

| | | |
|---|---|---|
| Given a cue and a model | the child runs | for a distance of 10 feet so that he pushes off with ball and toes of one foot, raises knee of foot moving forward, both feet leave ground, alternates right and left without breaking sequence, swings arms in opposition to legs, and points toes straight ahead. |
| Given a cue and a model | the child jumps on two feet | for a distance of 10 feet so that both feet leave the floor and land simultaneously. |
| Given a cue and a model | the child gallops | for a distance of 10 feet so that he steps forward on one foot, draws the other foot to side of supporting foot and puts weight on it, and the same foot always leads. |
| Given a cue and a model | the child skips | for a distance of 10 feet so that he steps forward one one foot, hops on same foot, steps forward on opposite foot, hops on that foot, swings arms in opposition to legs, and does not break sequence. |
| Given a cue and a model | the child hops on one foot | three consecutive times with the same foot leaving the ground and landing, and the other foot remaining in the air. |
| Given a cue and a model | the child walks on a one inch wide tape | for a distance of 10 feet with the heel of one foot touching the toe of the other foot and so that the tape is covered by the feet. |

| | | |
|---|---|---|
| When thrown an eight inch ball from a distance of six feet | the child catches the ball | so that it does not hit the floor before or after it reaches his hands, at least 80% of the throws. |
| Given an eight inch ball, a target person six feet away and a cue | the child throws the ball | so that it hits or will hit the target person between the shoulders and knees without the target person extending his arms to either side to catch the ball, reaching forward or bending down to catch the ball, at least 80% of the tries. |

PERCEPTION SKILLS

| | | |
|---|---|---|
| Given a cue | the child names and points to each of his body parts (head, eyes, nose, mouth, chin, forehead, hair, teeth, tongue, lips, eyebrow, cheek, neck, shoulder, chest, stomach, back, arm, elbow, wrist, finger, thumb, leg, knee, ankle, foot, toe) | within 5 seconds for at least 80% of the body parts listed. |
| Given a cue | the child recognizes and names each of the eight basic colors (red, blue, green, yellow, orange, purple, brown, black) | within 5 seconds for 100% of the colors listed. |

| | | |
|---|---|---|
| Given a cue | the child demonstrates directional concepts (right/left, up/down, over/under, on/off, above/below, in/out, around/through, first/middle,/last) | within 5 seconds for at least 80% of the concepts listed. |
| Given a cue | the child recognizes and names each of four basic shapes (circle, square, triangle, rectangle) | within 5 seconds for at least 3 of the 4 shapes. |
| Given a blank piece of paper, a pencil, and a cue | the child draws a person | including head, eyes, nose, mouth, hair, body, arms, legs, hands, and feet. |
| Given a three and a four beat rhythm pattern | the child imitates each pattern | within 5 seconds 100% correctly. |

Appendix iv



CHILD'S NAME_____ DATE_____

ADMINISTERED BY_____ START TIME_____

FINISH TIME_____

## GENERAL PROCEDURES FOR SOCIAL AND SELF-CARE INVENTORY

1. Check the test packet before going out to observe. Materials included are:
   a) Lotto game
   b) Book: The Witch Next Door
   c) Stopwatches (for you and observer)
   d) Two decks of cards, one red and one blue
   e) Ten blank sheets of paper
   f) Two boxes of crayons
   g) Play dough
   h) Shirt (with buttons, snap)
   i) Jacket (with zipper)
   j) Shoe (with laces)
   k) Fork, knife, spoon, bowl, plate
   l) Two large pieces of construction paper

2. Remember to put the child's name and date on the cover sheet.

3. Give all directions slowly and exactly as they appear on the inventory. Speak clearly.

4. Give no other prompts unless they are indicated in the procedures on the inventory. Repeat the directions if the child says "what" or "huh".

5. Praise the child for following the procedures correctly or for completing tasks. Praise can be given after any item is finished. Ignore all aggressive speech or inappropriate verbalizations. For transition between items and to retain the child's attention, it is appropriate to say "Now" or "Are you ready" or say the child's name.

6. Use the stopwatch to measure length of time the child attends during items 2 and 6.

7. In the right-hand margin, record the occurance of inappropriate behaviors such as interrupting ongoing conversation or activity, use of aggressive speech or actions, crying or whining without physical reason, and self-stimulating behaviors (see below).

## DEFINITIONS AND OBSERVATION SHEET FOR OBSERVER

1. Did the child interrupt conversation or the ongoing activities more than two times when in a group? _____

2. Did the child initiate aggressive speech during the session (e.g. swearing, threatening speech)? _____

3. Did the child initiate aggressive actions toward you or the materials (e.g. hit you, damage materials by throwing, tearing, marking)? _____

4. Did the child cry or whine for no physical reason before, during or after the session? _____

5. Did the child engage in any self-stimulating behaviors (e.g. thumbsucking, rocking) to such an extent that attention to other activities was precluded? _____

**ITEM 1:** RESPONDS VERBALLY AND WITH EYE CONTACT **OBSERVATIONS**

Ask the child the following questions and record the child's verbal response or "no response" if child does not speak. Record a "+" if child has eye contact with you (looks at you) during or after you speak.

A) "What's your name?"

_____EYE CONTACT____

B) "How old are you?"

_____EYE CONTACT____

C) "Do you go to school?"

_____EYE CONTACT____

D) "Do you have any brothers or sisters?"

_____EYE CONTACT____

E) "What's your favorite thing to play with?"

_____ EYE CONTACT____

**ITEM 2:** PARTICIPATES IN A DIRECTED ACTIVITY

Begin by having a practice game. Give each child one board from the Lotto game and place cards face down in a pile on the table. Say "_____, take a card from the pile and see if it looks the same as a picture on your board. If it does put the card on top of the picture. If it doesn't look the same as any picture on your board, put the card back in the pile. Good. Now it's _____'s turn." Repeat directions as necessary until children are playing game without prompts. Then put all cards back in pile and say, "Now I want you to play until I tell you to stop. You may start now. _____ _____, you go first." Record start time below.

Measure the child's attending (face oriented to task or partner) by running a stopwatch when the child is attending and stopping the stopwatch when the child is not attending. When the twenty minutes are up, record stop time and the number of minutes accumulated on the stopwatch. If either child completes a board, say "_____ has filled his board." Give the child another board. Say "Keep playing the game."

**OBSERVATIONS**

_____start time _____# minutes attending

_____finish time _____% attending

ITEM 3: FOLLOWS TWO-STEP DIRECTION

Place book to be read (ITEM 4) on a chair or table across the room while children are playing game. When game is over say, "_____ & _____, please finish putting all the cards back in the box, and (tested child's name), after you have finished putting all the cards away, bring me the book over there." (You may specify where the book is.) When the child completes the second task say, "Thank you."

_____Record a "+" if the child initiates task one within five seconds. Record a "0" if child does not initiate task within five seconds (requires extra prompt).

_____Record a "+" if child completes task one before beginning task two. Record a "0" if child does not.

ITEM 4: VOLUNTEERS VERBAL RESPONSE OBSERVATIONS

Read The Witch Next Door to the two children. Read slowly and clearly. Do not ask any questions or make any comments during the story except:

A) after reading page 8, pause 3 seconds, then say, "What funny looking pets." Wait 3 seconds and continue reading.

B) after reading page 15, pause 3 seconds, say, "What a funny way to sleep." Wait 3 seconds and continue reading.

C) after reading page 26, pause 3 seconds, say, "I guess she's a good witch." Wait 3 seconds and continue reading.

_____Record a "+" if child volunteers at least one verbal response related to the story during or immediately after reading.

ITEM 5: COMPLETES COOPERATIVE TASK

Scatter two decks of cards over the floor and say, "I want both of you to sort out these cards into two piles. Put the blue cards here and the red cards here." Begin the task by placing one red card and one blue card in separate piles. Give the children a maximum of 3 minutes to complete the task.

_____Record a "+" if the child collects at least ten cards and stacks them. Record a "0" if child does not stack at least 10 cards.

ITEM 6: ATTENDS TO INDEPENDENT ACTIVITY OBSERVATIONS

Place the following materials on the table where the children will be seated:

10 sheets of paper 2 boxes crayons
playdough

Say, "Each of you may play with the playdough and the crayons and paper by yourself until I tell you to stop. Use the large piece of paper if you use the playdough. Please do not talk to each other." Record start time below. Measure the child's attending (face oriented to task, not partner) by running a stopwatch when the child is attending and stopping the stopwatch when the child is not attending. When ten minutes are up, record stop time below and the number of minutes accumulated on the stopwatch.

_____Start time

_____Stop time

_____# Minutes attending

_____% Attending

# SELF-CARE INVENTORY

**ITEM 1:** DRESSES SELF

Give the child the article of clothing indicated below and ask him to do the following. Record a "+" or "0" for the child's response.

_____Please put on this shirt. Thank you.
_____Please button the shirt. Thank you.
_____Please snap the snap on the shirt. Thank you.
_____Please unsnap the snap on the shirt. Thank you.
_____Please unbutton the shirt. Thank you.
_____Please take off the shirt. Thank you.
_____Please put on this jacket. Thank you.
_____Please zip the zipper. Thank you.
_____Please unzip the zipper. Thank you.
_____Please take off the jacket. Thank you.
_____Please put on this shoe. Thank you.
_____Please tie the laces on the shoe. Thank you.
_____Please untie the laces. Thank you.
_____Please take off the shoe. Thank you.

**ITEM 2:** FEEDS SELF

Set a place at the table for the child as if he were going to have dinner. Put a lump of playdough on the plate and say to the child, "Pretend this is a piece of meat. Use your knife and fork to cut the meat."

_____Record a "+" if the child holds on to the handle of the knife and cuts through playdough with sharp side of blade cutting through to bottom of plate. Record a "0" if child does not use knife correctly.

Say, "Now use your fork and make believe you are going to eat the meat."

_____Record a "+" if child holds on to handle.
Record a "0" if child does not hold fork correctly.

Replace the plate with the bowl and say, "Pretend there is soup in this bowl. Pick up the spoon and make believe you are going to taste the soup."

_____Record a "+" if child holds on to the handle of spoon with the convex side parallel to and facing the table. Record a "0" if the child does not hold the spoon correctly.

SOCIAL AND SELF-CARE INVENTORY SCORE SHEET

CHILD'S NAME _____ DATE TESTED _____

TESTED BY _____ SECOND OBSERVER _____

SCORED BY _____ SCORING RELIABILITY BY _____

| SOCIAL SKILLS | SCORE | 2ND OB. | SCORING REL. |
|---|---|---|---|
| 1. Responds verbally | | | |
| 2. Responds with eye contact | | | |
| 3. Participates in directed activity | | | |
| 4. Follows two-step direction | | | |
| 5. Completes one task before beginning next | | | |
| 6. Volunteers verbal response | | | |
| 7. Works cooperatively to complete task | | | |
| 8. Attends to independent activity | | | |
| 9. Interrupts ongoing activity | | | |
| 10. Aggressive speech | | | |
| 11. Aggressive actions | | | |
| 12. Cries or whines | | | |
| 13. Engages in self-stimulation behaviors | | | |
| SCORE | | | |

| SELF-CARE SKILLS | | | |
|---|---|---|---|
| 1. Dresses Self | | | |
| 2. Feeds Self | | | |
| SCORE | | | |

Appendix v

MINIMUM OBJECTIVES SEQUENCED

FOR THE KINDERGARTEN YEAR



Social, Motor, Self-Care Skills

| | | |
|---|---|---|
| * 1 When in a group | the child participates in a directed activity | for at least 80% of a 20 minute interval. |
| ** 1.0 Given 2 or more children, a card game or board game with rules (e.g., Old Maid, Candyland) and adult proximity with no contingent attention | the child plays the game with the other child(ren) | according to the rules of the game for at least 80% of a 20 minute interval without aggressive actions/ verbalizations or emotional outbursts (e.g., crying, screaming) or self-stimulation behaviors which preclude attention to the game. |
| K.8 Given 2 or more children, a card game or board game with rules (e.g., Old Maid, Candyland) and with adult near table and contingent attention only at end of interval | the child plays the game with the other child(ren) | according to the rules of the game for at least 80% of a 20 minute interval without aggressive actions/ verbalizations or emotional outbursts (e.g., crying, screaming) or self-stimulation behaviors which preclude attention to the game. |
| [illegible] Given 2 or more children, a card game or board game with rules (e.g., Old Maid, Candyland) and with adult near table and contingent attention on intermittent schedule | the child plays the game with the other child(ren) | according to the rules of the game for at least 80% of a 20 minute interval without aggressive actions/ verbalizations or emotional outbursts (e.g., crying, screaming) or self-stimulation behaviors which preclude attention to the game. |

* Boxed objectives correspond to the minimum objectives for first grade entry, terminal objectives for kindergarten.

** Numbers preceding each enabling objective pertain to the grade and month of the school year when the objective should be achieved.

| | | |
|---|---|---|
| K.4<br>Given 2 or more children, a card game or board game with rules (e.g., Old Maid, Candyland) and with adult near table and contingent attention on an intermittent schedule | the child plays the game with the other child(ren) | according to the rules of the game for at least 80% of a 15 minute interval without aggressive actions/ verbalizations or emotional outbursts (e.g., crying, screaming) or self-stimulation behaviors which preclude attention to the game. |
| K.3<br>Given 2 or more children, a card game or board game with rules (e.g., Old Maid, Candyland) and with adult seated at table and contingent attention on a continuous schedule | the child plays the game with the other child(ren) | according to the rules of the game for at least 80% of a 15 minute interval without aggressive actions/ verbalizations or emotional outbursts (e.g., crying, screaming) or self-stimulation behaviors which preclude attention to the game. |
| K.2<br>Given 2 or more children, a card game or board game with rules (e.g., Old Maid, Candyland) and with adult seated at table and contingent attention on an intermittent schedule | the child plays the game with the other child(ren) | according to the rules of the game for at least 80% of a 10 minute interval without aggressive actions/ verbalizations or emotional outbursts (e.g., crying, screaming) or self-stimulation behaviors which preclude attention to the game. |
| K.0<br>Given 2 or more children, a card game or board game with rules (e.g., Old Maid, Candyland) and with adult seated at table and contingent attention on a continuous schedule | the child plays the game with the other child(ren) | according to the rules of the game for at least 80% of a 10 minute interval without aggressive actions/ verbalizations or emotional outbursts (e.g., crying, screaming) or self-stimulation behaviors which preclude attention to the game. |

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| 2 Given a prompt | the child attends to an independent activity | for at least 80% of a 10 minute interval. |
| Given a work table, an adult assigned activity, play materials (e.g., puzzle, clay, drawing materials, books) and no occasions of adult attention contingent upon attending and adult supervision | the child attends to the material | according to the directions for at least 80% of a 10 minute interval and such that progress is made toward completion of the assigned activity. |
| K.8<br>Given a work table, an adult assigned activity, play materials (e.g., puzzle, clay, drawing materials, books) with adult near table and contingent attention only at end of interval | the child attends to the material | according to the directions for at least 80% of a 10 minute interval and such that progress is made toward completion of the assigned activity. |
| K.6<br>Given a work table, an adult assigned activity, play materials (e.g., puzzle, clay, drawing materials, books) with adult near table and contingent attention on an intermittent schedule | the child attends to the material | according to the directions for at least 80% of a 10 minute interval and such that progress is made toward completion of the assigned activity. |
| K.4<br>Given a work table, an adult assigned activity, play materials (e.g., puzzle, clay, drawing materials, books) with adult near table and contingent attention on an intermittent schedule | the child attends to the material | according to the directions for at least 80% of a 10 minute interval and such that progress is made toward completion of the assigned activity. |
| K.3<br>Given a work table, an adult assigned activity, play materials (e.g., puzzle, clay, drawing materials, books) with adult near table and contingent attention on an intermittent schedule | the child attends to the material | according to the directions for at least 80% of a 5 minute interval and such that progress is made toward completion of the assigned activity. |

| | | |
|---|---|---|
| K.2<br>Given a work table, an dult assigned activi-cy, play materials (e.g., puzzle, clay, drawing materials, books) with adult seated at table and contingent attention on an intermittent schedule | the child attends to the material | according to the directions for at least 80% of a 5 minute interval and such that progress is made toward completion of the assigned activity. |
| K.0<br>Given a work table, an adult assigned activity, play materials (e.g., puzzle, clay, drawing materials, books) with adult seated at table and contingent attention on a continuous schedule | the child attends to the material | according to the directions for at least 80% of a 5 minute interval and such that progress is made toward completion of the assigned activity. |
| 3 Given a two-step direction | the child begins to follow the direction | within 5 seconds. |
| Given the direction to leave the work area, find a specific item (e.g., a book, article of clothing, etc.) and bring it to the work area with the adult staying at work area and one occasion of contingent attention (Thank you!) | the child leaves the area to begin the task | within 5 seconds and such that the task is completed within one minute. |
| K.8 & K.6<br>Given the direction to leave the work area, find a specific item (e.g., a book, article of clothing, etc.) and bring it to the work area with adult not accompanying the child and contingent attention on an intermittent schedule | the child leaves the area to begin the task | within 5 seconds and such that the task is completed within one minute. |
| K.4<br>Given the direction to leave the work area, find a specific item (e.g., a book, article of clothing, etc.) and bring it to the work area with adult accompanying the child for ¼ of the distance and contingent attention on an intermittent schedule | the child leaves the area to begin the task | within 5 seconds and such that the task is completed within one minute. |

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|---|---|---|
| K.2<br>Given the direction to leave the work area, find a specific item (eg, a book, article of clothing, etc.) and bring it to the work area with adult accompanying the child and contingent attention on an intermittent schedule | the child leaves the area to begin the task | within 5 seconds and such that the task is completed within one minute. |
| K<br>Given the direction to leave the work area, find a specific item (e.g., a book, article of clothing, etc.) and bring it to the work area with adult accompanying the child and contingent attention on a continuous schedule | the child leaves the area to begin the task | within 5 seconds and such that the task is completed within one minute. |
| 4 When in a group | the child volunteers verbal responses | at least one time during each session. |
| Given 2 or more children an adult, a story read by an adult, a discussion of the story with no adult prompt and no contingent attention | the child volunteers verbal responses | at least once during the session such that the response is related to the story content and/or the discussion. |
| K.6, K.8<br>Given 2 or more children, an adult, a story read by an adult, a discussion of the story with no adult prompt and with contingent attention | the child volunteers verbal responses | at least once during the session such that the response is related to the story content and/or the discussion. |
| K, K.2, K.4<br>Given 2 or more children, an adult, a story read by an adult, a discussion of the story with adult prompt and contingent attention | the child volunteers verbal responses | at least once during the session such that the response is related to the story content and/or the discussion. |

| | | |
|---|---|---|
| 5 Given two tasks to complete | the child completes one task | before beginning the next. |
| Given directions to complete two tasks (e.g., completing a puzzle and constructing a clay figure) in an order such that the least preferred task is to be completed first with an adult in room and with no contingent attention | the child completes the least preferred task | before beginning the next task. |
| K.6, K.8<br>Given directions to complete two tasks (e.g., completing a puzzle and constructing a clay figure) in an order such that the least preferred task is to be completed first with adult in room and with contingent attention on an intermittent schedule | the child completes the least preferred task | before beginning the next task. |
| K.2, K.4<br>Given directions to complete two tasks (e.g., completing a puzzle and constructing a clay figure) in an order such that the least preferred task is to be completed first with adult seated beside child and with contingent attention on an intermittent schedule | the child completes the least preferred task | before beginning the next task. |
| K<br>Given directions to complete two tasks (e.g., completing a puzzle and constructing a clay figure) in an order such that the least preferred task is to be completed first with adult seated beside child and with contingent attention on continuous schedule | the child completes the least preferred task | before beginning the next task. |

| | | |
|---|---|---|
| 6 Given a group assigned task | the child works with other children to complete the assigned task | in a cooperative manner. |
| 1.0<br>Given two or more children and directions to complete a task (e.g., Pick up two scrambled decks of cards and place in two separate piles with numbered and face sides down.) with adult in room and with no contingent attention | the child works with other children to complete the assigned task | such that each child shares in completion of the task and there are no aggressive actions /verbalizations or emotional outbursts (e.g., crying, screaming) or self-stimulation behaviors which preclude attention to the game. |
| K.6, K.8<br>Given two or more children and directions to complete a task (e.g., Pick up two scrambled decks of cards and place in two separate piles with numbered and face sides down.) with adult in room and with contingent attention on an intermittent schedule | the child works with other children to complete the assigned task | such that each child shares in completion of the task and there are no aggressive actions/verbalizations or emotional outbursts (e.g., crying, screaming) or self-stimulation behaviors which preclude attention to the game. |
| K.2, K.4<br>Given two or more children and directions to complete a task (e.g., Pick up two scrambled decks of cards and place in two separate piles with numbered and face sides down.) with adult beside child and with contingent attention on an intermittent schedule | the child works with other children to complete the assigned task | such that each child shares in completion of the task and there are no aggressive actions/verbalizations or emotional outbursts (e.g., crying, screaming) or self-stimulation behaviors which preclude attention to the game. |
| K<br>Given two or more children and directions to complete a task (e.g., Pick up two scrambled decks of cards and place in two separate piles with numbered and face sides down.) with adult beside child and with contingent attention on a continuous schedule | the child works with other children to complete the assigned task | such that each child shares in completion of the task and there are no aggressive actions/verbalizations or emotional outbursts (e.g., crying, screaming) or self-stimulation behaviors which preclude attention to the game. |

| | | |
|---|---|---|
| 7 & 8 When spoken to | the child responds verbally and with eye contact | on 100% of the occasions. |
| K.8<br>Given the questions "what is your name?" "Where do you live?" "What is your telephone number?" | the child says his name, street address, town and telephone number and has eye contact | on every occasion. |
| K.6<br>Given the questions "What is your name?" "Where do you live?" "What is your telephone number?" and contingent attention on an intermittent schedule | the child says his name, street address, town and telephone number and has eye contact | on every occasion. |
| K.4<br>Given the questions "What is your name?" "Where do you live?" "What is your telephone number?" and contingent attention on a continuous schedule | the child says his name, street address, town and telephone number and has eye contact | on every occasion. |
| K.2<br>Given the questions "Do you go to school?" or "Do you have any brothers or sisters?" and contingent attention | the child says yes or no and has eye contact | on every occasion. |
| K.1<br>Given a greeting by an adult and contingent attention | the child says "Hello or its equivalent and has eye contact | on every occasion. |
| K<br>Given the questions "Do you go to school?" or "Do you have any brothers or sisters?" and contingent attention | the child nods his head to indicate yes or no and has eye contact | on every occasion. |

| | | |
|---|---|---|
| 9 When in a group | the child interrupts the discussion | no more than two times during the session. |
| Given 2 or more children, an adult, a story read by an adult, a discussion of the story with no adult prompt and no contingent attention for volunteering responses | the child interrupts the discussion | Fewer than two times during the session such that the interruption is not related to the story content and/or the discussion. |
| K.6, K.8<br>Given 2 or more children, an adult, a story read by an adult, a discussion of the story with no adult prompt and with contingent attention for volunteering responses | the child interrupts the discussion | fewer than two times during the session such that the interruption is not related to the story content and/or the discussion. |
| K, K.2, K.4<br>Given 2 or more children, an adult, a story read by an adult, a discussion of the story with adult prompt and contingent attention for volunteering responses | the child interrupts the discussion | fewer than two times during the session such that the interruption is not related to the story content and/or the discussion. |

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|---|---|---|
| 10 During any time of the day | the child initiates aggressive speech | on no occasions. |

Included in criteria for #6 and #1.

| | | |
|---|---|---|
| 11 During any time of the day | the child initiates aggressive actions | on no occasions. |

Included in criteria for #6 and #1.

| | | |
|---|---|---|
| 12 During any time of the day when there is no physical reason | the child cries or whines | on no occasions. |

Included in criteria for #6 and #1.

| | | |
|---|---|---|
| 13 During any time of the day | the child engages in self-stimulation behaviors | without precluding attention to the ongoing activity. |

Included in criteria for #6 and #1.

