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ABSTRACT

This document describes a project which was designed (1) to develop a program to teach concepts to young children, and (2) to pilot test the program using college students as teachers of Appalachian children. The instructional program was composed of a series of visual discrimination problems in which the child must discriminate the correct from the incorrect example of the concept. An errorless discrimination procedure was combined with positive reinforcement. A preliminary evaluation of the effectiveness of the teaching method and materials was made to determine the feasibility of organizing college students as preschool volunteer tutors. It was concluded that (1) college students were highly motivated and creative teachers, (2) tutors, children, and parents enjoyed participating in the program, and (3) exploratory data indicated that the programs, teaching methods, and evaluation procedures provided a good framework for the teaching program. Appendices include information and materials associated with the learning program, data forms, student evaluation forms, lists of supplementary activities compiled by the tutors, and newspaper articles and communications relevant to the project. (DP)

Final Report

Regional Research Project No. 2-C-022
Grant No. OEG-3-72-031

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TEACHING COLLEGE STUDENTS TO TEACH CONCEPTS TO YOUNG CHILDREN.

May 1973

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Office of Education

National Center for Educational Research and Development

(Regional Research Program)

ABSTRACT

The objectives of my proposal were twofold: (1) to develop a program to teach concepts to young children which can be used by college students, and (2) to pilot test the program using Juniata College students and Appalachian children. An instructional program was developed and tested which provided a set of materials and training needed to teach concepts to a child. The instructional program was composed of a series of visual discrimination problems in which the child must discriminate the correct from the incorrect example of the concept. The primary feature of the program was the combined use of an "errorless" discrimination training procedure with positive reinforcement.

A preliminary evaluation of the effectiveness of the teaching method and materials was made to determine the feasibility of organizing a college student volunteer preschool tutoring program. It was found that (1) college students were highly motivated and creative teachers; (2) college students, children, and parents enjoyed participating in the program, and (3) exploratory data indicated that the concept programs, teaching methods, and evaluation procedures provided a good framework for the teaching program. Further research on the concept programs under controlled laboratory conditions was recommended followed by more extensive field testing of the teaching program.

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Teaching College Students to Teach Concepts To Young Children

Julie Gatewood Latané

Juniata College

Huntingdon, Pennsylvania

May 1, 1973

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U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

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I. PROBLEM AND OBJECTIVES

We can no longer take it for granted that all children will simply "pick up" the early language and cognitive skills needed to function effectively in school and society. It is becoming increasingly true that if a child is to succeed in society, he must first succeed in school. (Bloom, Davis, and Hess, 1965). To succeed in school, it is important to have certain linguistic skills. The nature of linguistic skills expected of a child when he enters the first grade is to a large extent determined by the average performance of children from middle income families (Menyuk, 1971). There are many children who do not have these prerequisite language skills, and who therefore are behind before they begin. Children from lower income backgrounds are more likely to have smaller vocabularies, shorter and less complex sentences, and ask fewer questions than middle class children (Landreth, 1967). Although some apparent deficits may represent differences in style, dialect, etc., (Cazden and Menyuk, 1971) in all probability, they still contribute to poor school performance.

It is assumed that deficiency in language development is due to the lack of opportunity to learn, not the inability to learn. It is further assumed that it is both possible and desirable to provide children with the opportunity to learn language which otherwise would not be provided. The purpose of this project is to develop a method by which people with relatively little training can teach language to