| | | |
|---|---|---|
| 14<br>Given the child's need to urinate or defecate | the child uses the toilet | every time and without assistance with clothing such that there are no occasions of wetting or soiling and clothes are arranged and secured properly. |
| K.6, K.8<br>Given the child's need to urinate or defecate and one occasion of contingent attention | the child uses the toilet | every time and without assistance with clothing such that there are no occasions of wetting or soiling and clothes are arranged and secured properly. |
| K.2, K.4<br>Given the child's need to urinate or defecate and adult proximity and contingent attention on an intermittent schedule | the child uses the toilet | every time and without assistance with clothing such that there are no occasions of wetting or soiling and clothes are arranged and secured properly. |

| | | |
|---|---|---|
| K<br>Given the child's need to urinate or defecate and adult proximity and contingent attention on a continuous schedule | the child uses the toilet | every time and without assistance with clothing such that there are no occasions of wetting or soiling and clothes are arranged and secured properly. |
| 15 When necessary | the child dresses himself | including buttoning, snapping, zipping, and typing but excluding difficult zippers and bows he cannot see. |
| Given clothing (coat, boots, hat, mittens, shoes, sweater) | the child puts on and takes off clothing and puts clothing away | such that buttons, snaps, zippers and ties are secured when clothes are put on and clothes are in proper place when pu away. |
| K.6, K.8<br>Given clothing (coat, boots, hat, mittens, shoes, sweater) and one occasion of contingent attention | the child puts on and takes off clothing and puts clothing away | such that buttons, snaps, zippers and ties are secured when clothes are put on and clothes are in proper place when put away. |
| K.2, K.4<br>Given clothing (coat, boots, hat, mittens, shoes, sweater) and adult proximity and contingent attention on an intermittent schedule | the child puts on and takes off clothing and puts clothing away | such that buttons, snaps, zippers and ties are secured when clothes are put on and clothes are in proper place when put away. |
| K<br>Given clothing (coat, boots, hat, mittens, shoes, sweater) and adult proximity and contingent attention on a continuous schedule | the child puts on and takes off clothing and puts clothing away | such that buttons, snaps, zippers and ties are secured when clothes are put on and clothes are in proper place when put away. |

| | | |
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| 16 During a meal or snack time | the child feeds himself and uses utensils | correctly on every occasion. |
| 1.0<br>Given food and a table setting including a fork, knife, spoon, plate bowl, glass and contingent attention on an intermittent schedule | the child feeds himself | using the given utensils correctly (e.g., penholder grasp for fork and spoon, knife and fork for cutting) with spilling of food on no more than one occasion every three meals. |
| K.6, K.8<br>Given food and a table setting including a fork, knife, spoon, plate, bowl, glass and contingent attention on an intermittent schedule (and retrogressive chaining procedures when necessary) | the child feeds himself | using the given utensils correctly (e.g., penholder grasp for fork and spoon, knife and fork for cutting) with spilling of food on no more than one occasion every other meal. |
| K, K.2, K.4<br>Given food and a table setting including a fork, knife, spoon, plate, bowl, glass and contingent attention on an intermittent schedule (and retrogressive chaining procedures when necessary) | the child feeds himself | using the given utensils correctly (e.g., penholder grasp for fork and spoon, knife and fork for cutting) with spilling of food on no more than one occasion every meal. |

| | | |
|---|---|---|
| 17 Given a pair of scissors and a circle outlined on a piece of paper | the child cuts out the circle | within a ½" margin of error. |
| 1.0<br>Given a pair of blunt ended scissors and a 6" diameter circle outlined on an 8½" x 11" paper and one occasion of contingent praise | the child cuts out the circle | within a ½" margin of error and the scissors are held such that the thumb is in the upper hole and the index or index and middle fingers are in the lower hole. |

| | | |
|---|---|---|
| K.6, K.8<br>Given a pair of blunt ended scissors and a 6" diameter circle outlined on an 8½" x 11" paper and with intermittent contingent praise, modeling and chaining as necessary | the child cuts out the circle | within a ½" margin of error and the scissors are held such that the thumb is in the upper hole and the index or index and middle fingers are in the lower hole. |
| K.2, K.4<br>Given a pair of blunt ended scissors and an arc bisecting an 8½" x 11" paper and with intermittent contingent praise, modeling and chaining as necessary | the child cuts along the arc | within a ½" margin of error and the scissors are held such that the thumb is in the upper hole and the index or index and middle fingers are in the lower hole. |
| K<br>Given a pair of blunt ended scissors and a blue line bisecting an 8½" x 11" paper with intermittent contingent praise, modeling and chaining as necessary | the child cuts along the line | within a ½" margin of error and the scissors are held such that the thumb is in the upper hole and the index or index and middle fingers are in the lower hole. |
| 18 Given a pair of scissors | the child holds the scissors | so that the thumb is in the top hole and the index or index and middle fingers are in the second hole. |

Included in MO 17 criteria.

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|---|---|---|
| 9 Given a cue and a model with no contingent attention | the child walks | for a distance of 10 feet so that he pushes off with the ball and toes of one foot, swings knee and ankle forward, transfers weight to ball and toe of foot swinging forward, alternates right and left without breaking sequence, swings arms in opposition to legs, and points toes straight ahead. |

Achieved by 4 years of age.
(See Grad MO's)

| | | |
|---|---|---|
| 20 Given a cue and a model | the child runs | for a distance of 10 feet so that he pushes off with ball and toes of one foot, raises knee of foot moving forward, both feet leave ground, alternates right and left without breaking sequence, swings arms in opposition to legs, and points toes straight ahead. |

Achieved by 4 years.
(See Grad MO's)

| | | |
|---|---|---|
| 21 Given a cue and a model with no contingent attention | the child jumps on two feet | for a distance of 10 feet so that both feet leave the floor and land simultaneously. |

Achieved by 4 years.
(See Grad MO's)

| | | |
|---|---|---|
| 22 Given a cue and a del | the child gallops | for a distance of 10 feet so that he steps forward on one foot, draws the other foot to side of supporting foot and puts weight on it, and the same foot always leads. |
| K.6, K.8<br>Given a cue and a model | the child balances | on one foot, transfers weight to ball of other foot momentarily and repeats five times. |
| K.2, K.4<br>Given a cue and a model | the child balances | one one foot, for at least 2 seconds by the age of 3½ years. |
| K<br>Given a cue and a model | the child walks up and down stairs | leading with the same foot on each step with a rhythmic motion. |
| 23 Given a cue and a model | the child skips | for a distance of 10 feet so that he steps forward on one foot, hops on same foot, steps forward on opposite foot, hops on that foot, swings arms in opposition to legs, and does not break rhythmic sequence. |
| K.6, K.8<br>Given a cue and a model | the child skips | for a distance of 10 feet so that he steps forward on one foot, hops on same foot, steps forward on opposite foot, hops on that foot, swings arms in opposition to legs, but breaks sequence in a rhythmic sequence. |
| K.2, K.4<br>Given a cue and a model | the child hops on one foot and then the other foot | for a distance of 10 feet so that he hops on one foot and then on the other in a rhythmic alternate sequence. |

| | | |
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| Given a cue and a model | the child hops on one foot | three consecutive times with the same foot leaving the ground and landing, and the other foot remaining in the air. |
| 24 Given a cue and a model | the child hops on one foot | three consecutive times with the same foot leaving the ground and landing and the other foot remaining in the air. |

Included in MO #23 - skipping.

| | | |
|---|---|---|
| 25 Given a cue and a model | the child walks on a one inch wide tape | for a distance of 10 feet with the heel of one foot touching the toe of the other foot and so that the tape is covered by the feet. |
| K.8, K.6<br>Given a cue and a model | the child walks on a one inch wide tape | for a distance of 5 feet with the heel of one foot touching the toe of the other foot and so that the tape is covered by the feet. |
| K.4, K.2<br>Given a cue and a model | the child walks on a one inch wide tape | for a distance of 10 feet so that the tape is covered by the feet. |
| K<br>Given a cue and a model | the child walks on a one inch wide tape | for a distance of 5 feet so that the tape is covered. |
| 26 When thrown an eight inch ball from a distance of six feet | the child catches the ball | so that it does not hit the floor before or after it reaches his hands on four of five throws. |

| | | |
|---|---|---|
| K.8<br>When thrown an eight inch ball from a distance of five feet | the child catches the ball | so that it does not hit the floor before or after it reaches his hands on four of five throws. |
| K.6<br>When thrown an eight inch ball from a distance of four feet | the child catches the ball | so that it does not hit the floor before or after it reaches his hands on four of five throws. |
| K.4<br>When thrown an eight inch ball from a distance of three feet | the child catches the ball | so that it does not hit the floor before or after it reaches his hands on four of five throws. |
| K.2<br>When thrown an eight inch ball from a distance of two feet | the child catches the ball | so that it does not hit the floor before or after it reaches his hands on four of five throws. |
| K<br>When thrown an eight inch ball from a distance of one foot | the child catches the ball | so that it does not hit the floor before or after it reaches his hands on four of five throws. |

| | | |
|---|---|---|
| 27<br>.0 Given an eight inch ball, a target person six feet away and a cue | the child throws the ball | so that it hits or will hit the target person between the shoulders and knees without the target person extending his arms to either side to catch the ball, reaching forward or bending down to catch the ball on four of five tries. |
| K.8<br>Given an eight inch ball, a target person five feet away and a cue | the child throws the ball | so that it hits or will hit the target person between the shoulders and knees without the target person extending his arms to either side to catch the ball, reaching forward or bending down to catch the ball on four of five tries. |
| K.6<br>Given an eight inch ball, a target person four feet away and a cue | the child throws the ball | so that it hits or will hit the target person between the shoulders and knees without the target person extending his arms to either side to catch the ball, reaching forward or bending down to catch the ball on four of five tries. |
| K.4<br>Given an eight inch ball, a target person three feet away and a cue | the child throws the ball | so that it hits or will hit the target person between the shoulders and knees without the target person extending his arms to either side to catch the ball, reaching forward or bending down to catch the ball on four of five tries. |

| | | |
|---|---|---|
| Given a cue "What is this?" and "Point to your _____." | the child names and points to body parts (head, eyes, nose, mouth, chin, forehead, hair, teeth, tongue, lips, eyebrow, cheek, neck, shoulder, chest, stomach, back, arm, elbow, wrist, finger, thumb, leg, knee, ankle, foot, toe) | within 5 seconds for at least 21 of the 27 body parts. |
| K.8, K.6<br>Given a cue "What is this?" and "Point to your ____." | the child names and points to body parts (head, eyes, nose, mouth, chin, forehead, hair, teeth, tongue, lips, eyebrow, cheek, neck, shoulder, chest, stomach, back, arm, elbow, wrist, finger, thumb, leg, knee, ankle, foot, toe) | within 5 seconds for at least 18 of the 27 body parts. |
| K.4, K.2<br>Given a cue "What is this?" and "Point to your ____." | the child names and points to body parts (head, eyes, nose, mouth, chin, forehead, hair, teeth, tongue, lips, eyebrow, cheek, neck, shoulder, chest, stomach, back, arm, elbow, wrist, finger, thumb, leg, knee, ankle, foot, toe) | within 5 seconds for at least 15 of the 27 body parts. |
| K<br>Given a cue "What is this?" and "Point to your _____." | the child names and points to body parts (head, eyes, nose, mouth, chin, forehead, hair, teeth, tongue, lips, eyebrow, cheek, neck, shoulder, chest stomach, back, arm, elbow, srist, finger, thumb, leg, knee, ankle, foot, toe) | within 5 seconds for at least 12 of the27 body parts. |

| | | |
|---|---|---|
| 2<br>Given an eight inch ball, a target person two feet away and a cue | the child throws the ball | so that it hits or will hit the target person between the shoulders and knees without the target person extending his arms to either side to catch the ball, reaching forward or bending down to catch the ball on four of five tries. |
| K<br>Given an eight inch ball, a target person one foot away and a cue | the child throws the ball | so that it hits or will hit the target person between the shoulders and knees without the target person extending his arms to either side to catch the ball, reaching forward or bending down to catch the ball on four of five tries. |
| 29.<br>Given a cue | the child recognizes and names each of the eight basic colors (red, blue, green, yellow, orange, purple, brown, black) | within 5 seconds for the colors listed. |
| K.8, K.6<br>Given a cue<br>"What color is this?" | the child recognizes and names basic colors (red,blue, green, yellow, orange, purple, brown, black) | within 5 seconds for at least six of the colors listed. |
| K.4, K.2<br>Given a cue<br>"What color is this?" | the child recognizes and names basic colors (red, blue, green, yellow, orange, purple, brown, black) | within 5 seconds for at least four of the colors listed. |
| K<br>Given a cue<br>'What color is this?" | the child recognizes and names basic colors (Red, blue, green, yellow, orange, purple, brown, black) | within 5 seconds for at least two of the colors listed. |

| | | |
|---|---|---|
| 30 | | |
| ven a cue (e.g., "Show ... your right hand.") | the child demonstrates directional concepts (right/left, up/down, over/under, on/off, above/below, in/out, around/through, first/ middle,/last) | within 5 seconds for at least 13 of the concepts listed. |
| K.8, K.6<br>Given a cue (e.g., "Show me your right hand.") | the child demonstrates directional concepts (right/left, up/down, over/under, on/off, above/below, in/out, around/through, first/ middle,/last) | within 5 seconds for at least 10 of the concepts listed. |
| K.4, K.2<br>Given a cue (e.g., "Show me your right hand.") | the child demonstrates directional concepts (right/left, up/down, over/under, on/off, above/below, in/out, around/through, first/ middle,/last) | within 5 seconds for at least 8 of the concepts listed. |
| K<br>Given a cue (e.g., "Show me your right hand.") | the child demonstrates directional concepts (right/left, up/down, over/under, on/off, above/below, in/out, around/through, first/ middle/last) | within 5 seconds for at least 6 of the concepts listed. |
| 31 | | |
| Given a cue (i.e., "What is this called?") | the child recognizes and names the basic shapes (circle, square, triangle, rectangle) | within 5 seconds for at least 3 of the 4 shapes. |
| K.6, K.8<br>Given a cue (i.e., "What is this called?") | the child recognizes and names the basic shapes (circle, square, triangle, rectangle) | within 5 seconds for at least 2 of the 4 shapes. |
| K, K.2, K.4<br>Given a cue (i.e., What is this called?") | the child recognizes and names the basic shapes (circle, square, triangle, rectangle) | within 5 seconds for one of the four shapes. |

| | | |
|---|---|---|
| 32 | | |
| Given a blank piece of paper, a pencil and a cue (e.g."Draw a person. It can be a man, a woman, a boy or a girl.) | the child draws a person | including 10 body parts (head, eyes, nose, mouth, hair, body, arms, legs, hands and feet). |
| K.8, K.6 | | |
| Given a blank piece of paper, a pencil and a cue (e.g., "Draw a person. It can be a man, a woman, a boy or a girl.) | the child draws a person | including 8 of the 10 body parts (head, eyes, nose, mouth, hair, body, arms, legs, hands and feet). |
| K.4, K.2 | | |
| Given a blank piece of paper, a pencil and a cue (e.g., "Draw a person. It can be a man, a woman, a boy or a girl.) | the child draws a person | including 6 of the 10 body parts (head, eyes, nose, mouth, hair, body, arms, legs, hands and feet). |
| K | | |
| Given a blank piece of paper, a pencil and a cue (e.g., "Draw a person. It can be a man, a woman, a boy or a girl.) | the child draws a person | including 4 of the 10 body parts (head, eyes, nose, mouth, hair, body, arms, legs, hands and feet). |
| 33 | | |
| 1.0 | | |
| Given a three and a four beat rhythm pattern (fingers beating on table.) | the child imitates each pattern | within 5 seconds 100% correctly. |
| K.8, K.6 | | |
| Given a two and a three beat rhythm pattern (e.g., Fingers beating on table.) | the child imitates each pattern | within 5 seconds 100% correctly. |
| K.4, K.2 | | |
| Given a two beat rhythm pattern (e.g., Fingers beating on table.) | the child imitates | within 5 seconds 100% correctly. |
| Given one beat (e.g., Fingers beat on table.) | the child imitates | within 5 seconds 100% correctly. |

| | | |
|---|---|---|
| 34 | | |
| Given a toothbrush (e.g., Oral B Junior size), toothpaste and water | the child will brush all his tooth surfaces (occlusal, facial and lingual) | such that dental plaque is not seen on the enamel surfaces after rinsing with a disclosing solution (e.g., Trace). |
| K.8<br>Given a toothbrush (e.g., Oral B Junior size), toothpaste and water | the child will brush all occlusal and facial portions of the teeth | such that dental plaque is not seen on the enamel surfaces after rinsing with a disclosing solution (e.g., Trace). |
| K.4, K.6<br>Given a toothbrush (e.g., Oral B Junior size), toothpaste and water | the child will brush the anterior facial portions and occlusal surfaces of the teeth | such that dental plaque is not seen on the enamel surfaces after rinsing with a disclosing solution (e.g., Trace). |
| K, K.2<br>Given a toothbrush (e.g., Oral B Junior size), toothpaste and water | the child will brush the occlusal surfaces of the teeth | such that dental plaque is not seen on the enamel surfaces after rinsing with a disclosing solution (e.g., Trace). |

# LANGUAGE SKILLS *

K.1

| | | |
|---|---|---|
| Given a 3 word sentence, "Today is Monday" | the child will repeat the sentence | with no errors. |
| Given 2 objects of clearly different sizes and a prompt | the student will point to the larger or smaller object | with 100% accuracy on every occasion. |
| Given a cue from the teacher | the child will sing the alphabet song | with 50% accuracy. |
| Given samples of 8 basic colors | the child will name the colors | with 100% accuracy |
| Given a pencil and a piece of paper | the child will print his first name | with the first letter upper case and following letters in lower case and such that the letters are within a box 2" wide and 9" long. |

*These objectives are sequenced by the month for the kindergarten year. (e.g. K-1 means these objectives should be achieved by the end of September, K.2-end of October, etc.)

.2

| | | |
|---|---|---|
| Given 4 presentations of a set of 4 pictures and a sentence (with a maximum of seven words) for each picture | the child will recite the sentences | with no errors. |
| Given two objects of different lengths and a prompt | the student will point to the shorter or longer | with 100% accuracy on every occasion. |
| Given two persons or objects of clearly different heights and a prompt | the student will point to the taller or the shorter | with 100% accuracy on every occasion. |
| Given a cue from the teacher | the child will sing the alphabet song | with 100% accuracy. |
| Given a pencil and a piece of paper | the child will print his first name | with the first letter upper case and following letters lower case and such that the letters are correctly formed and within a box 1½" wide and 8" long. |
| Given the 4 basic shapes | the child will name each shape | with 100% accuracy. |

K.3

| | | |
|---|---|---|
| Given repetition of a 4 line poem on 4 consecutive days and a cue | the child will recite the poem | with no errors. |
| Given a cue from the teacher | the child will count out loud from 1 to 5 | with 100% accuracy. |
| Given two objects in different vertical planes and a prompt | the student will point to the higher/lower | with 100% accuracy on every occasion. |
| Given two objects in different vertical planes and a prompt | the student will point to an object as being over or under the other | with 100% accuracy on every occasion. |
| Given a set of objects placed in a pattern | the student will place the next object in the pattern | with 100% accuracy. |
| Given a piece of paper and a pencil | the child will print his first name | with the initial letter in the upper case and the rest in lower case with correctly formed letters on primary writing paper. |
| Given a cue from the teacher | the child will recite the alphabet | with 100% accuracy. |
| Given a cue and a full length mirror | the child points to and names parts of his body that are visable including head, eyes, nose, mouth chin, forehead, hair, teeth, tongue, lips, eyebrows, cheek, neck, shoulder, chest, stomach, | at least 80% correctly. |

K-3 (Cont'd.)

back, arm, elbow, wrist,
finger, thumb, leg, knee,
ankle, foot, toe

K.4

| | | |
|---|---|---|
| Given a cue from the teacher | the child will count out loud | from 1 to 10. |
| Given 5 pairs of rhyming words in picture form | the child will pair the 10 pictures | with 80% accuracy. |
| Given a set of 3 objects in which 1 is "different", and a verbal cue | the child will designate the object that is different | with 100% accuracy. |
| Given 2 sets of upper case letters | the child will match like letters | with no more than 6 errors. |
| Given 2 sets of lower case letters | the child will match like letters | with no more than 6 errors. |
| Given a number of objects | the child will count and tell how many | for any number less than 5. |
| Given the set of upper case alphabet letters in random order | the child will name the letters correctly | within 3 seconds and with 75% accuracy. |

K.5

| | | |
|---|---|---|
| iven 2 sets of 10 objects (pencils, crayons, letters, circles) | the child will match like objects | with 100% accuracy. |
| Given a set of 3 objects in which 2 are the "same" and a verbal cue | the child will designate the two similar objects | with 100% accuracy. |
| Given a cue from the teacher | the child will count out a directed number of objects from a pile of objects | for any number less than 10. |
| Given two sets of objects and a prompt | the student can point to the set that has more or less | with 100% accuracy. |
| Given 5 pairs of initial sounds in picture form | the child will pair the 10 pictures | with 80% accuracy. |
| Given the set of upper case alphabet letters in random order | the child will name the letters correctly | within 3 seconds and with 100% accuracy. |
| Given a number of objects | the child will count and tell how many | for any number less than 10. |

K.6

| | | |
|---|---|---|
| Given the numerals 1 through 10 | the child will name the numerals | correctly. |
| Given the set of lower case letters in random order | the child will name the letters correctly | within 3 seconds and with 100% accuracy. |
| Given a cue | the child demonstrates right, left, up, down, in, out, above, below, on, off, around, through, first, middle, last | 80-100% correctly. |

7

| | | |
|---|---|---|
| Given a cue from the teacher | the child will count out loud | from at least 1 to 20. |
| Given a set of upper and lower case letters | the child will match upper and lower case letters | with 100% accuracy. |
| Given the numerals 1 through 5 | the child will write the numerals | correctly. |
| Given a piece of paper and a pencil and primary writing paper | the child will write his first and last name | with correctly formed letters. |

K.8

| | | |
|---|---|---|
| Given the 19 consonants on cards | the child will give the correct sound verbally | for 7 consonants within 3 seconds. |
| Given the numerals 1 through 10 | the child will write the numerals | correctly. |
| Given a cue from the teacher | the child will demonstrate the opposite concept ("What is the <u>opposite</u> of up?") | without prompts. |

K.9

| | | |
|---|---|---|
| Given the 19 consonants on cards | the child will give the correct sound verbally | within 3 seconds for 14 of the consonants. |
| Given the directions to count out a number of objects | the student will place the objects on the table | for any number less than 5. |

.10

| | | |
|---|---|---|
| Given the 19 consonants on cards | the child will give the correct sound verbally | within 3 seconds for all 19 consonants. |
| Given the directions to count out a number of objects | the student will place the objects on the table | for any number less than 10. |

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Appendix vi

# MINIMUM OBJECTIVES SEQUENCED FOR FIRST SIX YEARS

## Language and Perception Minimum Objectives

Burns, J., Getsie, R., Grad, M.
Marcy, C., Wade, M., Knight, M.,
and Lates, B.J., 1972

### Language

| | | |
|---|---|---|
| Given a cue | the child recites the alphabet | in consecutive order with 25% accuracy by age, 3 yrs. 2 mos. |
| Given a cue | the child recites the alphabet | in consecutive order with 50% accuracy by age, 3 yrs. 7 mos. |
| Given a cue | the child recites the alphabet | in consecutive order with 75% accuracy by age, 3 yrs. 9 mos. |
| Given a cue | the child recites the alphabet | in consecutive order with 100% accuracy by age, 3 yrs. 10 mos. |
| Given a cue | the child counts to ten | within 30 seconds by age, 3 yrs. 10 mos. |
| After listening to a 3 word sentence | the child imitates the sentence | with 100% accuracy by age, 2 yrs. 6 mos. |
| After listening to a 1 word sentence | the child imitates the sentence | with 100% accuracy by age, 1 yr. |
| Given a pencil, a piece of paper with a horizontal line and dotted letters of the child's name | the child traces the dots to form the letters | so that each letter is recognized by 2 independent observers and the tracing marks completely cover the model by age, 4 yrs. 4 mos. |
| Given a pencil, a piece of paper with a horizontal line and the child's name printed on the line | the child traces over the letters | so that the tracing marks completely cover the model letters and such that each letter is recognized by 2 independent observers by age, 3 yrs. 10 mos. |

| | | |
|---|---|---|
| Given a crayon, a piece of paper and models of circles and lines | the child traces the circles and lines | so that the tracing completely covers the models and so that 2 independent observers can identify the circles and lines by age, 3 yrs. 3 mos. |
| Given a crayon and a piece of paper | the child scribbles on the paper | such that the paper is not torn or rumpled, by age, 2 yrs. |
| Given a picture with one object familiar to the child | the child say one word | appropriate to the picture by age, 2 yrs. 10 mos. |
| Given a picture with one object familiar to the child | the child makes sound approximations | such that 2 independent observers would agree on what the child is trying to say by age, 2 yrs. 4 mos. |
| Given a recent past event (within one day) | the child will tell about the event with 3 facts | such that the facts are in correct sequence by age, 4 yrs. 10 mos. |
| Given a recent past event (within one day) | the child will tell about the event with 2 facts | such that the facts are in correct sequence, by age 3 yrs. 10 mos. |
| Given a recent past event (within one day) | the child will tell about the event with 1 fact | such that the fact is in correct sequence, by age, 3 yrs. 1 mo. |
| Given a series of 3 pictures in non-systematic order and a cue | the child arranges the pictures in order | within 15 seconds, by age, 4 yrs. 8 mos. |
| Given a series of 2 pictures in non-systematic order and a cue | the child arranges the pictures in order | with 15 seconds, by age, 3 yrs. 10 mos. |

| | | |
|---|---|---|
| Given three pictures and a cue | the child names the pictures | with 100% accuracy by age, 2 yrs. 10 mos. |
| Given sets of 1-8 objects | the child names the objects | with 100% accuracy by age, 5 yrs, 10 mos. |
| Given sets of 1-5 objects | the child names the objects | with 100% accuracy by age, 5 yrs, 5 mo. |
| Given sets of 1, 3 and 3 objects | the child names the objects | with 100% accuracy by age, 4 yrs. 6 mos. |
| Given sets of 1 & 2 objects | the child tells how many objects are in the set | 100% correctly by age, 3 yrs. 6 mos. |
| Given printed upper case alphabet letters in non-systematic order | the child names the letters | 50% correctly by age, 5 yrs. 3 mos. |
| Given printed upper case alphabet letters in non-systematic order | the child names the letters | 25% correctly by age, 4 yrs, 6 mos. |
| Given printed lower case alphabet letters in non-systematic order | the child names the letters | 50% correctly by age, 5 yrs. 5 mos. |
| Given 18 words each beginning with a different consonant sound | the child will tell the beginning sound for each word | with 50% accuracy by age, 5 yrs. 10 mos. |
| Given 18 words each beginning with a different consonant sound | the child will tell the beginning sound for each word | 4 sounds by age 5 yrs. 8 mos. |

| | | |
|---|---|---|
| Given 3 questions including main idea and action questions | the child will answer | 2 of the 3 questions correctly as judged by at least 2 independent observers by age, 4 years 10 mos. |
| Given one question about the main idea | the child will answer | the question correctly as judged by at least 2 independent observers by age 3 yrs 10 mos. |

Perception

| | | |
|---|---|---|
| Given a cue | the child names and points to at least 3 body parts (e.g., eyes, nose mouth) | with 100% accuracy by age, 2 yrs 3 mos. |
| Given a cue | the child names and points to at least 9 body parts | with 100% accuracy by age, 4 yrs. 6 mos. |
| Given a cue | the child names and points to at least 20 body parts | with 100% accuracy by age, 5 years 1 mo. |
| Given a cue | the child names and points to 27 body parts | with 100% accuracy by age, 5 yrs. 10 mos. |
| Given a cue | the child recognizes 3 colors (e.g., red, blue, yellow) | with 100% accuracy, by age 3 yrs. 8 mos. |
| Given a cue | the child recognizes 5 colors | with 100% accuracy by age, 4 yrs. 4 mos. |
| Given a cue | the child recognizes 8 colors | with 100% accuracy, by age 5 yrs. 6 mos. |
| Given a cue | the child demonstrates 3 directional concepts (e.g., up/down, on/off, in/out) | with 100% accuracy, by age 2 yrs. 8 mos. |

| | | |
|---|---|---|
| Given a cue | the child demonstrates at least 6 directional concepts | with 100% accuracy, by age 4 yrs. 6 mos. |
| Given a cue | the child demonstrates at least 8 directional concepts (including right/left) | with 100% accuracy, by age 5 yrs. 10 mos. |
| Given a cue | the child recognizes and names 1 shape (e.g., circle) | with 100% accuracy, by age 3 yrs. 10 mos. |
| Given a cue | the child recognizes and names 3 basic shapes (e.g., circle, square, triangle.) | with 100% accuracy, by age 5 yrs. 1 mo. |
| Given a cue | the child recognizes and names 4 basic shapes (e.g., circle, square, triangle, rectangle) | with 100% accuracy by age, 5 yrs. 10 mos. |
| Given a blank piece of paper, a pencil and a cue | the child draws a person | which is composed of at least three parts (including the head, eyes, mouth), by age 3 yrs. 6 mos. |
| Given a blank piece of paper, a pencil and a cue | the child draws a person | which is composed of at least 6 parts, by age 4 yrs. 6 mos. |
| Given a blank piece of paper, a pencil and a cue | the child draws a person | which is composed of at least 8 parts, by age 5 yrs. 6 mos. |
| Given a 2 beat rhythm pattern | the child imitates the pattern | with 100% accuracy by age 3 yrs. 10 mos. |

| | | |
|---|---|---|
| Given a 2 and a 3 beat rhythm pattern | the child imitates the pattern | with 100% accuracy, by age 4 yrs. 7 mos. |
| Given a 3 and a 4 beat rhythm pattern | the child imitates the pattern | with 100% accuracy, by age 5 yrs. 4 mos. |

## Participation Minimum Objectives

| | | |
|---|---|---|
| Given a child at a B.D. party (or other social gathering) | the child will participate in a directed game/activity | for at least 5 minutes by age 2. |
| Given a child in a nursery school | the child participates in a directed activity | for at least 80% of a 10 minute interval by age 3 |
| Given a child in nursery school | the child participates in a directed activity | for at least 80% of a 15 minute interval by age 4. |
| Given 3 toys | the child will play by himself | for at least a 5-10 minute period with a maximum of 2 prompts by age 2. |
| Given a choice of play materials | the child will play by himself | for at least 10-15 minutes with a maximum of 2 prompts by age 4. |
| Given a prompt | the child attends to an independent activity | for at least 80% of a 10 minute interval by age 5. |
| Given no more than 3 prompts | the child will respond to a 1 step direction (say bye, bye) | within 5 seconds by age 1. |

| | | |
|---|---|---|
| Given a 2 step direction | the child completes the directions | with no prompts by age 3. |
| Given a 3 step direction | the child completes the directions | with no prompts by age 5. |
| During any time of the day | the child asks questions | on at least 3 occasions by age 2. |
| When questioned about his first name and sex | the child will answer the questions | accurately and within 5 seconds by age 3. |
| When in a group | the child volunteers verbal responses | at least once per week by age 4. |
| When in a group | the child volunteers verbal responses | at least three times per week by age 5. |
| Given the prompt to do a task (Pick up your toys.) | the child will begin the task | within 10 seconds by age 2. |
| Given two tasks to complete | the child completes one task | before beginning the next by age 5. |
| Given a non-directed group activity | the child watches the group | with head oriented toward the group for at least 3 out of 5 minutes by age 2. |
| Given a non-directed group activity | the child joins the group | such that he is within 3 feet proximity to the group for 5 out of 10 minutes by age 3. |

| | | |
|---|---|---|
| Given a non-directed group activity | the child joins the group and engaged in the same play behaviors | without disrupting the on-going activity for 10 out of 15 minutes by age 4. |
| Given a group assigned task | the child works with the other children to complete the assigned task | in a cooperative manner by age 5. |

## Social Minimum Objectives

| | | |
|---|---|---|
| When asked questions about his name, the use of a toy and members of his family | the child responds verbally | on at least 80% of the occasions by the age of 3 years. |
| When asked about a recent event | the child responds verbally | with eye contact on at least 80% of the occasions by the age of 4 years. |
| When in a group of peers or adults (2 or more) | the child interrupts the ongoing activity | such that at least one member of the group ceases ongoing activity at a minimum of 2 times during 10 minutes by the age of 15 months. |
| When in a group of peers or adults (2 or more) | the child interrupts the ongoing activity | such that at least one member of the group ceases ongoing activity at a minimum of 2 times during a 15 minute period by the age of 2 years. |

| | | |
|---|---|---|
| When in a group of peers or adults (2 or more) | the child interrupts the ongoing activity | such that at least one member of the group ceases ongoing activity at a minimum of 2 times during a 20 minute period by the age of 4 years. |
| During any time of the day | the child uses inappropriate speech (swearing and threats) | on no more than 2 occasions by the age of 2 years. |
| During any time of the day | the child uses inappropriate speech (swearing and threats) | on no occasions by the age of 4 years. |
| During any time of the day | the child initiates "aggressive actions" (Hitting, kicking, scratching, biting, spitting, throwing and pushing) | on no more than 2 occasions by the age of 1 year. |
| During any time of the day | the child initiates aggressive actions (hitting, kicking, scratching, biting, spitting, throwing and pushing) | on no occasions by the age of 2 years. |
| During any time of the day when there is no physical reason | the child cries or whines | on no more than 2 occasions by the ago of 1 year. |
| During any time of the day when there is no physical reason | the child cries or whines | on no occasions by the age of 3 years. |
| During any time of the day | the child engages in self-stimulative behaviors | without precluding attention to the ongoing activity by the age of 2 years. |

## Motor and Self-Care Minimum Objectives

### WALKING

| | | |
|---|---|---|
| Given a cue and a model | the child walks | for at least a distance of 10 feet in a heel to toe walk so that he pushes off with the ball and toes of one foot, swings knee and ankle forward, transfers weight to ball and toe of foot swinging forward, alternates right and left without breaking sequence, swings arms in opposition to legs, and points toes straight ahead by the age of 4 years. |
| Given a cue and a model | the child walks | for at least 75% of the time in a heel to toe walk without falling stumbling by the age of 4 years. |
| Given a cue and a model | the child walks | in preference to crawling 100% of the time when he is moving from place to place by the age of two years. The child does not necessarily exhibit heel to toe walk. |
| Given a cue | the child stands | alone without falling for at least 2 minutes and attempts walking even though he may fall, by the age of 16 months. |
| Given a cue | the child walks | while holding on to furniture for 50% of the time he is moving from place to place by the age of 12 months. |

| | | |
|---|---|---|
| Given a cue | the child stands | while holding on to a support for 5 seconds by the age of 10 months. |
| Given a cue | the child creeps on hands and knees | to move from one place to another for at least 10 feet by the age of 10 months. |
| Given a cue | the child gets up into a hand-knees position | by himself for at least 1 minute by the age of 9 months. |
| Given a cue | the child crawls on his stomach | for a distance of 3 feet by the age of 7 months. |

RUNNING

| | | |
|---|---|---|
| Given a cue and a model | the child runs | for a distance of ten feet so that he pushes off with ball and toes of one foot, raises knee moving forward, both feet leave ground, alternates right and left without breaking sequence, swings arms in opposition to legs, and points toes straight ahead by the age of 4 years. |
| Given a cue and a model | the child runs | for a distance of ten feet without falling, tripping or bumping by the age of 3 years. |
| Given a cue and a model | the child walks-runs | flat on his feet for three feet by the age of 2½ years. |

(Prior to 2½ years same as walking.)

HOPS ON TWO FEET

| | | |
|---|---|---|
| ven a cue and a model | the child hops on two feet | for a distance of 10 feet so that both feet leave the floor simultaneously by the age of 4 years. |
| Given a cue and a model | the child hops on two feet | for a distance of 5 feet so that both feet leave the floor and land on the floor approximately together by the age of 3½ years. |
| Given a cue and a model | the child hops in place | at least five times so that both feet leave the floor and land approximately simultaneously by the age of 3 years. |

GALLOPING

| | | |
|---|---|---|
| Given a cue and a model | the child gallops | for a distance of 10 feet so that he steps forward on one foot, draws the other foot to side of supporting foot and puts weight on it, and always leads with the same foot by the age of 4 years. |
| Given a cue and a model | the child balances | on one foot, transfers weight to ball of other foot momentarily and repeats five times by the age of 4 years. |
| Given a cue and a model | the child balances | on one foot, for at least 2 seconds by the age of 3½ years. |
| Given a cue | the child walks both up and down | at least 5 stairs leading with the same foot on each step with a rhythmic motion by the age of 3½ years. |

CUTTING CIRCLE

| | | |
|---|---|---|
| Given a pair of scissors and a circle outlined on a piece of paper | the child will cut out the circle | within no more than 1/2" deviation either toward or away from the center of the circle by the age of 6 years. |
| Given a pair of scissors and a paper with a 1/2" cross drawn in black ink on the paper | the child will cut out the cross | not deviating more than 1/4" in any direction from the cross 100% of the time by the age of 5 years. |
| Given a pair of scissors and a paper with a 1/2" line drawn from one side to the other in black ink | the child will cut on the line | within the black line 100% of the time by the age of 4 1/2 years. |
| Given a pair of scissors | the child will hold the scissors | so that the thumb is in the top hole and the index or index and middle fingers are in the second hole by the age of 4 years. |

SELF-CARE

DRESSING

| | | |
|---|---|---|
| When necessary | the child dresses himself | including buttoning, snapping, zipping, and tying but excluding difficult zippers and bows he cannot see by the age of 6 years. |
| When necessary | the child dresses himself | without help except for ties and closures he cannot see by the age of 5 years. |

| | | |
|---|---|---|
| When necessary | the child dresses himself | except for zippers, grippers, ties and closures he cannot see by the age of 4 years. |
| When necessary | the child dresses himself | except for snaps, buttons, zippers, grippers, ties and closures he cannot see 50% of the time by the age of 3 1/2 years. |
| When given a cue | the child helps to dress himself | by holding out his arm for a sleeve, hands for mittens and feet for shoes, etc. by the age of 2 years. |

EATING

| | | |
|---|---|---|
| During a meal or snack time | the child feeds himself and uses his eating utensils | correctly on every occasion by the age of six years. |
| During a meal or snack time | the child feeds himself and uses his eating utensils | properly except for meat cutting on each occasion by the age of 5 years. |
| During a meal or snack time | the child feeds himself and uses his eating utensils | properly except for cutting by the age of 4 years. The child now cuts only soft things with his knife. |
| During a meal or snack time and given only a spoon | the child feeds himself | with minimal spilling when the food is not runny by the age of 3 years. |
| Given a liquid in a cup during meal or snack time | the child picks up, drinks from and replaces the cup on the table | at all times and without spilling by the age of 2 1/2 years. |

| | | |
|---|---|---|
| Given liquid in a cup | the child picks up and drinks from the cup | unassisted and without a straw by the age of 2 years. |
| Given a meal or snack which may be eaten with a spoon | the child will use the spoon | properly by the age of 2 years |
| Given a spoon at meal time | the child holds the spoon and lifts food with it | but is unable to turn the spoon to empty the food i his mouth by the age of 1 year. |
| Given liquid in a cup at meal or snack time | the child picks up the cup and drinks from it | with assistance and with minimal spilling by the age of 1 year. |
| Given a "Finger Food" at snack time or meal time | the child feeds himself | with his hands by the age of 1 year. |

## Toileting and Gross Motor Minimum Objectives

### TOILETING

| | | |
|---|---|---|
| When necessary | the child demonstrates independent proper use of the toilet | 100% of the time by age 6. |
| When necessary | the child demonstrates independent prpoer use of the toilet (includes wiping bottom, flushing toilet, appropriate re-arrangement of clothing, washing and drying hands) | 75% of the time with out assistance and 100% of the time without accidents by age 5. |
| When necessary | the child demonstrates independent proper use of the toilet | 50% of the time with out assistance and 100% of the time without accidents by age 4. |
| When necessary | the child uses the toilet | 25% of the time with out assistance and 75% of the time with out accidents by age |

| | | |
|---|---|---|
| When necessary | the child verbalizes toilet needs | 50% of the timy by age 2. |
| When necessary | the child uses the toilet | with adult assistance 100% of the time and is accident free 50% of the time by age 2. |
| <u>Walking Balance Beam</u> | | |
| Given a cue, a model and a balance beam 10 ft. long, four inches wide and six inches high | the child walks across the balance beam | so that neither foot touches the floor, 100% of the time by age 6. |
| Given a cue, a model and a balance beam 10 ft. long, four inches wide and two inches high | the child walks across the balance beam | so that neither foot touches the floor 100% of the time by age 5. |
| Given a cue, a model and a 2 inch wide tape line on the floor | the child walks placing one foot in front of the other | so that the tape is covered 100% of the time by age 4. |
| Given a cue, a model and a 12 inch aisle outlined by tape on the floor | the child walks between the tapes placing one foot in front of the other | without touching the tape 100% of the time by age 3. |
| <u>Hopping on One Foot</u> | | |
| Given a cue and a model | the child hops on one foot | 3 consecutive times with the same foot leaving the ground and landing and the other foot remaining in the air 100% of the time by age 5. |
| Given a cue and a model | the child hops on one foot | 2 consecutive times with the same foot leaving the ground and landing and the other foot remaining in the air 100% of the time by age 4. |
| Given a cue and a model | the child stands on one foot | for one second by age 3. |

| | | |
|---|---|---|
| iven a cue and a model | the child stands on one foot with other foot off the floor holding on to a support (e.g., chair) | for one second by age 2. |
| **Skipping** | | |
| Given a cue and a model | the child skips for a distance of 10 feet | so that he steps forward on one foot, hops on same foot, steps forward on opposite foot, hops on that foot, swings arms in opposition to legs and does not break sequence 100% of the time by age 5. |
| Given a cue and a model | the child skips in lame duck (hopping) fashion | by age 4. |
| **Catching Ball** | | |
| When thrown an 8 inch ball from a distance of six feet | the child catches the ball | so that it does not hit the floor before or after it reaches his hands at least 80% of the throws by age 6. |
| When thrown a 10 inch ball from a distance of six feet | the child catches the ball with 2 hands | with success 33 1/3% of the time by age 3. |
| **Throwing Ball** | | |
| Given a 5 inch diameter ball | the child throws it | using both hands without aim by age 2. |
| Given an 8 inch diameter ball | the child throws it | using both hands hitting a target six feet away 50% of the time by age 4. |

Appendix vii

CASE STUDIES
1971-1972

Colchester
Martha Knight
Mary Carter
1971-1972

# BURT

## CHILD AND REFERRAL PROBLEM

Burt was a five year old boy with one older brother. His parents reported that Burt did not attend to any activity for more than a few minutes at a time and did not seem ready for school.

## OBJECTIVE 1

| | | |
|---|---|---|
| Given upper and lower case alphabet letters printed on index cards and presented singly | the child names each letter | correctly and within two seconds of presentation. |

## MEASUREMENT PROCEDURES

Each day five letters were presented to Burt by his mother or father. A "+" was recorded for each letter correctly named within two seconds of presentation and a "0" was recorded for no response or an incorrectly named letter. Letters named correctly on two consecutive days were recorded as learned and another letter was presented in its place.

Reliability of measures were obtained weekly by the parent trainer who measured Burt's responses indpendently.

## TEACHING/LEARNING PROCEDURES

During Baseline 1, after the correctness of Burt's letter naming responses was recorded, the cards on which the letters

were printed were shuffled and presented to Burt again. If Burt named the presented letter correctly within a two second interval he was praised and that letter was not presented again that day. If Burt did not name the presented letter correctly within a two second interval that letter was named by the parent and Burt was then asked to name the letter himself, imitating his parent. The same letter was presented again immediately after the next letter in the sequence. Each of the five letters were presented in this manner until all five letters were named correctly on one presentation without the parent's help.

During Contingent Prize 1, conditions were the same as in Baseline 1, except crayons and games were given contingent upon Burt learning a letter. Burt was allowed to choose from a selection of several decoratively wrapped prizes when he named a letter correctly on two consecutive days.

Baseline 2 conditions were the same as for Baseline 1.

Contingent Prize 2 conditions were the same as for Contingent Prize 1.

## RESULTS

During the Baseline 1, Burt learned eight letters during the 34 days, a rate of .2 letters per day.

During Contingent Prize 1, the rate increased to .6 letters per day for the 12 day period.

No letters were learned during the ten days of the Baseline 2 condition.

Thirty three letters were learned during Contingent Prize 2, a rate of .8 letters per day during the 44 days. The parent trainer observations agreed with the observations of the parent

on every occasion.

OBJECTIVE 2

| | | |
|---|---|---|
| Given a prompt | the child attends to an independent work activity | for at least 80% of a 10 minute interval |

MEASUREMENT PROCEDURES

One or both parents recorded the type and frequency of play activity engaged in without interuption for at least ten minutes, (e.g. playing with toy cars, drawing etc.)

TEACHING LEARNING PROCEDURES

When Burt played with the same materials for at least 10 minutes without interuption he was praised.

RESULTS

Burt engaged in one of six different play activities from four to eleven times per week over a seven week period.

— — — — — — — — — — — — — — —

OBJECTIVES 3 and 4

| | | |
|---|---|---|
| Given a cue and a piece of paper and a pencil | the child prints his name | such that the first letter is upper case and the rest lower case and are printed in order and in horizontally correct size and shape. |
| Given a pencil, paper and a cue | the child draws a man | including head, eyes, nose, mouth, hair, body, arms, legs, hands and feet. |

MEASUREMENT PROCEUDRES

Each day for 47 days Burt was asked by his mother to print his first name and draw a picture of a man. Burt's

products were evaluated each week by the home trainer.

TEACHING LEARNING PROCEDURES

Burt was instructed to first trace figures, then copy figures and finally to make figures without a modle. Burt was also instructed to make more detailed figures as his figures improved. Burt was praised each day for meeting or exceeding the criteria.

RESULTS

Letters were traced for the first 13 days and were then printed using a model for the next 31 days. Approximations to the figure of a man were partially traced and partially drawn independently for the first 27 days. Burt achieved the objectives of printing his name and drawing a man independently on the 45th day.

---

OBJECTIVE 5

| | | |
|---|---|---|
| Given a cue | the child recognizes and names the eight basic colors | 100% correctly. |

MEASUREMENT PROCEDURES

For 16 days Burt's mother recorded his correct (+) or incorrect (0) responses to the eight basic colors.

TEACHING LEARNING PROCEDURES

Burt's mother pointed to colors singly on a prepared data sheet. Burt was praised when he correctly named the color to which his mother pointed. When he didn't name the

color within two seconds he was told the name of the color and repeated the name while looking at the color. Colors were pointed to in varying order until Burt correctly named each color within a two second interval.

RESULTS

Burt's percentage of correct responses ranged from 75 to 100 percent for the first six days and maintained at 100 percent for the next ten days.

---

OBJECTIVE 6

| | | |
|---|---|---|
| Given a cue | the child skips | for a distance of at least ten feet. |

MEASUREMENT PROCEDURES

Burt's mother and father recorded his success or failure at skipping approximations for 38 days. Approximations were hopping on the left foot, hopping on the right foot, hopping alternately on the left and right feet, and finally skipping with an even rhythm.

TEACHING LEARNING PROCEDURES

Approximations were first demonstrated by the home trainer, then done with the home trainer and finally done independently. Burt demonstrated at least one successful approximation for his mother each day. Burt was praised for these successful approximations.

RESULTS

Burt was not successful at any approximation for the first

two days. He successfully hopped on his left foot for the next 13 days and on both his left and right feet for the next two days. Burt hopped alternately on the left and right feet for the next nine days and skipped with an even rhythm for the final 12 days.

---

OBJECTIVE 7

| | | |
|---|---|---|
| Given a cue | the child recognizes and names the four basic shapes (circle, square, triangle and rectangle) | at least 75% correctly. |

MEASUREMENT PROCEDURES

For 17 days Burts mother recorded his correct (+) or incorrect (0) responses to the four basic shapes.

TEACHING LEARNING PROCEDURES

Burt's mother pointed to the shapes singly on a prepared data sheet. Burt was praised when he correctly named the shape to which his mother pointed. When he didn't name the shape within two seconds he was told the name of the shape within two seconds he was told the name of the shape and repeated the name while looking at the shape. Shapes were pointed to in varying order until Burt correctly named each shape within a two second interval.

RESULTS

Burts percentages of correct responses ranged from 75 to 100 percent for the first seven days and maintained at 100 percent for the next ten days.

Table 1 shows the scores for specific objectives over eight months.

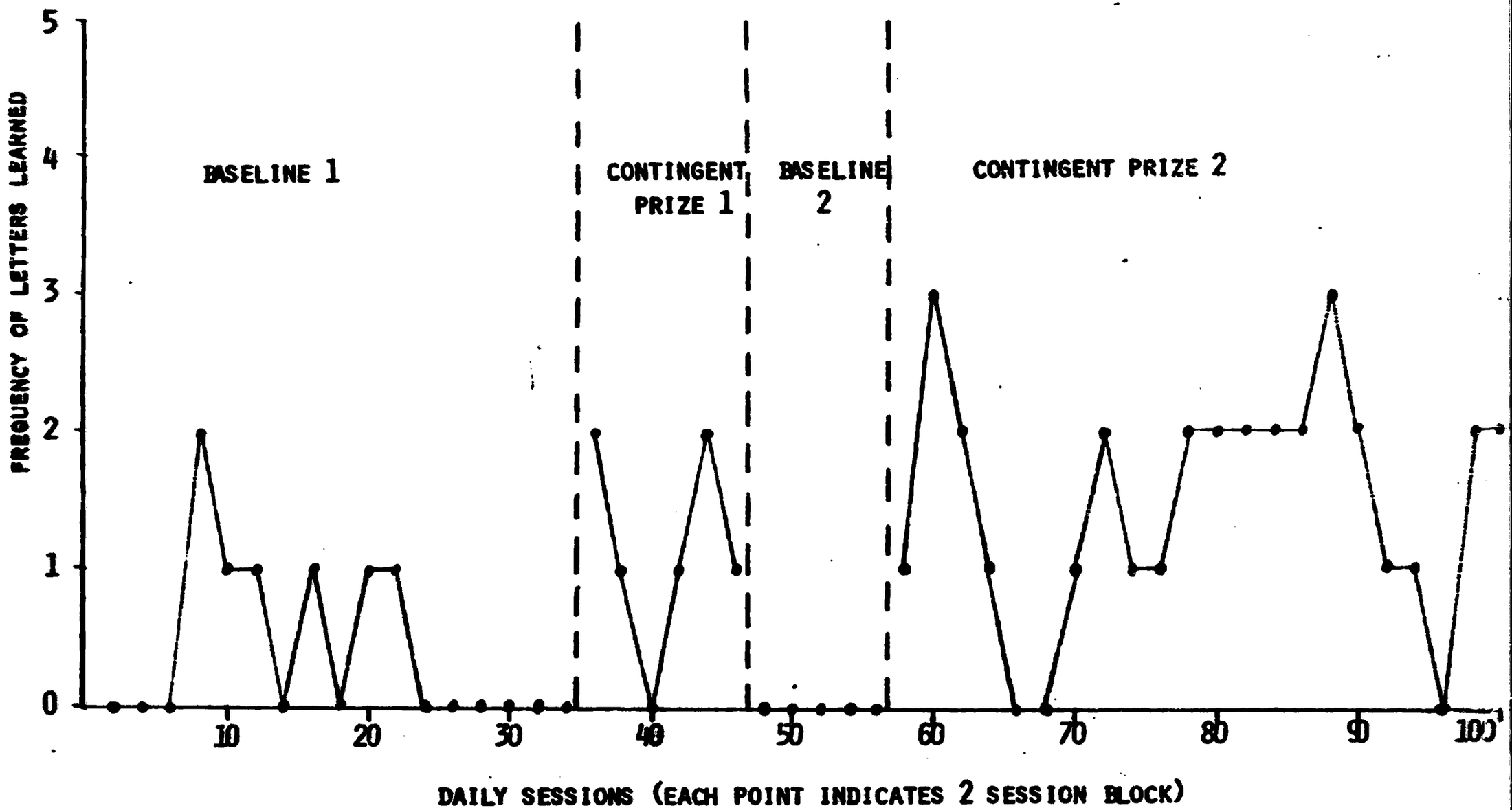
| | February 1972 | September 1972 |
|---|---|---|
| Letter Recognition Upper case | .04 | .62 |
| Letter Recognition Lower Case | .00 | .46 |
| Writing the Name | .00 | .75 |
| Drawing a Man | .00 | .80 |
| Color Recognition | .63 | 1.00 |
| Skipping | .00 | .00 |
| Shape Recognition | .67 | 1.00 |

Table 1

Table 2 shows the overall scores for the EEEP entry level test over eight months.

| February | September |
|---|---|
| 42% | 83% |

Table 2




FREQUENCY OF LETTERS LEARNED (RECOGNIZED CORRECTLY ON TEST ON TWO CONSECUTIVE SESSIONS) DURING DAILY THREE MINUTE SESSIONS.

Colchester
Martha Knight
Mary Carter
1971-1972

# CELIA

## CHILD AND REFERRAL PROBLEM

Celia was a five year old girl with four older brothers and one older sister. Her mother reported that Celia tantrummed and would not dress herself.

Celia attended the Winooski Day Care Center daily. Her teachers reported that she also needed help in interacting with peers as well as learning self-care skills.

Celia received speech therapy at the center provided through a University of Vermont Speech Department graduate student. She was also evaluated by the Child Development Clinic in the Fall of 1971.

## OBJECTIVES

| | | |
|---|---|---|
| During any time of the day when there is no physical reason | the child cries or whines (tantrums) | on no occasions. |
| When necessary | the child dresses herself | including tying, buttoning, snapping, but excluding difficult zippers and bows she cannot see. |
| Given paper, pencil, crayons, clay and story books provided by the home trainer, daily sessions of at least 10 minutes duration and another's or sister's assistance | the child will work with the materials | such that a task is completed (e.g., listening to the entire story, making figure with clay, printing name, drawing picture). |

| | | |
|---|---|---|
| Given a bedtime set at 9:30 p.m. or before and reminders to go to bed | the child will be in her own bed | by 9:30 p.m. and will remain there for the night. |

MEASUREMENT PROCEDURES

Each day Celia's mother or sister recorded a check or comment in the appropriate column on the data sheet if Celia achieved the objective for that day.

TEACHING/LEARNING PROCEDURES

Celia's mother and sister praised Celia each time she met an objective.

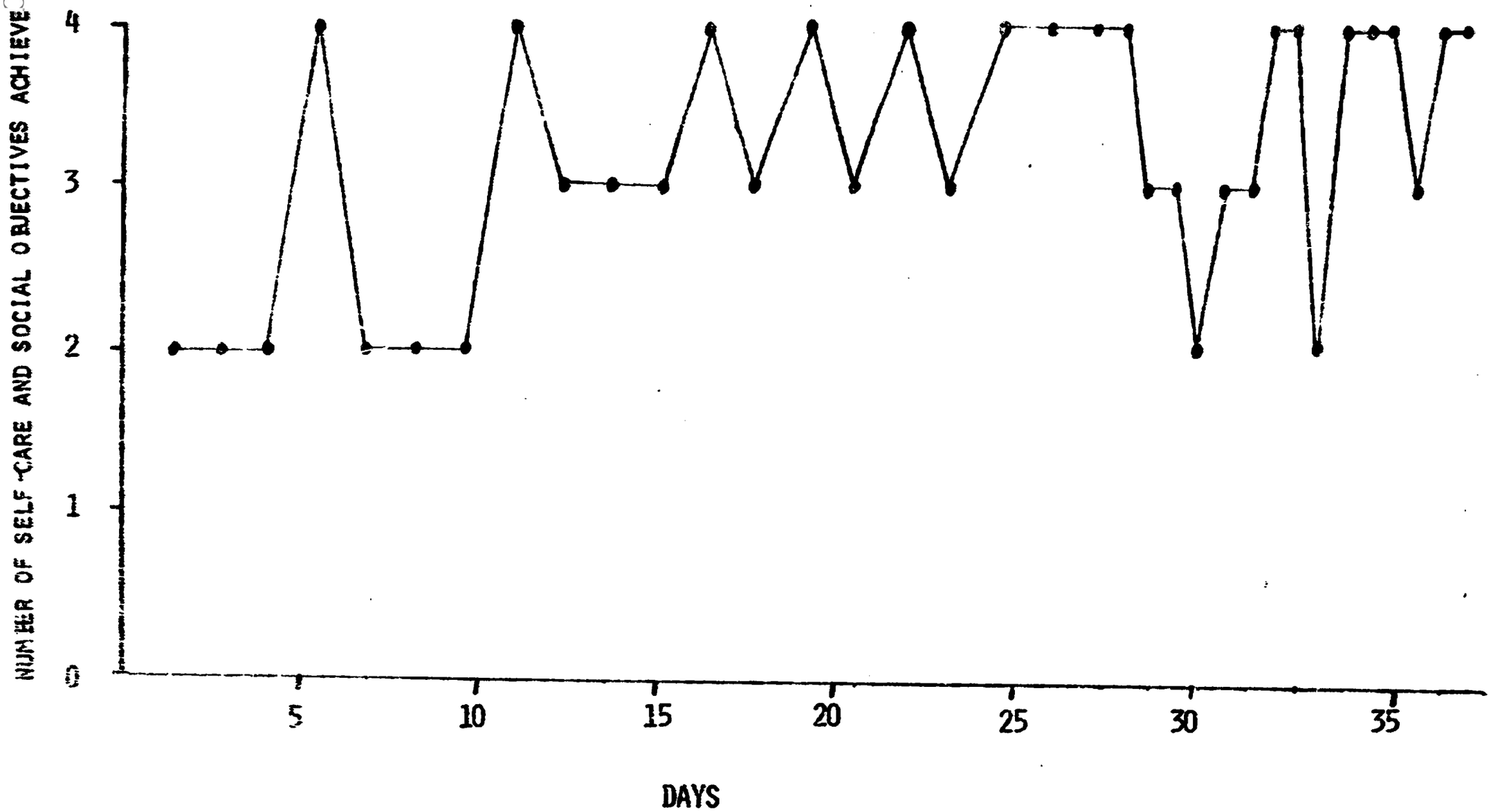
RESULTS

During the first five days of the 36 days an average of 3.4 of the four objectives were achieved each day.

During the last five days of the 36 days an average of 3.8 of the four objectives were achieved each day.

Table 1 shows the overall scores for the EEEP entry level test over eight months.

| January | September |
|---|---|
| 51% | 51% |




NUMBER OF SELF-CARE AND SOCIAL OBJECTIVES (1. NON-TANTRUMMING, 2. DRESSING INDEPENDENTLY, 3. WORKING WITH EEEP MATERIALS, 4. GOING TO BED BY 9:30) ACHIEVED DAILY.

Colchester
Martha Knight
Mary Carter
1971-1972

# MARVIN

## CHILD AND REFERRAL PROBLEM

Marvin was a five year old boy with two older brothers and one younger sister. His parents reported that Marvin had been diagnosed by a neurologist as having an "intentional tremor" which interfered with his learning both fine and gross motor skills. They also reported that Marvin occasionally stood in the middle of a room and "spinned" around rapidly and rocked his body when fatigued.

## OBJECTIVE 1

| | | |
|---|---|---|
| Given a chemical pen, printing exercises in Write and See Book I (Lyons and Carnahan) and five minutes each day | the child traces or copies the model | such that the pen marks are within the specified boundaries. |

## MEASUREMENT PROCEDURES

Marvin's mother monitored the five minutes of writing time with a kitchen timer and recorded the points in the writing book at which he started and stopped each day.

The home trainer later counted the number of responses completed correctly during each five minute session. The number of correct responses was divided by five to obtain rate per minute.

TEACHING/LEARNING PROCEDURES

Marvin's mother stayed in the same room with him for the five minute writing session and praised him for lines that were straight and firm, indicating no tremor. She would say, for instance, "That's a good line!" while pointing at the line. She did not say anything about the lines that were shaky, indicating a tremor.

RESULTS

Marvin's rate of writing responses per minute increased from [illegible] responses per minute in the first session to 11 responses per minute in the last session (day 19).

OBJECTIVE

| | | |
|---|---|---|
| Given a [illegible] chip | the child skips | for a distance of at least ten feet. |

TEACHING PROCEDURES

[illegible] mother directed Marvin to practice the approximations [illegible] skipping designed by the home trainer for the week. She recorded [illegible] check "✓" in the appropriate column when at least [illegible] completed. Approximations practiced during five consecutive weeks were:

- hopping on one foot with mother
- hopping on one foot alone
- hopping on alternate (left, right, left, right, etc.) feet with mother
- hopping on alternate feet alone
- skipping alone

Each week the home trainer determined the approximation to be practiced that week.

## TEACHING/LEARNING PROCEDURES

Marvin's mother praised him following each successful practice trial. Unsuccessful practice trials were followed by practicing an easier approximation. The session was always terminated with a successful trial of the specified approximation.

## RESULTS

Marvin could not skip when directed to do so before the program began. By the fifth week of the program Marvin achieved the objective and could skip.

Table 1 shows the scores for specific objectives over eight months.

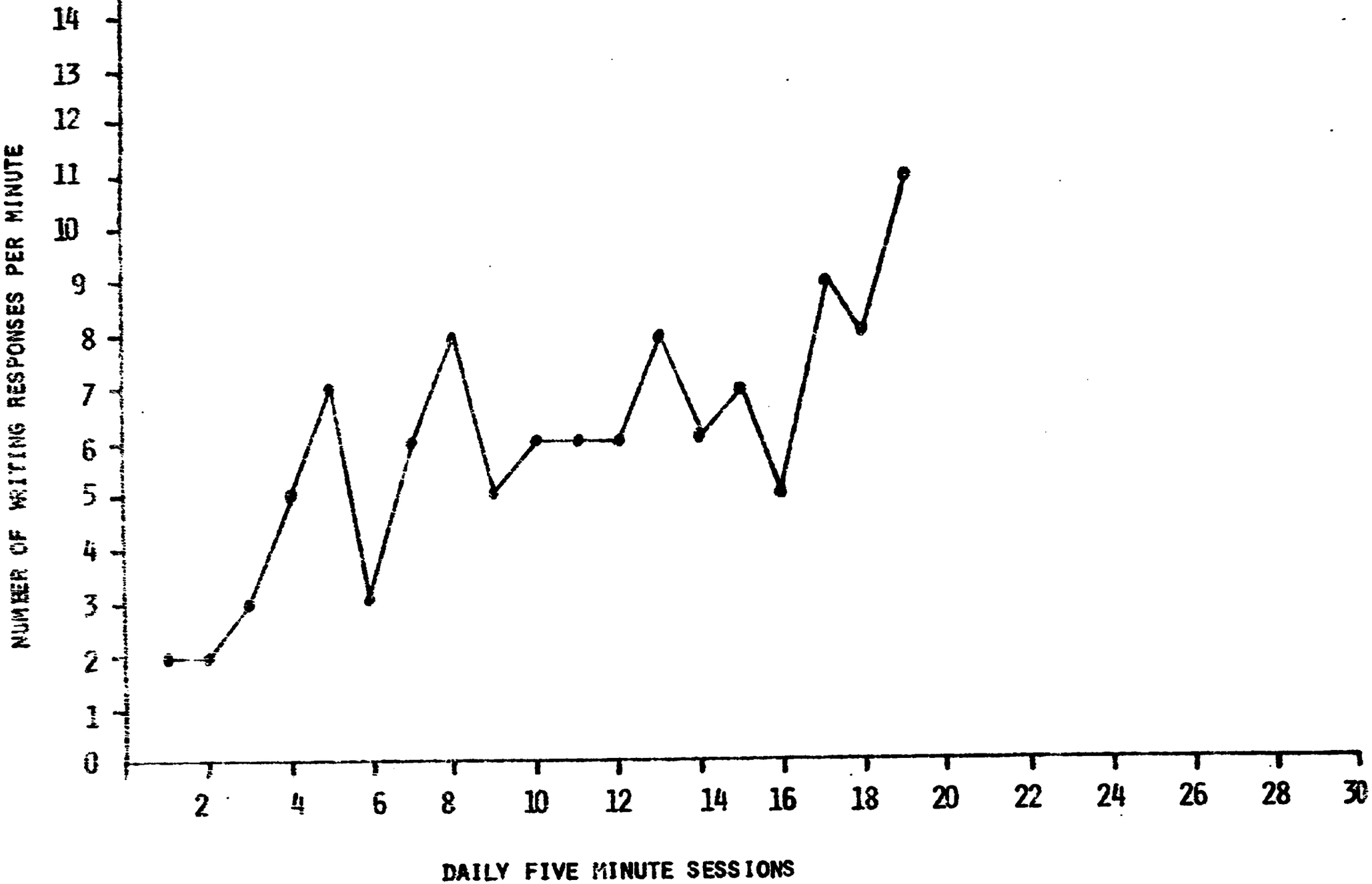
| | January | September |
|---|---|---|
| Skipping | .00 | 1.00 |

Table 1

Table 2 shows the overall scores for the EEEP entry level test over eight months

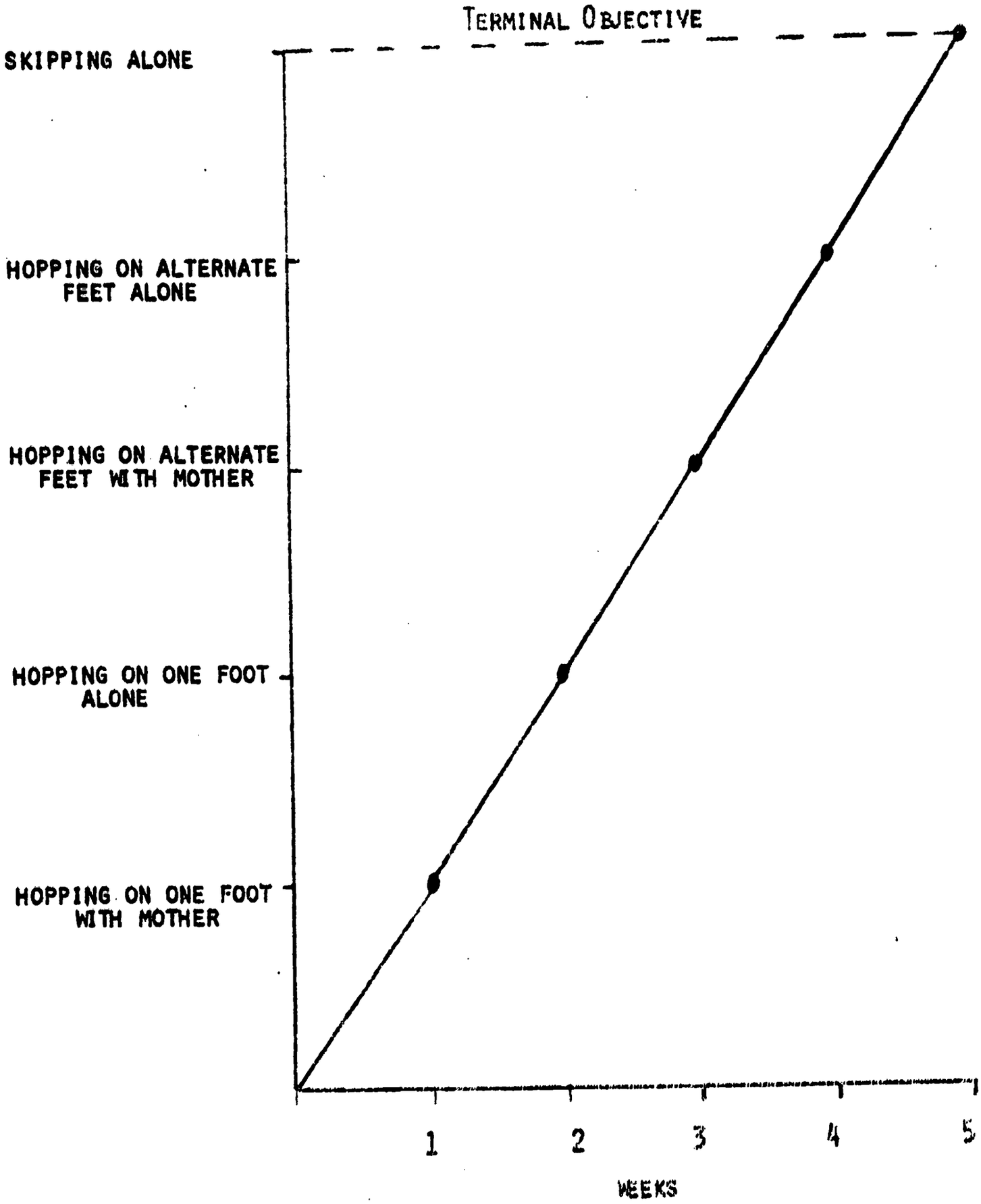
| January | September |
|---|---|
| 77% | 99% |

Table 2




A RECORD OF THE NUMBER OF WRITING RESPONSES DURING DAILY FIVE MINUTE SESSIONS OF A FIVE-YEAR-OLD BOY.

MARVIN




A RECORD OF ACHIEVEMENT OF APPROXIMATIONS TO SKIPPING OF A FIVE-YEAR-OLD BOY.

Colchester
Martha Knight
Mary Carter
1971-1972

# PENNY

## CHILD AND REFERRAL PROBLEM

Penny was a four year old girl with an older brother in school and an infant brother at home. Penny's mother had previously provided home based service for her older son and requested the home trainer help her provide the same service for Penny.

Services were provided to help Penny learn to attend to assigned tasks; listen to stories; follow directions; and name colors, shapes, body parts, number sets, and letters. The procedures utilized to help Penny learn letters is presented here.

## OBJECTIVE

| | | |
|---|---|---|
| Given upper case alphabet letters printed on index cards and presented singly | the child names each letter | correctly and within 2 seconds of presentation. |

## MEASUREMENT PROCEDURES

Each day five letters were presented to Penny by her mother. A "+" was recorded for each letter correctly named within two seconds of presentation and a "0" was recorded for no response or an incorrectly named letter. Letters named correctly on two consecutive days were recorded as learned and another letter was presented in its place.

Reliability of measures were obtained weekly by the parent trainer who measured Penny's responses independently.

TEACHING/LEARNING PROCEDURES

During Baseline 1, after the correctness of Penny's letter naming responses was recorded, the cards on which the letters were printed were shuffled and presented to Penny again. If Penny named the presented letter correctly within a two second interval she was priased and that letter was not presented again that day. If Penny did not name the presented letter correctly within a two second interval that letter was named by Penny's mother and Penny was then asked to name the letter herself, imitating her mother. The same letter was presented again immediately after the next letter in the sequence. Each of the five letters were presented in this manner until all five letters were named correctly on one presentation without the mother's help.

During Contingent Prize 1, conditions were the same as in Baseline 1, except prizes such as trinkets, crayons and games were given contingent upon Penny learning a letter. Penny was allowed to choose from a selection of several decoratively wrapped prizes when she named a letter correctly on two consecutive days.

Baseline 2 conditions were the same as for Baseline 1.

Contingent Prize 2 conditions were the same as for Contingent Prize 1.

RESULTS

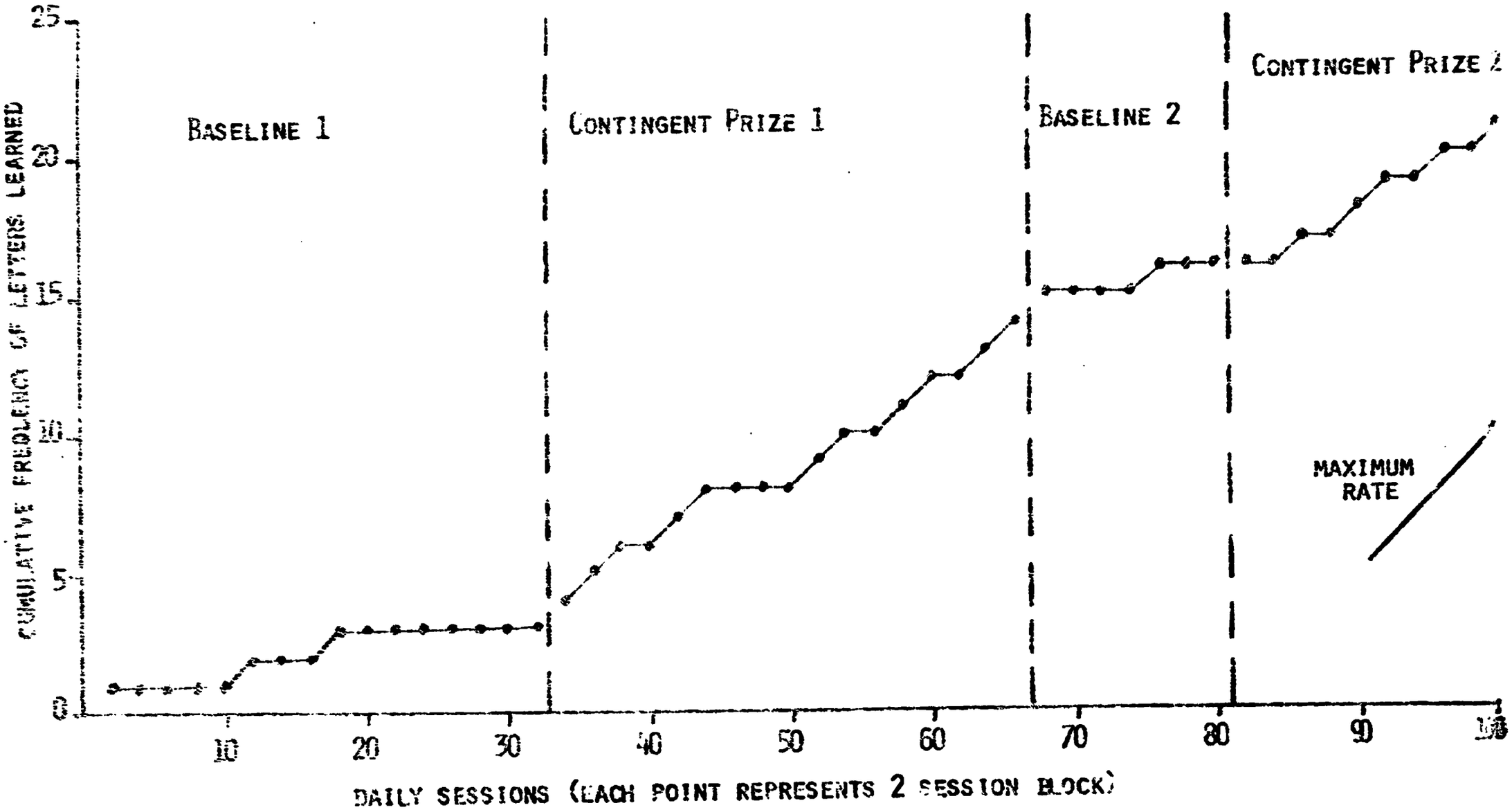
During Baseline 1, Penny learned three letters during the 31 days, a rate of .1 letters per day.

During Contingent Prize 1, the rate increased to .3 for the 17 day period.

One letter was learned during the seven days of Baseline 2, a rate of .1 letters per day.

Five letters were learned during Contingent Prize 2, a rate of .5 letters per day.

The parent trainer observations agreed with the observations of the parent on every occasion.




CUMULATIVE FREQUENCY OF LETTERS LEARNED (RECOGNIZED CORRECTLY ON TEST ON TWO CONSECUTIVE SESSIONS) DURING DAILY THREE MINUTE SESSIONS.

TOMMY



Essex Center
Martha Knight
Mary Carter
1971-1972

CHILD AND REFERRAL PROBLEM

Tommy was a six year old boy with three older and two younger sisters. His parents reported that Tommy needed help in speaking and in learning to get along with both children and adults.

Tommy attended a private kindergarten for six weeks in the fall of 1971 and was expelled because of his disruptive behavior.

In May of 1972 Tommy was evaluated by the Child Development Clinic. He scored 82 on the Wechsler Intelligence Scale for Children.

Tommy subsequently attended the University of Vermont Special Education Program Summer Development School*, the Trinity College Diagnostic Clinic during the 1972-1973 school year & an Essex Center Elementary School first grade during the 1973-1974 school year.

OBJECTIVES 1

| | | |
|---|---|---|
| During the day | the child used polite speech (e.g. "please" thank you", "you're welcome"), shares possessions, and praises siblings and parents | appropriately |

MEASUREMENT PROCEDURES

Tommy's mother and father tallied occasions when Tommy

*Seaver, P. A classroom procedure to decrease disruptive classroom behaviors. Journal of Behavioral Education. 1973, Vol. 2 No. 1, pp. 24-28.

used polite speech, shared possessions or praised others appropriately during the day.

TEACHING LEARNING PROCEDURES

During baseline Tommy was not aware that his parents were observing and recording his behavior.

During the contingency condition the recording sheet was displayed on the kitchen wall and each tally was paired with parental praise. At the end of the day a "similing face" was drawn on the data sheet.

RESULTS

During the three days of baseline Tommy averaged 10 occasions of "good" behaviors each day.

During the 38 days of the contingency condition "good" behaviors ranged from eight to 42 and averaged 38.6 per day for the final ten days of this condition.

---

OBJECTIVE 4

| | | |
|---|---|---|
| During any time of the day | the child uses agressive speech or actions | on no occasions. |

MEASUREMENT PROCEDURES

Two more trainers visited Tommy's home once each week after the evening meal. They tallied independently the number of aggressive statements and the number of agressive actions or statements and the number of times parents attended to good behaviors. (see objective 1)

TEACHING LEARNING PROCEDURES

The home trainers told Tommy's parents each week that they could help Tommy learn to behave by ignoring his aggressive statements and actions and by praising his good behaviors.

On each visit the home trainer praised Tommy's good behaviors and for ignoring his aggressive behaviors.

RESULTS

The frequency of aggressive statements decreased from 25 to 2 during the three week period. The average percentage of agreement between observers for the three visits was 92%.

The frequency of aggressive actions decreased from eight to zero during the three week period. The average percentage of agreement between observers for the three visits was 88%.

The frequency of parental attention for good behaviors increased from zero to three during the three week period. Percentage of agreement between observers was 100%.

The frequency of parental attention for aggressive behaviors decreased from four to zero during the three week period. Percentage of agreement between observers was 100%.

---

OBJECTIVE 3

| | | |
|---|---|---|
| During any time of the day | the child engages in self-stimulatory behaviors that interfere with ongoing activity | on no occasions. |

MEASUREMENT PROCEDURES

Tommy's mother and father recorded the frequency of rocking

behaviors (defined as moving the torso forward and backward in a rhymic mother) throughout the day.

TEACHING LEARNING PROCEDURES

During baseline rocking behavior was ignored.

During the contingency condition Tommy was allowed to play with his toy guns contingent upon no rocking behavior. The toy guns were a gift given to Tommy six months before but taken away immediately because he hit his sister with them. The guns broke on the 29th day of the contingency condition.

RESULTS

During baseline the frequency of rocking behaviors ranged from three to eight and averaged 4.8 for the five day period.

During the 35 days of contingency no rocking behavior was observed.

---

OBJECTIVE 4

| | | |
|---|---|---|
| In spontaneous conversation | the child speaks | with no noticeable articulation or syntax deficit. |

MEASUREMENT PROCEDURES

Tommy's father recorded a 5 minute conversation with his son on audio tape each night after dinner. An independent observer listened to the tapes and calculated daily percentages of verbs for which the correct tense was used, daily percentages of correctly used personal pronouns, daily percentages

of correctly articulated words and daily frequency of repetitious (stuttering).

TEACHING LEARNING PROCEDURES

Tommy's father praised Tommy contingent upon correct articulation of words, use of correct verb tense (past or present), correct use of personal pronouns and no repitious. Incorrect usage was ignored.

Started on the tneth day Tommy's father played a card game, Concentration with Tommy. Pictures were drawn on 3" x 5" cards representing words which Tommy could not articulate correctly. Cards were made in duplicate and placed face down on the table. Tommy and his father took turns turning cards over. A player turned over two cards, identifying each card as it was turned over. (e.g. "This is a violet"). If the word and cards phrase were articulated correctly and if the two cards matched the player was allowed to keep the cards. The player who accumulated the greater number of cards won the game.

RESULTS

Percentages of correctly used personal pronounds increased from an average of 90.2% during the first five days to 100% during the final five days of the 15 day period.

Percentages of correctly used verbs increased from a average of 4% during the first five days to 72.6% during the final five days of the 15 day period.

Percentages of correctly articulated words averaged 66% during the first five days to 69.6% during the final five days.

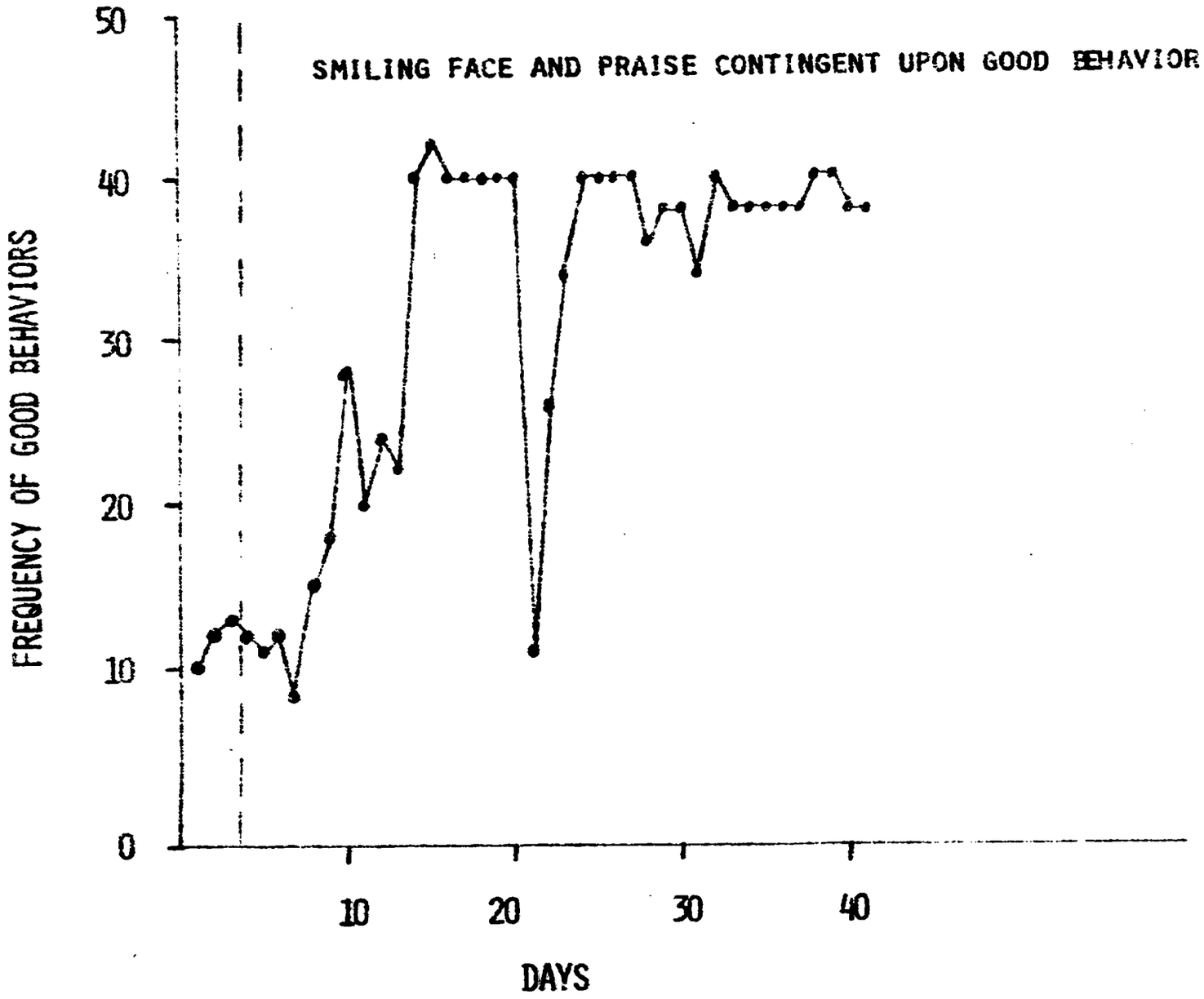
The average number of repetitious (stuttering) during the first five days was three and during the final five days decreased to an average of 1.4.

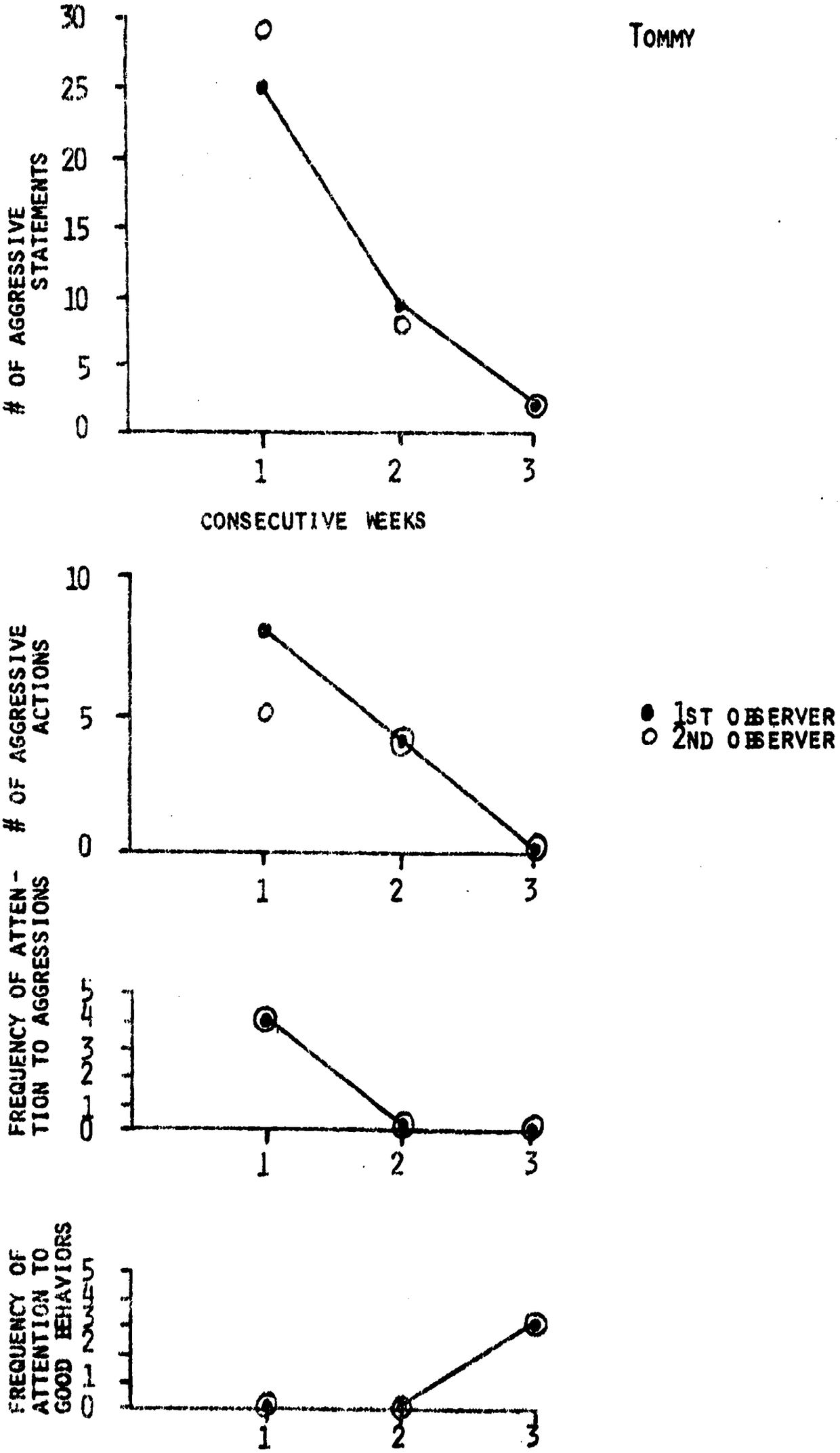
Table 1 shows the overall scores for the EEEP entry level test over eight months.

| January | October |
|---|---|
| 41% | 65% |

Table 1

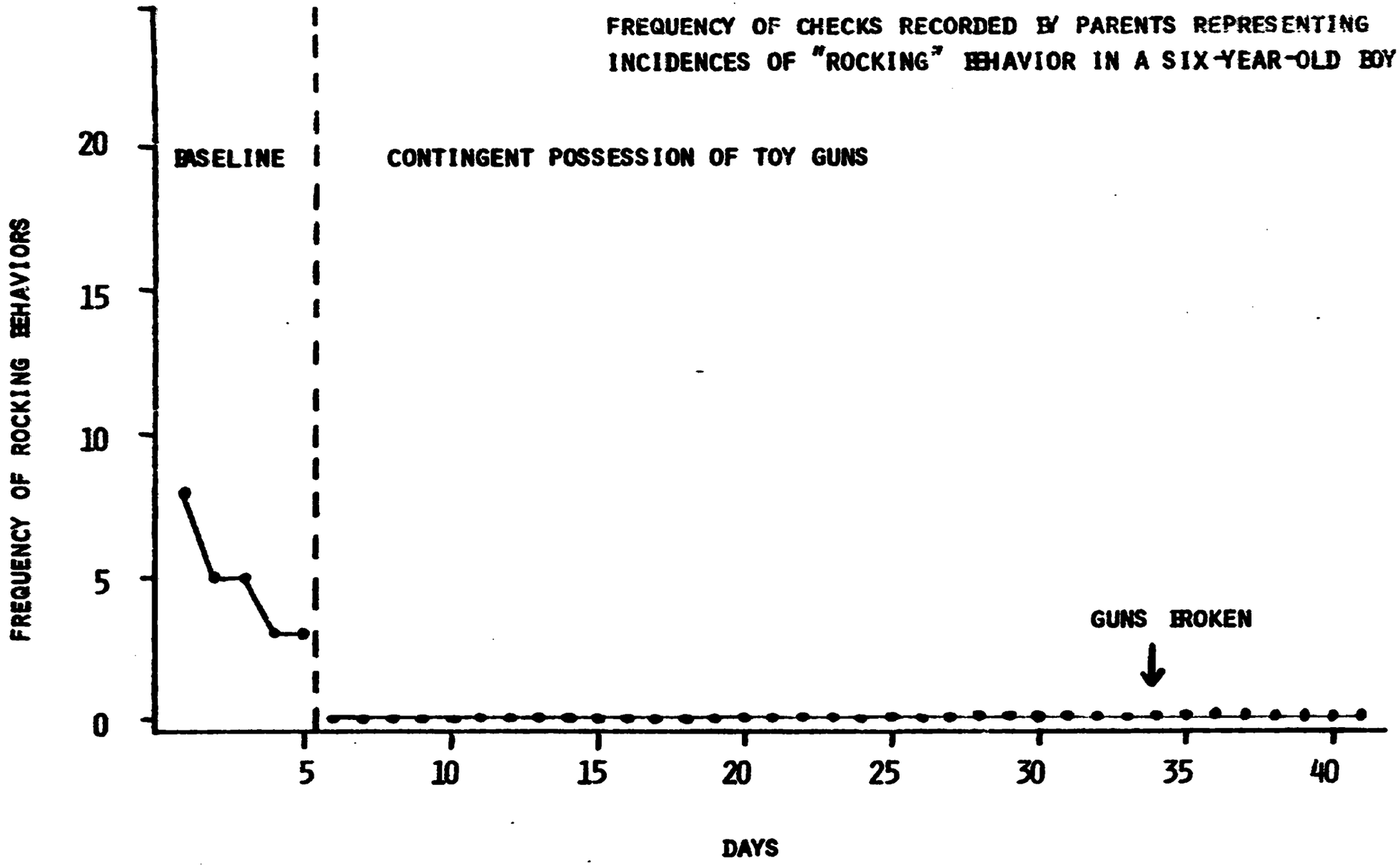
FREQUENCY OF CHECKS RECORDED BY PARENTS REPRESENTING "GOOD BEHAVIORS"




TOMMY
# OF AGGRESSIVE STATEMENTS
30
25
20
15
10
5
0
1
2
3
CONSECUTIVE WEEKS
# OF AGGRESSIVE ACTIONS
10
5
0
1
2
3
1ST OBSERVER
2ND OBSERVER
FREQUENCY OF ATTEN-TION TO AGGRESSIONS
0
1
2
3
4
5
1
2
3
FREQUENCY OF ATTENTION TO GOOD BEHAVIORS
0
1
2
5
1
2
3

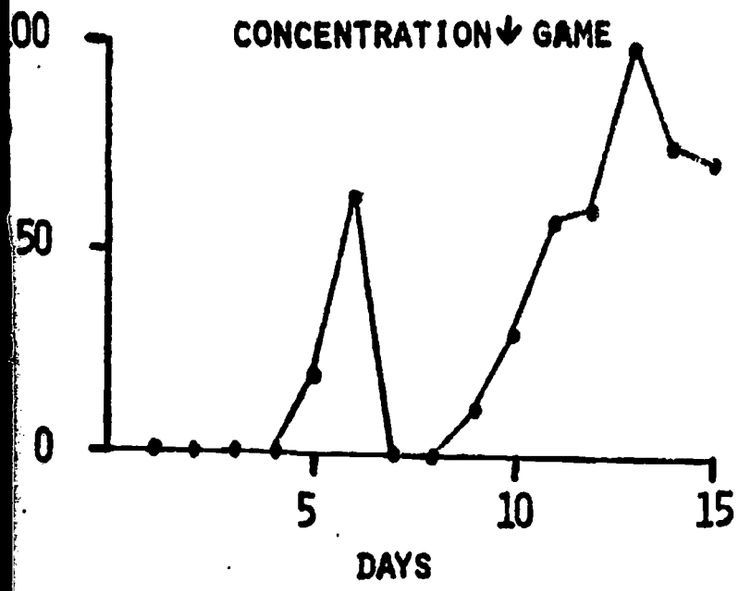
TOMMY

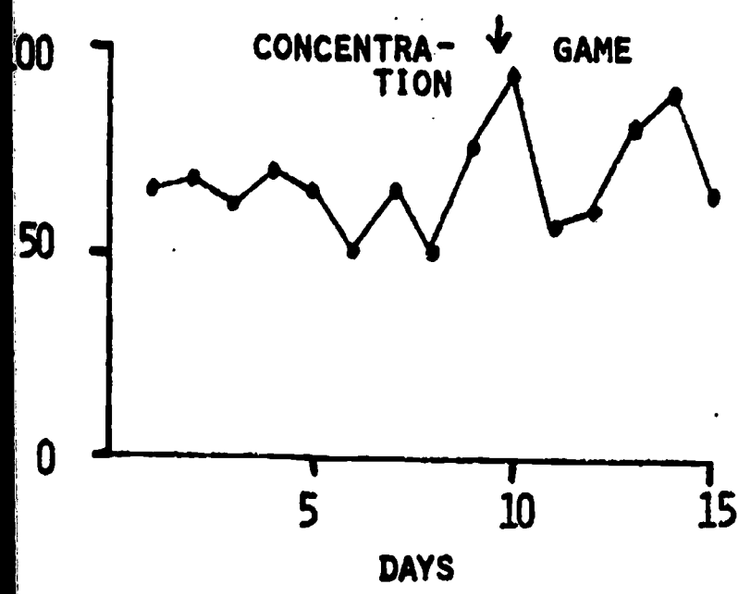
FREQUENCY OF CHECKS RECORDED BY PARENTS REPRESENTING INCIDENCES OF "ROCKING" BEHAVIOR IN A SIX-YEAR-OLD BOY.

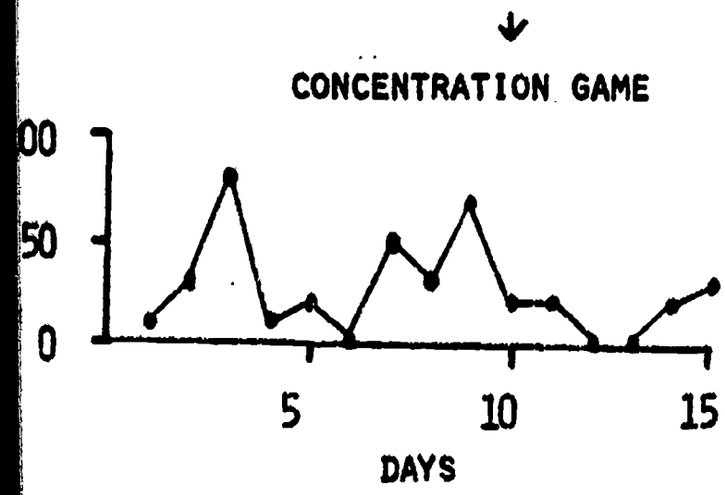


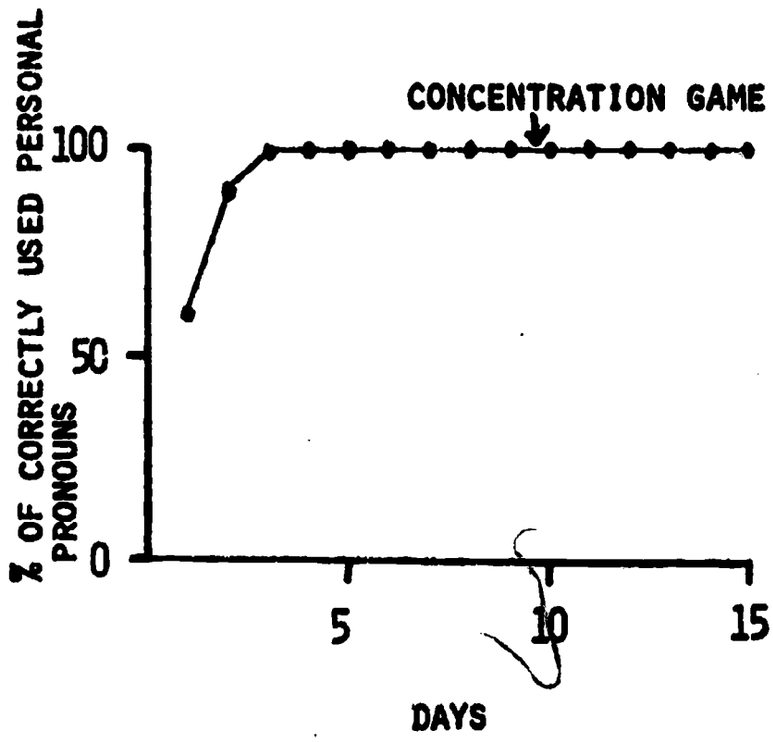
TOMMY

SPONTANEOUS SPEECH TAPE
FROM DAILY CONVERSATIONS
WITH FATHER.



Essex Junction
Martha Knight
Mary Carter
1971-1972

# HELEN

## CHILD AND REFERRAL PROBLEM

Helen was a six year old girl with four older and one younger sibling. She was enrolled in the public kindergarten during the previous (1970-1971) year, but was asked to enroll again the following year because of irregular attendance. Helen was referred by the school district elementary school supervisor because the same pattern of irregular attendance persisted.

Helen's mother reported that her daughter frequently tantrummed and complained of sicknesses while getting ready for school. Occasionally, after Karen arrived at school she ran home and did not return.

## OBJECTIVE 1

| | | |
|---|---|---|
| Given predetermined wake up, breakfast, and school departure times; and mother's presence | the child will walk to school and remain in school | for the entire school day. |

## MEASUREMENT PROCEDURES

Helen's mother recorded when Helen did not attend school, attended school for a portion of the school day or attended school for the entire day. The reliability of these measures was verified through school attendance records. Karen's mother also recorded days when her daughter's complaints of sickness were confirmed by a body temperature above normal (98.6°).

## TEACHING/LEARNING PROCEDURES

During baseline 1 times were determined for getting up, eating breakfast and leaving for school. Helen's mother praised her upon returning home from school when she attended for the entire day (e.g., "What a big school girl you are, Helen!"). Helen's teacher also praised her while she was attending school (e.g., "It's so good to have you here, Helen.").

During instructions and feedback conditions were the same as in baseline except the home trainer who had come only once a week in the afternoon now came more frequently and in the morning. At Helen's home, on three of the seven days, in the morning, a half hour prior to the scheduled school departure time, the home trainer instructed Helen's mother on how to manage Helen and gave the mother immediate feedback when the instructions were followed. Instructions consisted of ignoring irrelevant behaviors (e.g., crying, saying "I don't want to go to school") praising appropriate behaviors (e.g., eating, dressing), and dressing or carrying Helen when she refused to emit these behaviors independently. The home trainer accompanied Helen and her mother on their walk to school.

During baseline 2 the same procedures were used as in baseline 1.

During the instructions and feedback 2 condition the same procedures were used as in the instructions and feedback 1 condition. The home trainer came to Helen's home on three of the four days.

## RESULTS

During baseline 1 Helen attended school for the entire school day on five of the 21 days or 24 percent of the time.

During the instructions and feedback 1 condition Helen attended school on six of the seven days or 86 percent of the time.

During baseline 2 Helen attended school on six of the 13 days or 46 percent of the time.

During the instructions and feedback 2 condition Helen attended school on all of the four days.

## Discussion

The district consulting teacher intern, Deborah Giddings Lawrence, continued to use similar procedures as those described with the same success. Helen attended school regularly in the first grade without the use of special procedures.

---

## OBJECTIVE 2

| | | |
|---|---|---|
| Given printed upper case alphabet letters presented in random order | the child names the letters | 100% correctly. |

## MEASUREMENT PROCEDURES

Each day five letters were presented to Helen by her mother. A "+" was recorded for each letter correctly named within two seconds of presentation. A "0" was recorded for no response or an incorrectly named letter. Letters named correctly on two consecutive days were recorded as learned and another letter was presented in its place.

Reliability of measures were obtained weekly by the parent trainer who measured Helen's responses independently.

## TEACHING/LEARNING PROCEDURES

After Helen's responses to the five letters was recorded, the letter cards were shuffled to be presented to Helen again. If Helen named the presented letter correctly within a two second interval that letter was named by Helen's mother and Helen was then asked to name the letter herself. The letter was presented again immediately after the next letter in the sequence. Each of the five letters were presented in this manner until all five letters were named correctly on one presentation without mother's help.

## RESULTS

Helen learned a total of 20 words in 23 days, a rate of .8 words per day.

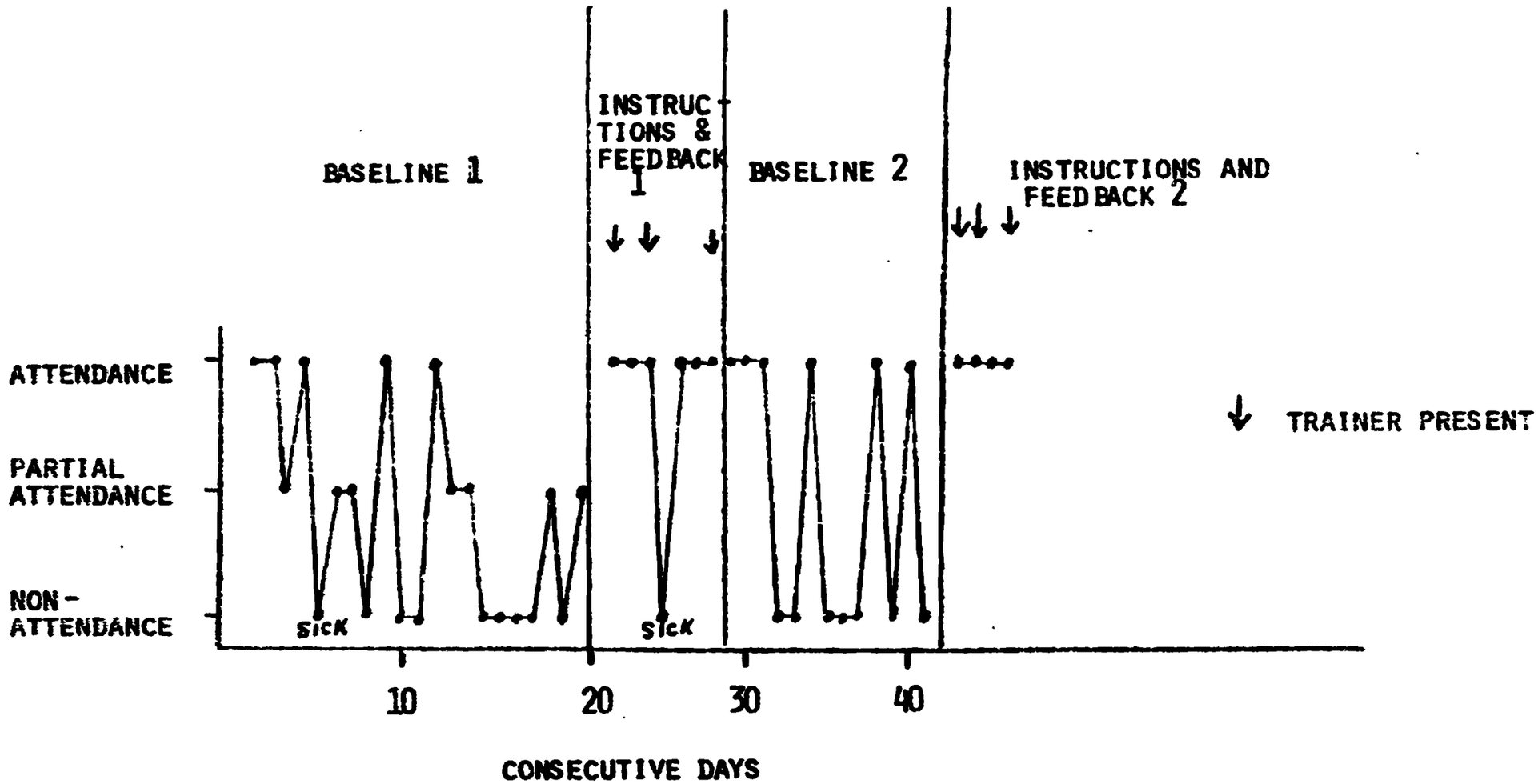
Table I shows the scores for specific objectives over eight months.

| | Feb. | Sept. |
|---|---|---|
| Upper case letters | .27 | .83 |

Table II shows the overall scores for the EEEP entry level test over eight months.

| Feb. | Sept. |
|---|---|
| 84% | 95% |

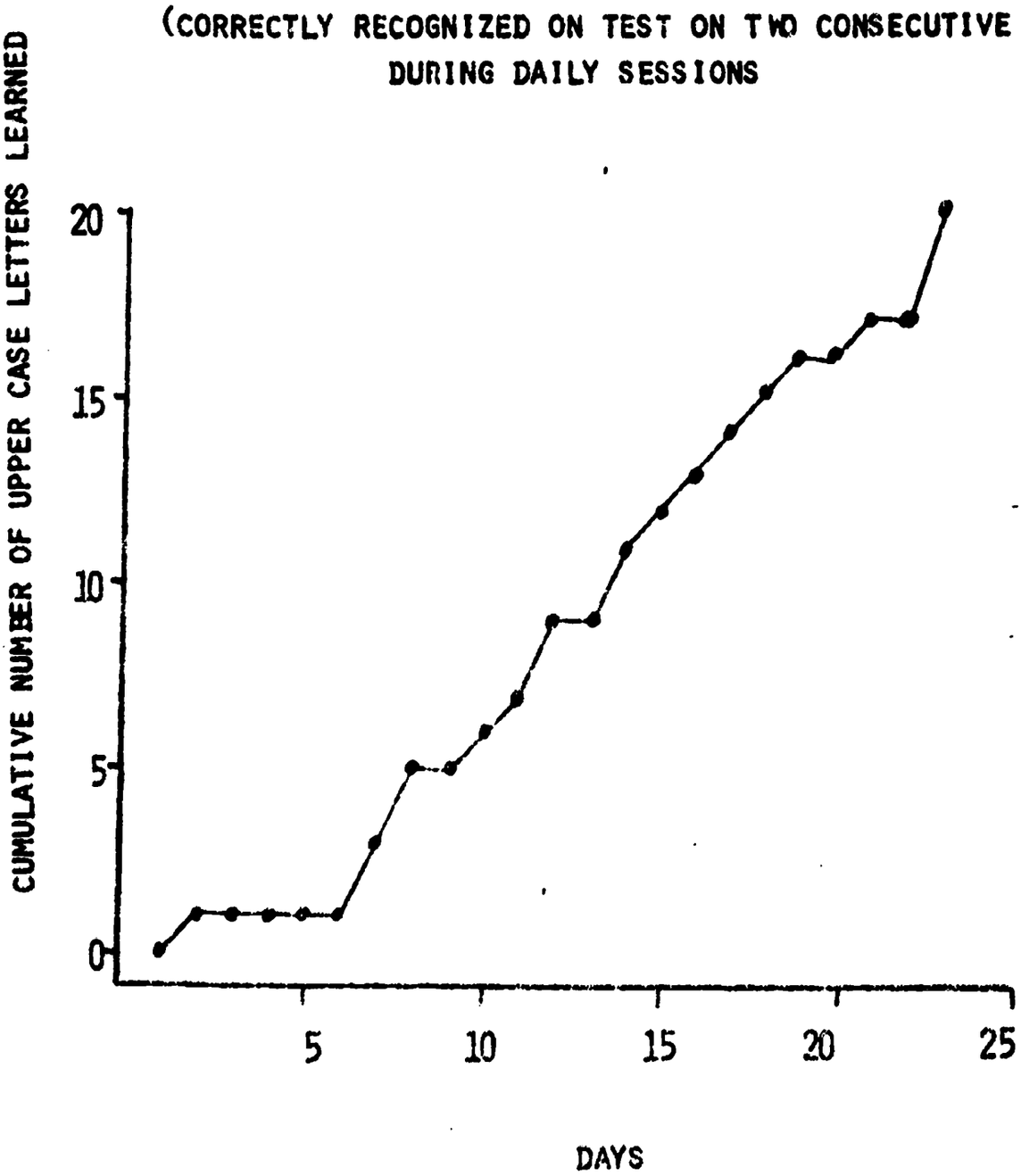
HELEN




THE SCHOOL ATTENDANCE RECORD OF A SIX YEAR OLD GIRL

HELEN

CUMULATIVE NUMBER OF UPPER CASE ALPHABET LETTERS LEARNED
(CORRECTLY RECOGNIZED ON TEST ON TWO CONSECUTIVE DAYS)
DURING DAILY SESSIONS



Westford
Martha Knight
Mary Carter
1971-1972

# LARRY

## CHILD AND REFERRAL PROBLEM

Larry was a five year old boy with one older sister and a younger sister and brother. His mother reported that Larry soiled and wet his pants, tantrummed and reversed letters when printing his name.

## OBJECTIVE 1

| | | |
|---|---|---|
| Given directions to do a simple household task (e.g., please bring your dishes to the sink) | the child begins to follow the directions | immediately and in a cooperative manner. |

## MEASUREMENT PROCEDURES

Each day Larry's mother tallied the number of times she gave directions and the number of times directions were not followed and Larry tantrummed. Daily percentages of direction following and tantrumming behavior was determined by dividing the number of incidences by the total number of directions given, multiplied by 100.

## TEACHING/LEARNING PROCEDURES

Larry's mother thanked him for completing each task during baseline and contingency conditions.

During the contingency condition, Larry was invited to play a special card game (Spike and Mike) with his mother or father

if there were no incidences of tantrumming that day.

RESULTS

During baseline, daily percentages of tantrumming averaged 64 and following direction behavior averaged 30 percent.

When the card game was contingent daily percentages of tantrumming decreased to an average of 20 percent. Following direction behavior increased to an average of 30 percent.

---

OBJECTIVE 2

| | | |
|---|---|---|
| When necessary and without prompting or assistance | the child uses the toilet | such that no soiling or wetting of clothing occurs. |

MEASUREMENT PROCEDURES

Larry's mother tallied the number of times Larry wet or soiled during the day.

TEACHING/LEARNING PROCEDURES

During baseline, Larry's mother did not use any procedure consistently but occasionally scolded Larry for wetting or soiling.

During the contingency condition Larry's mother praised Larry (at least once each day when no wetting or soiling occurred) for using the toilet. When wetting or soiling occurred, Larry was not scolded but was directed to wash his underpants in the sink.

RESULTS

During baseline, two occasions of wetting or soiling occurred each week.

During contingency there were three occasions of wetting or soiling during the first week and only one occasion during the following three weeks.

---

OBJECTIVE 3*

| | | |
|---|---|---|
| Given a predetermined bedtime and directions to go to bed | Larry and his sisters will go to bed | with no noise and without getting out of bed. |

MEASUREMENT PROCEDURES

Larry's mother recorded the time when all the children were in bed and quiet each night. On one occasion during each condition an outside observer also observed the children's bedtime behaviors and recorded in the same manner.

TEACHING/LEARNING PROCEDURES

During baseline, Larry's mother and father frequently told Larry and his sisters to go to bed. There was no predetermined bedtime during this condition.

During the contingency condition, a specific bedtime was determined for week days. Larry's mother and father agreed that the children should go to bed at 7:30 p.m. and be quiet by 8:00 p.m. At 7:00 p.m. each evening children were told that when the long hand reached the bottom of the clock, they were to go to bed and that if they went to bed at 7:30 p.m. and were quiet by 8:00 p.m. for that entire week they would earn a new card game on Saturday.

*Every bedtime was accompanied by parental nagging and fussing, crying children. This objective was derived when Larry's mother reported that she and her husband were having difficulty getting the children to bed at night.

RESULTS

During baseline the time when the children were in bed and quiet ranged from 9:00 p.m. to 10:00 p.m.

During the contingency condition the children were in bed and quiet by 8:00 p.m. for the two week period.

---

OBJECTIVE 4

| | | |
|---|---|---|
| Given a cue and a piece of paper and a pencil | the child writes his name | such that the first letter is upper case and the rest lower case, are printed in order and horizontally, and are of correct size and shape, |

MEASUREMENT PROCEDURES

Larry's mother recorded the number of letters printed correctly on the first trial each day. The percentage of letters printed correctly was calculated by dividing the number correct by the total number of letters, multiplied by 100. The parent trainer also observed and recorded in this same manner once each week.

TEACHING/LEARNING PROCEDURES

Larry was praised by his mother immediately after correctly printing a letter. Incorrectly printed letters were immediately erased and Larry was instructed to look at a model and print the letter again. This procedure was repeated until all the letters were printed correctly.

RESULTS

During the initial ten days of the 42 days this procedure was

in effect, the percentage of correctly printed letters ranged from 33% to 100% and averaged 71%.

During the final ten days the percentage correct ranged from 83% to 100% and averaged 95%.

---

OBJECTIVE 5

| | | |
|---|---|---|
| Given printed upper and lower case letters | the child names the letters | 100% correctly within 2 seconds of presentation. |

MEASUREMENT PROCEDURES

Each day Larry's mother presented the 13 lower case letters and eight upper case letters which Larry named incorrectly on the EEEP language motor test. She recorded a plus (+) if Larry named the letter correctly within two seconds and a zero (0) if Larry named the letter incorrectly. The percentage of correctly named lower and upper case letters was calculated each day by dividing the number of letters correctly named by the number of letters presented, multiplied by 100.

TEACHING/LEARNING PROCEDURES

After recording Larry's letter naming responses each day his mother presented each of the cards again. She praised Larry if he named the letter correctly within two seconds. If Larry did not name the letter correctly within two seconds, his mother said the correct letter name and Larry was instructed to say the letter name while looking at the letter. Letters named incorrectly were presented again following presentation of the next

card in the sequence. The five letters were presented in this manner until Larry had named each letter correctly within two seconds of presentation.

Occasionally Larry and his mother played "Concentration" with the letters currently being presented. A duplicate set of letter cards were made, the cards were shuffled and placed face down on a table. Larry and his mother then took turns turning over two cards at a time and saying the name of the letters. When the two letters turned over were correctly named and were the same letters that player kept that pair of letters until the end of the game. The player who accumulated the greater number of pairs won the game.

RESULTS

The percentage of correctly named lower case letters increased from 69% on the first day of presentation to 92% on the seventh day.

The percentage of correctly named upper case letters increased from 38% on the first day of presentation to 88% on the fifteenth day.

---

OBJECTIVE 6

| | | |
|---|---|---|
| Given the book Sandwich (Early-Start Preschool Readers) and the 11 words contained therein | the child will read book | such that the words are read 100% correctly with no errors or hesitations. |

## MEASUREMENT PROCEDURE

Larry's mother presented the 11 words separately printed on 3" x 5" cards. She recorded a plus (+) if Larry named the word correctly and a zero (0) if he named the letter incorrectly. The percentage of correctly named words was calculated by dividing the number of words correctly named by 11, multiplied by 100. This recording procedure was conducted on three occasions throughout the eight day period; on the first, seventh and eighth days.

## TEACHING/LEARNING PROCEDURES

Each day for eight days Larry's mother presented each of the 11 words. She praised Larry if he named the presented word correctly within two seconds. If Larry did not name the word correctly his mother said the word and Larry was instructed to say the word while looking at the word. The words were presented daily in this manner until each word was said correctly within two seconds of presentation.

Larry was allowed to read the book for the first time on the eighth day.

## RESULTS

The percentage of correct word naming was 18% on the first day, 73% on the seventh day and 82% on the eighth day. Larry read the book without error on the eighth day.

Table 1 shows the scores for specific objectives over eight months.

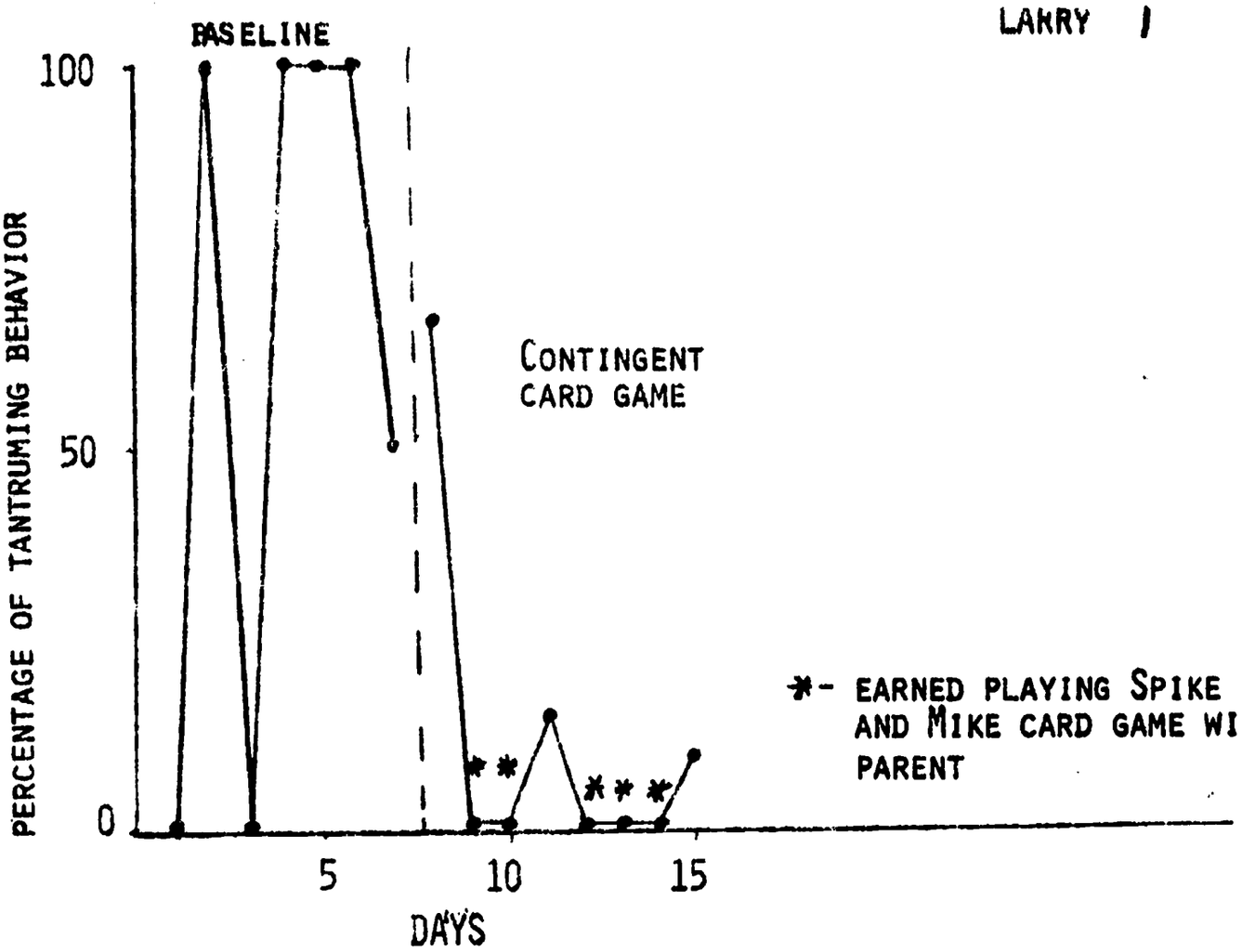
| | January | September |
|---|---|---|
| Writes name | .50 | .50 |
| Letter Recognition upper case | .54 | .92 |
| Letter Recognition lower case | .31 | .96 |

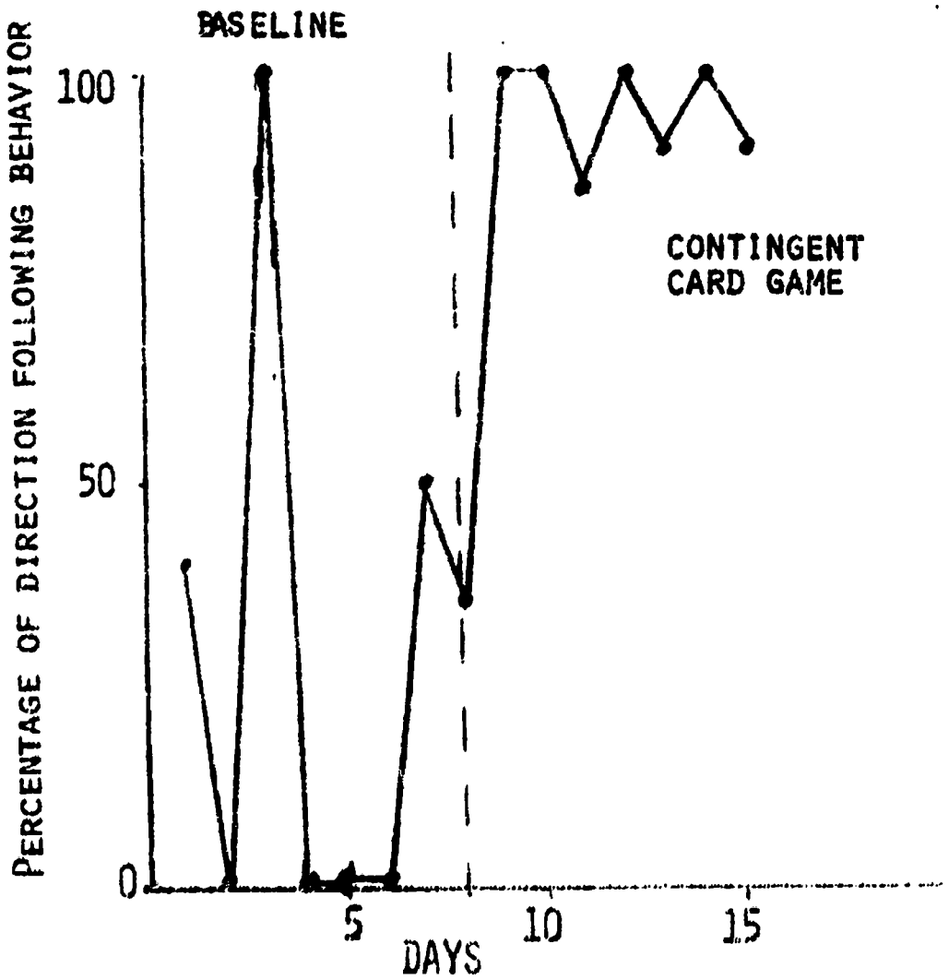
Table 1

Table 2 shows the overall scores for the EEEP entry level test over eight months.

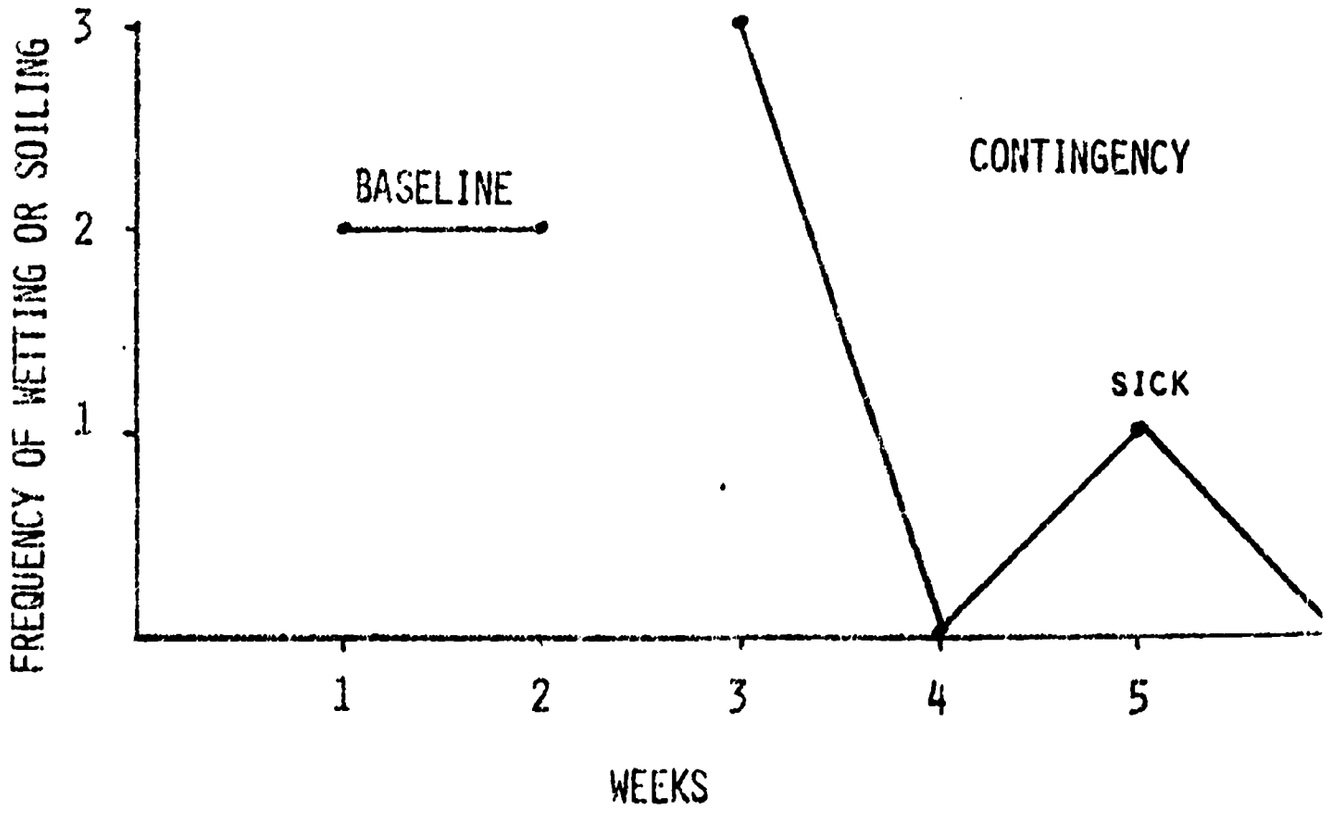
| January | September |
|---|---|
| 70% | 83% |

Table 2

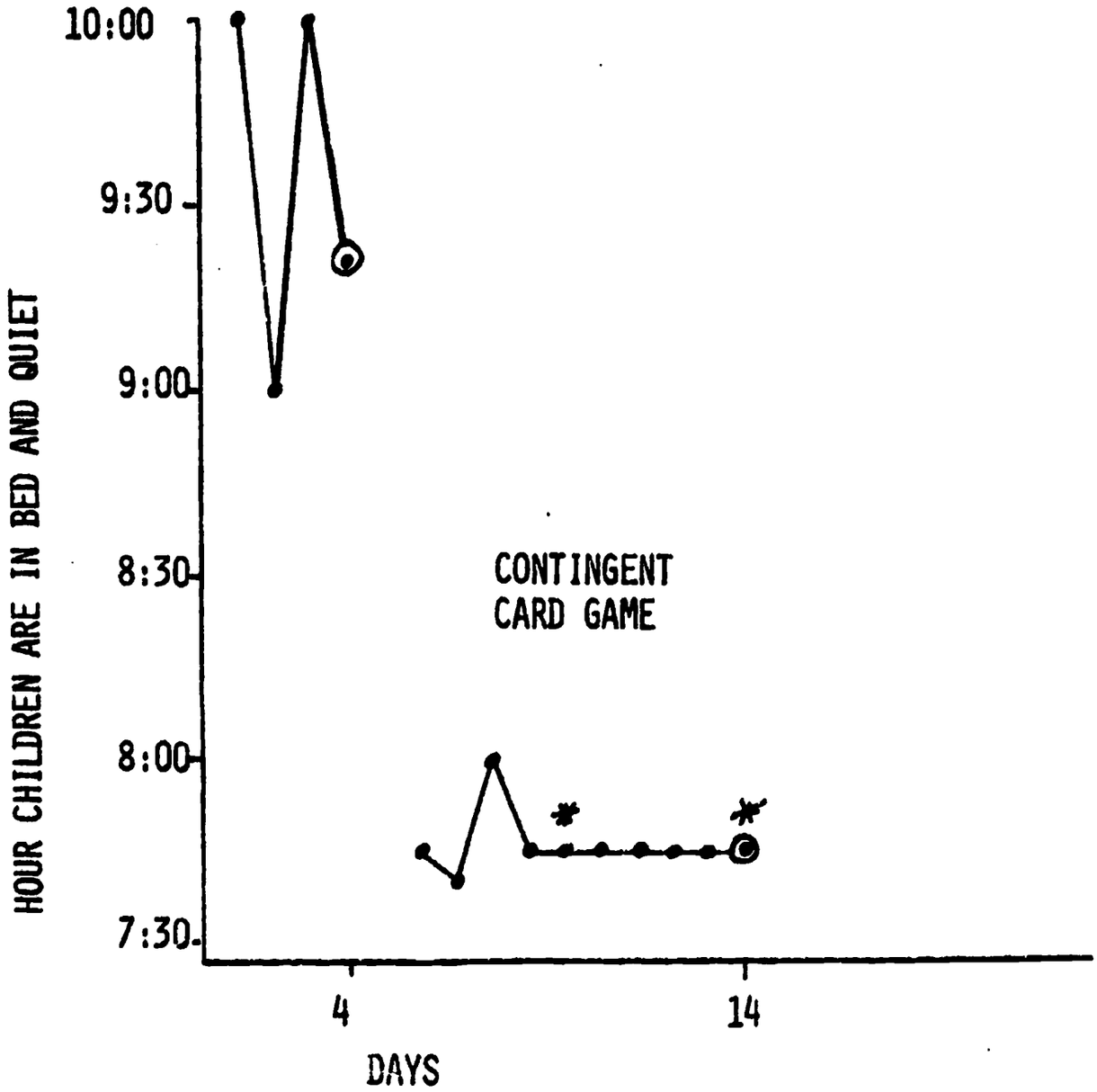



A RECORD OF THE PERCENTAGE OF TANTRUMING AND DIRECTION FOLLOWING BEHAVIOR ON BEING ASKED TO COMPLETE A SIMPLE HOUSEHOLD TASK.



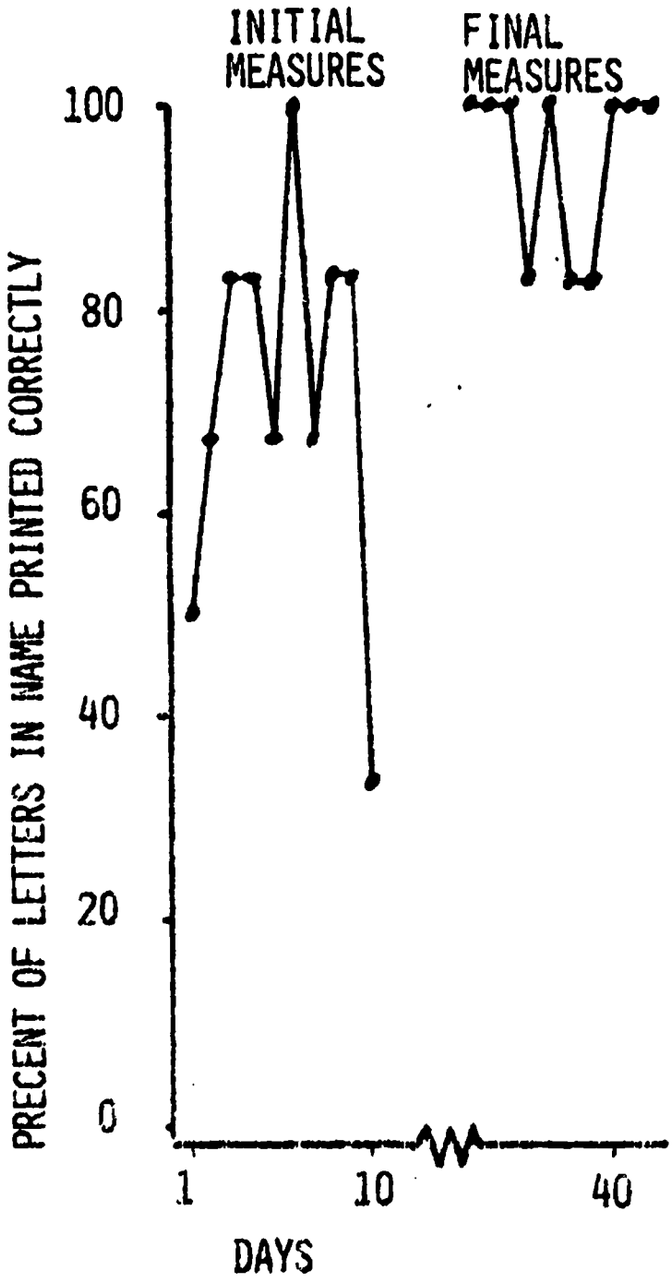

FREQUENCY OF WETTING OR SOILING DURING CONSECUTIVE WEEKS



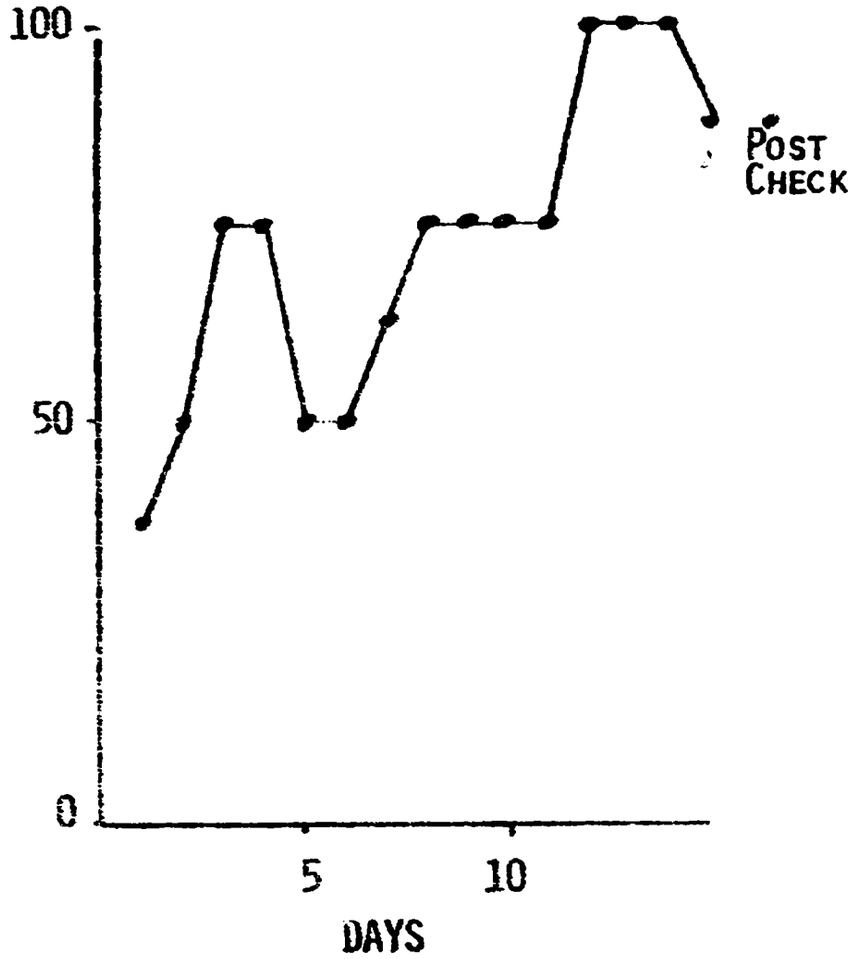

○ 2ND OBSERVER PRE

✱ EARNED POSSESSIO OF NEW CARDS

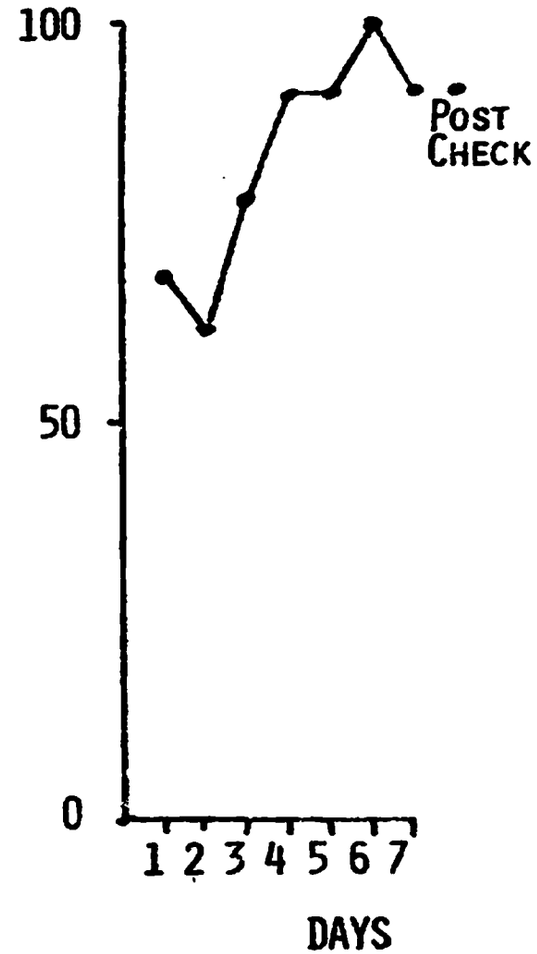
A RECORD OF THE HOUR WHEN LARRY AND HIS SISTERS WERE IN BED AND QUIET



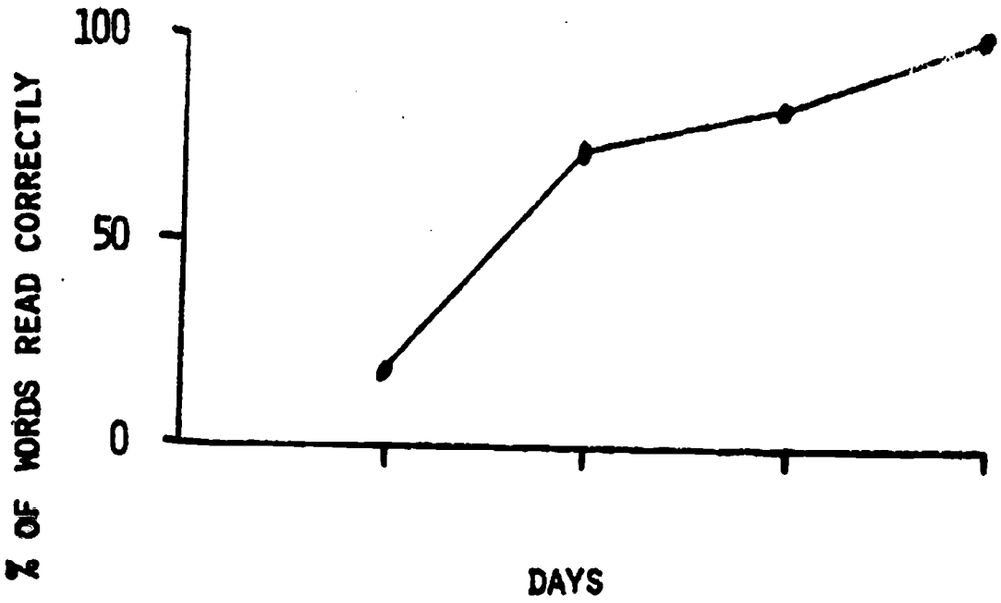

DAILY PERCENTAGES OF CORRECTLY PRINTED LETTERS IN NAME (LARRY)




DAILY PERCENTAGES OF CORRECTLY RECOGNIZED




DAILY PERCENTAGES OF
CORRECTLY RECOGNIZED
LOWER CASE LETTERS




PERCENTAGES OF WORDS READ CORRECTLY IN PRESCHOOL BOOK, SANDWICH, CONTAINING ELEVEN WORDS.

Westford
Martha Knight
Mary Carter
1971-1972

# LENNY

## CHILD AND REFERRAL PROBLEM

Lenny was a five year old boy with six older brothers and sisters and one younger brother. His mother reported that Lenny needed help speaking and interacting with his siblings and peers. Lenny attended kindergarten in Fairfax every morning. His teacher also reported that Lenny needed help in speaking and interacting with peers.

## OBJECTIVE 1

| | | |
|---|---|---|
| When in a group (more than 1 person) | the child will interact with the other child(ren) or adult(s) | such that he does not refuse to complete a task assigned by an adult and is not physically aggressive toward another child. |

## MEASUREMENT PROCEDURES

Each day Lenny's mother tallied the frequency of uncooperative behaviors. These included refusal to complete an adult assigned task and being physically aggressive toward another child for 78 days.

From the twenty-eighth day to the seventy-eighth day, Lenny's mother also tallied the frequency of cooperative behaviors. These included sharing toys with other children and completion of adult assigned tasks without complaining.

TEACHING/LEARNING PROCEDURE

During baseline (days 1-27) Lenny's mother did not record the frequency of cooperative behaviors or praise Lenny systematically.

During the contingency condition (days 28-78) Lenny's mother, father and older sister observed and recorded the frequency of cooperative behaviors.

RESULTS

During baseline the frequency of uncooperative behaviors ranged from 0 to 6 and averaged 2 per day.

During contingency the frequency of uncooperative behaviors ranged from 0 to 2 and averaged .3 per day.

---

OBJECTIVE 2

| | | |
|---|---|---|
| Given 20 Peabody Articulation cards (American Guidance Services) and instructions to name the picture by saying, "That is a _____." | the child will name the picture | with no articulation errors. |

MEASUREMENT PROCEDURES

Each day Lenny was presented with 20 Peabody Articulation Cards representing words for which Lenny misarticulated the initial consonant sound. Lenny was instructed to name the picture using the sentence model, "That is a _____."

The sentence was used because it contained the sound "th" which was frequently misarticulated by Lenny. All sounds were selected based on the frequency of errors tallied from daily audio tape recordings of conversations between Lenny and his mother or father.

Cards were presented singly and in the same sequence each day. If Lenny misarticulated any initial sound in the sentence on the first trial a "0" was recorded. The remaining sentences were considered articulated correctly and a "+" was later recorded for these.

Six of the eighteen sessions were recorded on audio tape and scored by a second observer.

## TEACHING/LEARNING PROCEDURES

Lenny's mother praised him when he articulated words correctly during the daily sessions. She said for instance, "You said that. Very nice, Lenny!" or "You said ladder. Good!" When Lenny misarticulated a word his mother said the word emphasizing the misarticulated sound and Lenny was instructed to imitate his mother. This procedure was repeated until the word was articulated correctly.

Before Lenny was asked to name the 20 pictures in the daily session, the home trainer used the above procedure to insure that Lenny had articulated the sound correctly at least once.

## RESULTS

Since percentage of agreement between the mother's data and the observer's data was low for the five occasions when data was

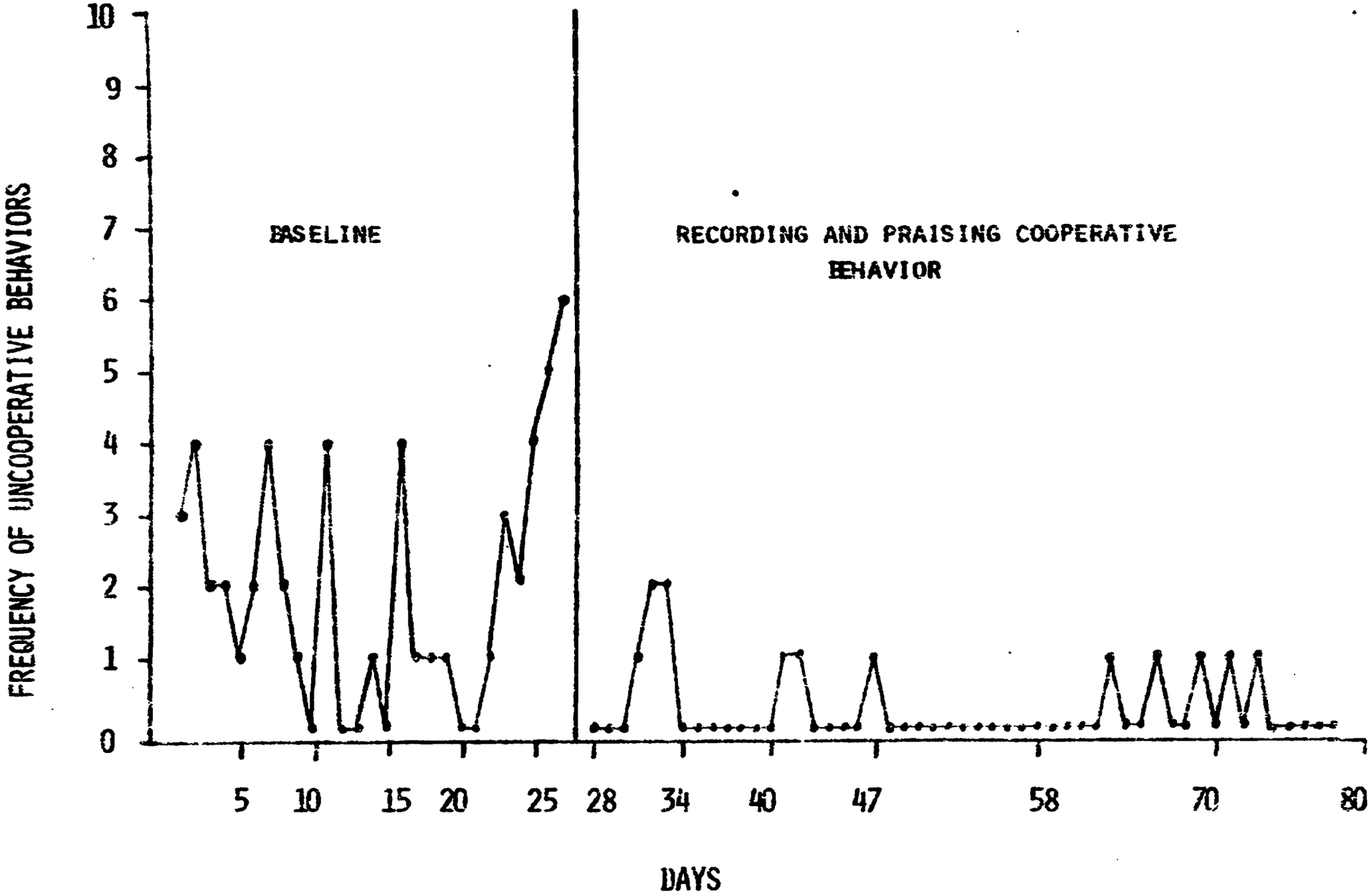
compared, only data recorded on audio tape will be reported. On the first recorded session (day 1) Lenny articulated 20% of the sentences correctly and on the last recorded session (day 18) Lenny articulated 65% of the sentences correctly.

Table 1 shows the overall scores for the EEEP entry level test over eight months.

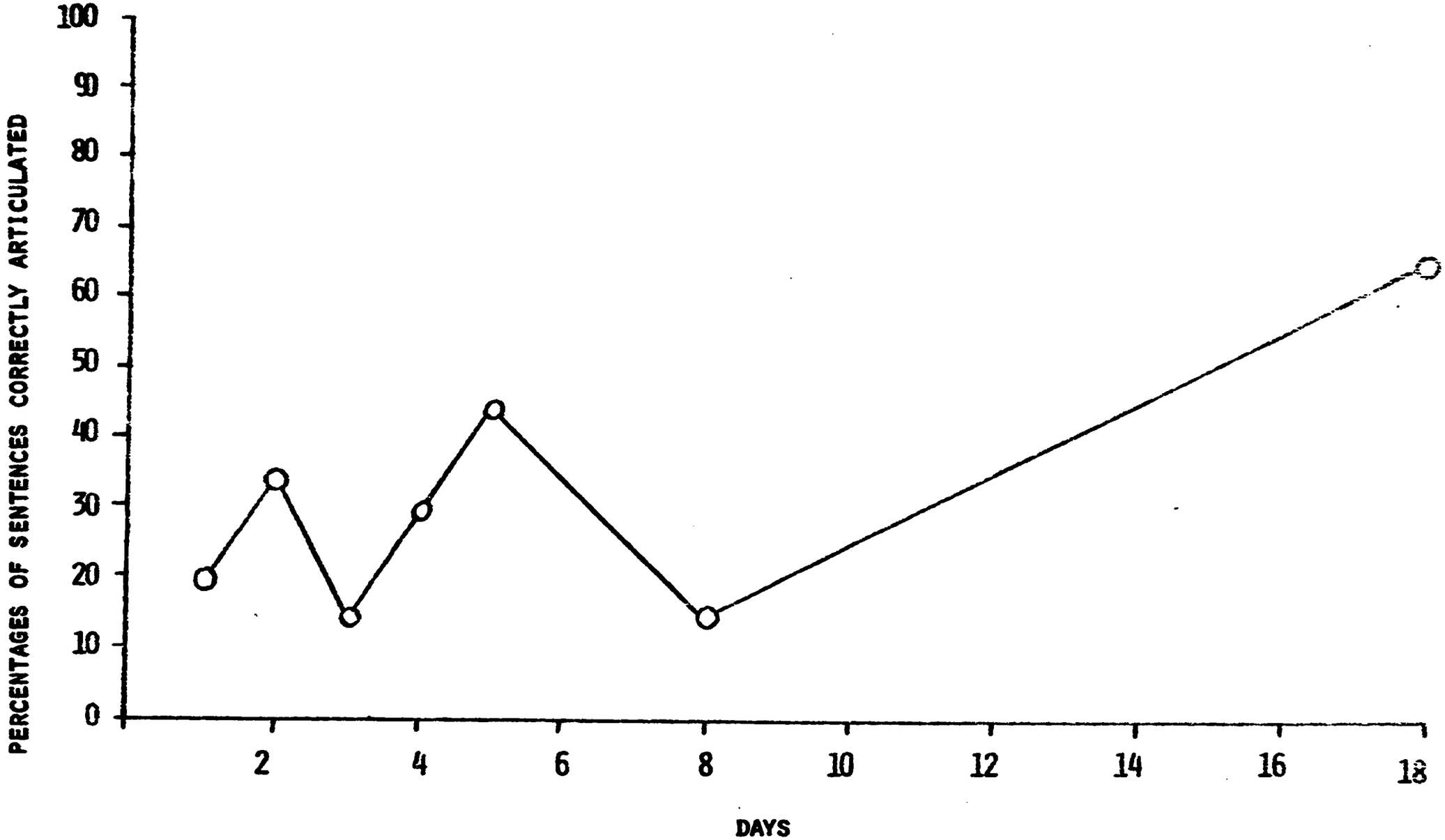
| March | September |
|---|---|
| 66% | 89% |

Table 1

LENNY


FREQUENCY OF UNCOOPERATIVE BEHAVIORS
10
9
8
7
6
5
4
3
2
1
0
BASELINE
RECORDING AND PRAISING COOPERATIVE BEHAVIOR
5
10
15
20
25
28
34
40
47
58
70
80
DAYS

LENNY




PERCENTAGES OF 20 SENTENCES CORRECTLY ARTICULATED USING PEABODY PICTURE CARDS.

Appendix viii

Special Education Program University of Vermont

# The Effects of Feedback in Parent Training

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## Introduction

It is well documented that consequences delivered by parents contingent upon their child's behavior may be arranged to promote desired behaviors and eliminate undesirable behaviors in young children. Hall, Axelrod, Tyler, Grief and Jones (1972) trained parents in principles of reinforcement, extinction, and punishment. As a result of the application of these principles, problem behaviors typical in many homes were eliminated. Knight and McKenzie (1970) trained a parent to eliminate bedtime thumb-sucking through contingent reading. Herbert (1970) trained mothers to use both material consequences and verbal praise to successfully promote desired behaviors in their children. In a study by Engeln, Knutson, Linwood and Warren (1968) an entire family unit (mother, father and older brother) were trained in reinforcement and extinction procedures. As a result the aggressive behavior of two young brothers was significantly reduced.

It has also been demonstrated that behavior consequences delivered by the parents may be responsible for the transition of a normally behaving child into an oppositional one. Ora and Wagner (1970) reviewed how parents may shape or increase aversive infant behavior through conscientious caretaking. They found that, in general, the parents may not reinforce desirable behaviors very often. However, the parents must attend to normal but undesirable behavior often because much of it is life threatening

or highly aversive. This differential reinforcement serves to increase undesirable behavior and decrease desirable behavior. Hamblin and Territor (1971) demonstrated how the disturbing behavior of autistic children can be maintained by parental reinforcement for the disturbing behavior. They found that when parents were trained to reinforce appropriate behaviors and to ignore inappropriate behaviors, the appropriate behaviors of the autistic child increased.

It seems obvious that early intervention procedures conducted by the parents in their home have at least one major advantage over programs conducted outside the home by other adults. Parents are already established as conditioned reinforcers for their children. There are several other advantages to home-based programs (Shearer and Shearer, 1972). First, learning is occurring in the parent and child's natural environment. Therefore, the problem of generalizing to the home what has been learned in a clinic or classroom does not occur. Second, there is direct and constant access to behavior as it occurs naturally. Third, the maintenance of desired behaviors may be enhanced if the behaviors have been learned in the natural environment. Fourth, the training of parents may provide them with the skills necessary to deal with new behaviors as they occur.

Any program designed to produce changes in children must obviously be "child-centered." However, if the program is to be dependent on parents as teachers, then a great deal of consideration must be given to the aspect of parent training. Parent training procedures must be both effective and efficient.

Parent training may be conducted in a variety of settings.

Hall, Axelrod, Tyler, Grief, Jones, and Robertson (1972) conducted parent training in a class setting. The parents were participants in the Responsive Teaching course, and enrolled for 3 credit hours. As part of the course requirement, each parent implemented procedures to modify his child's behavior. Lectures, discussions, films and sample case studies were used to train the parents in observation, measurement and principles of the analysis of behavior. As a result, each parent carried out a successful and reliable study, and achieved beneficial changes in their children.

Parent groups have also been used to train parents in behavior management. Galloway and Galloway (1970) established a parent group aimed at improving the behavior of the parents' retarded children. Parents were trained, through discussions, to record behaviors and to implement procedures to modify the recorded behaviors. Some parents verified the effectiveness of their procedure by withdrawing the procedures during a reversal phase. Each of the parents who stayed in the group carried out a successful project.

Herbert (1970) trained mothers in a group setting. Discussion and explanations were used to train the mothers in recording and reinforcement procedures. Each mother successfully modified her own child's behavior and then became a "Mother-Trainer" for a new member of the group.

Some studies have reported parent training programs in clinical settings. Hamblin, Buckholdt, Ferriter, Kozloff and Blackwell (1971) trained mothers to function as behavior thera-

pists by having them watch a therapist interact with their children. The mothers then went into the room with the therapist and child and gradually took over the role of the therapist as he withdrew from the interaction. Data taken of the child's behavior both in the home and clinic indicated that the mothers were successfully applying the techniques modeled by the therapist.

Engeln, Knutson, Laughy, and Garlington (1968) trained a mother in a clinic to give differential reinforcement for compliance behaviors to her aggressive sons. Training was accomplished through observations, explanations and modeling. The boys' aggressive behaviors were significantly reduced in the clinic. Although reliable data was not collected in the home or school, anecdotal records from family members and school personnel indicated that non-aggressive behaviors generalized to the home and school settings.

Some home-based programs have implemented parent training procedures in the home. Shearer and Shearer (1972), administrators of the Portage Project, reported that staff members went to the homes and demonstrated recording and teaching/learning procedures for the parent. The parent then practiced the procedures with the staff Member.* Seventh-five children were served in their homes by their parents. As a result, all of the children made significant gains in mental age, I.Q., language, academic development and socialization. The home-based learning program at the University of Vermont (Knight, Hasazi, and McNeil, 1972) also conducted parent training in the home. A

*The staff member thereafter made weekly visits to the home to collect data, take post-baseline data, and give feedback to the parent.

trainer visited the home and demonstrated procedures for the parent. The parent then practiced the procedures and was given feedback on his performance from the trainer. One example of the success of the home-based program was with a five-year-old Down's Syndrome child. As a result of the procedures implemented by his mother, the child was transferred from a school for the retarded to a special class in a regular elementary school.

Most of the previously cited articles mention the necessity of providing feedback to parents for their performance. Herbert (1970) relied on other mothers who had been through the program to give support to "new" mothers in the program. Mother trainers provided feedback and moral support through telephone calls and personal contacts. This procedure was considered to be very effective, as judged by the performance and enthusiasm of the participants. Shearer and Shearer (1972) found that 30% of the parents made no recordings in the first month. Praise and sometimes more tangible reinforcers, such as babysitting service, were used to reinforce recording behavior. Galloway and Galloway (1970) encouraged all parents in their parent-group to give feedback and support to one another. Although there was some attrition among the parents, those who remained carried out successful projects with their children. Knight, Hasazi and McNeil (1972) also made mention of providing feedback to parents for their performance. On each weekly visit the parent was given praise and suggestions from the trainer.

The proposed research project will further assess the role of feedback for initiating and maintaining parent performance.

It is designed to evaluate the frequency of feedback necessary to train parents in their homes as effective teachers for their children.

Behavioral Definitions

Parent behaviors were defined as:

1) Presentation - five cards are presented to the child three times during each session. Flashcards are presented in the order listed on Figure 1.

2) Recording - child's correct responses are recorded as a "+", incorrect responses are recorded as a "0" on the data sheets.

3) Procedures - the parent waits only three seconds before telling the child the correct response. The parent gives only those prompts or cues that have been specified.

4) Praise - parent gives verbal praise for correct and imitated responses made by the child.

Child Behavior: Phonics Training Objectives

| | | |
|---|---|---|
| Given 26 upper-case alphabet letters and 26 lower-case letters printed on flashcards | the child will identify each letter by saying its name | within 3 secs. for at least 90% of the letters. |
| Given 20 consonants, 5 vowels and 15 consonant blends printed on flashcards | the child will give the phoneme sound that corresponds to each consonant, vowel, or blend | within 3 secs. for at least 90% of the letters. [illegible]curacy will be judged acc[illegible] to examples [illegible] phoneme chart (Figure 1). |
| Given a spoken word and a cue | the child will name the initial consonant or consonant blend of the word | for at least 29 of the 34 words. |

Phonics training was chosen as the target behavior because:

1) The skill areas were components of the minimum objectives

specified by teachers for entering first graders.

2) The skills were discrete behaviors.

3) The skills were operant behaviors under the discriminated control of printed and verbal stimuli.

4) Acquisition of the skills required the presentation of antecedent and consequential stimuli.

5) The skills required verbal responses, and acquisition of the skills would require many learning sessions.

Measurement

Experimenter's Procedures:

Each time the experimenter visited the home, data sheets of the child's responses were collected. To determine whether or not appropriate antecedent and consequential stimuli were made available to the child, the experimenter kept data sheets identical to the parents' sheets and had the parents make a tape recording of each learning session. The experimenter listened to the tapes and recorded the cards presented, the child's responses and the parents' responses. Recordings were made on a data sheet similar to the one on Figure 2.

Data obtained from the tapes was then compared to the previous day's data. In this way the experimenter was able to determine whether the correct card was presented at the correct time and whether correct and/or incorrect responses were followed by appropriate consequential stimuli.

The experimenter recorded a "+" beside each step of the procedures conducted according to criteria, and a "0" for each

step that did not meet criteria. Fifteen responses were recorded for each of the four steps for a total of 60 responses. The number of correct responses was depicted graphically for each of the four steps (Figure 3).

The experimenter recorded all data either during learning sessions with the parent or by listening to tape recordings of the sessions.

Reliability of the experimenter's measurement procedures was taken at least once a week by an independent observer. The independent observer either listened to the tapes and recorded the same data as the experimenter or recorded data simultaneously with the experimenter during learning sessions with the parent.

Parent Procedures

The parent recorded the child's verbal responses to vowels, consonants and blends printed on flashcards and his verbal responses to cues and spoken words. The letters presented or words spoken were entered on a data sheet in the order in which they were to be presented. Presentation order for the alphabet letters and spoken words was taken from the EEEP entry level tests. The fifteen consonant blends were printed on flashcards and then shuffled to determine a non-systematic order of presentation.

If the child responded correctly to a flashcard or spoken word, a "+" was entered in the appropriate box. If the child responded incorrectly, or failed to respond within three seconds, the parent entered a "0". A percentage of response accuracy was calculated by dividing the total number of correct responses by the total number of responses, multiplied by 100.

Reliability of the measurement procedures was obtained in two ways. First, the experimenter recorded the same data in the same manner as the parent during the same session. Secondly, the parent made a tape recording of each learning session. The tape recording was then played at a later time by the experimenter. The experimenter recorded the child's responses in the same way the parents did during the learning session.

Data taken by the parents and the experimenter was compared and a percentage of agreement calculated by dividing the total number of agreements by the total number of responses, multiplied by 100.

It was assumed that if the parent conducted the procedures accurately when the experimenter was present, the data obtained from the tape recordings made in the experimenter's absence was also accurate.

Experimenter Procedures

Before the parent implemented the phonics training procedures with the child, the experimenter conducted pre-baseline training sessions with her. The parent was trained in the use of flash-cards, data sheets, the tape recorder, the delivery of contingent reinforcement, and the phoneme sounds were reviewed for her.

Verbal instructions were paired with practice sessions. The experimenter had the parent go through each step of the procedures. The parent and the experimenter each played the role of the child at least once. Practice was continued until the parent exhibited perfect performance for the required tasks.

The experimenter praised the parent's efforts at every opportunity.

The experimenter also observed the parent in a practice session with the child. The parent then received feedback on her performance with the child.

When the parent demonstrated that she had the necessary skills to implement the procedures effectively, the experimenter began taking measures of her behaviors.

Baseline:

During this condition the experimenter contacted the parents only after the procedures had been implemented for one week. The experimenter visited the home and collected the first week's data sheets and tape recordings of the learning sessions. A reliability check of the measurement and teaching/learning procedures was also done. This visit was approximately 30 minutes long. The experimenter praised the parent for her efforts related to the defined parent behaviors. The experimenter answered any questions the parents may have had regarding the procedures. Comments on the child's performance were made only in regard to the parents' procedural questions.*

The parent also received a weekly feedback sheet, similar to the experimenter's data sheet (Figure 3). The experimenter wrote praise notes next to appropriate parent behaviors as defined and ignored those that did not satisfy the definitions. Written feedback was also given for those procedures conducted in the experimenter's presence.

*These baseline conditions were in effect for two weeks.

Contingency:

During contingency the experimenter visited the home every day for approximately six minutes. Reliability measures were taken from the tape, with the exception of the constant weekly reliability check and feedback given to the parents for their performance.* Comments on the child's performance continued to be reserved. Daily feedback was given for two weeks.

Baseline$_2$:

During this condition, baseline procedures were reinstated to determine the effectiveness of the daily feedback contingency.

Contingency$_2$:

After the effectiveness of daily feedback had been determined, daily home visits were again made. During this condition the home visits were faded out, replaced by daily phone calls. The fading process was continued until the parent received only intermittent feedback.

Parent:

Phonics training was divided into six skill areas: 1) upper-case letter recognition, 2) lower-case recognition, 3) consonant sound identification, and 6) naming initial consonant or blend sounds.

The same procedure was followed for each skill. Skills were presented in the above order and each skill was mastered before the next skill was presented.

The 52 alphabet letters (upper and lower case) and 15 consonant blends were printed on word lists in the non-systematic

*Again the parent was given a written sheet after the procedures had been conducted.

order described above (Figure 3). Thirty-five words, 20 beginning with single consonants and 15 beginning with consonant blends, were listed in the same way.

Upper and Lower Case Letter Recognition:

To determine the child's entry level for letter recognition, the parent directed the child to name each letter on the lists. The parent recorded the child's responses in the manner described above.

After each response, or after three seconds expired, if he failed to respond, the child was directed to go on to the next letter on the list. No feedback for correct or incorrect responses was given.

Entry level testing was kept from five to ten minutes in length and was repeated until the child's entry level was determined.

Learning Session Procedures:

Each letter that was responded to incorrectly on the entry level test was printed on a 3 x 5 card. Data sheets were prepared. The first five letters missed on the entry level test were printed on the data sheet and the cards stacked in the same order as they appeared on the data sheet.

Each card was presented to the child three times in a session, for a total of 15 responses for each session. If the child responded with the correct name within three seconds, the parent verbally praised the child and recorded a "+" on the data sheet. If the child responded incorrectly or failed to respond within three seconds, the parent said the name aloud and had the child

imitate the response while looking at the card. A "0" was recorded on the data sheet.

A letter was considered "learned" when three consecutive correct responses were recorded in any one learning session. The child was permitted to keep any letter cards that he had learned. Upper-case letters were presented first. When they were learned the lower-case letters were presented.

Consonant, Vowel and Blend Sound Identification:

The same procedures, described above, were used for these three skill areas. However, in addition to naming each letter, the child was asked to give the phoneme sound which corresponded to the letter.

Naming Initial Sounds:

For this skill, flashcards were not used. The parent had a list of 35 words on a data sheet. He said the word and asked the child to tell the name of the letter or letters that the word began with.

The verbal praise given after each correct response was paired with other conditioned or primary reinforcement. The parent gave tokens for each correct response, which could be exchanged later for some appropriate reinforcer.

Research Design:

An ABAB research design was used for the parent behaviors.

When reinforcement other than verbal praise was used with the child, an ABAB design was used for the child behaviors. If verbal praise alone is effective for phonics training, an AB design will be used.

References

Engeln, R., Knutson, J., Laughy, L., and Garlington, W. Behavior modification techniques applied to a family unit. Journal of Child Psychology, 9, 1968, 245-252.

Galloway, D., and Galloway, K.C. Parent groups with a focus on precise behavior management. Institute on Mental Retardation and Intellectual Development (IMRID) Papers and Reports, Vol. VII, 1, 1970.

Hall, R.V., Axelrod, S., Tyler, L., Grief, E., Jones, F. C., and Robertson, R. Modification of behavior problems in the home with a parent as observer and experimenter. Journal of Applied Behavior Analysis, Vol. V, 1, 1972, 53-67.

Hamblin, R. L., Buckholdt, D., Territor, D., Kozloff, M., and Blackwell, L. In The Humanization Process. New York: Wiley and Sons, Inc., 1971.

Herbert, E. W. Parent programs--bringing it all back home. Paper presented at the Annual Meeting of the American Psychological Association, Miami Beach, Florida, 1970.

Knight, M.F., Hasazi, S.E., McNeil, M.E. A home-based program for the development of reading skills for preschoolers. In E.A. Ramp and B.L. Hopkins (Eds.) A New Direction for Education, Behavior Analysis, 1971, University of Kansas, Lawrence, Kansas, 1971, 223-234.

Knight, M., and McKenzie, H. Elimination of bedtime thumbsucking in day care and home settings through contingent reading. Journal of Applied Behavior Analysis, (in press).

Ora, J. P., and Wagner, L. I. Contextual variables in oppositional child training. Paper presented at the annual meeting of the Southeastern Psychological Association, Louisville, Kentucky, 1970.

Wagner, L. I., and Ora, J. P. Parental Control of the Very Young Oppositional Child. George Peabody College for Teachers.

Shearer, M. S., and Shearer, D. E. The Portage Project: A model for early childhood education. Exceptional Children, November, 1972, 210-217.

Figure 1

Consonant Sounds

| Consonant | Word example |
|---|---|
| p | pet |
| b | bed |
| t | tan |
| d | do |
| k | kite |
| g | go |
| f | fold |
| v | visit |
| s | say |
| z | zip |
| l | lull |
| m | man |
| n | none |
| r | roar |
| y | you |
| h | his |
| w | wave |
| j | jump |
| c | cow |
| h | hat |

Consonant Blends

| blend | word example |
|---|---|
| ch | church |
| sh | show |
| sk | skate |
| sm | small |
| sn | snow |
| sp | spell |
| st | stand |
| sw | swing |
| tw | twin |
| br | brew |
| bl | black |
| gl | give |
| pl | play |
| fr | front |
| tr | train |

Vowel Sounds

| Vowel | Word example |
|---|---|
| a | drama |
| e | item |
| i | devil |
| o | button |
| u | circus |

NAME _____ OBSERVER _____

DATE _____



| BEHAVIOR | RESPONSES | | | | | | | | | | | | | | | ACCURACY TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | |
| **Presentation**<br>Five cards presented three times in correct order. | | | | | | | | | | | | | | | | |
| **Recording**<br>Correct responses recorded as a "+", incorrect responses recorded as a "0". | | | | | | | | | | | | | | | | |
| **Procedures**<br>Parent waits only three seconds, and tells only correct response. | | | | | | | | | | | | | | | | |
| **Praise**<br>Parent gives verbal praise for correct and imitated responses. | | | | | | | | | | | | | | | | |

Figure 3

Order of Letter Presentation

Upper-Case Letters in Non-Systematic Order

| | |
|---|---|
| W | R |
| L | J |
| D | C |
| Y | T |
| M | G |
| B | F |
| K | H |
| P | S |
| V | Z |
| | N |

Vowels in Non-Systematic Order

E
O
I
U
A

Lower-Case Letters in Non-Systematic Order

| | |
|---|---|
| w | r |
| l | j |
| d | c |
| y | t |
| m | g |
| b | f |
| k | h |
| p | s |
| v | z |
| | n |

Consonant Blends in Non-Systematic Order

| | |
|---|---|
| ch | fr |
| sh | st |
| sk | tw |
| sm | br |
| sn | gl |
| sp | bl |
| tr | sw |
| pl | |

Figure 4

Words for Initial Sounds

| | |
|---|---|
| king | zoo |
| mat | ghost |
| church | lamb |
| dog | stairs |
| shoe | twin |
| sky | fine |
| pig | jump |
| wet | brown |
| yes | sign |
| small | vest |
| snow | give |
| speak | blue |
| ten | hat |
| nest | run |
| train | boy |
| plane | swim |
| front | |

⊙ - RELIABILITY CHECKS ACTUAL RESULTS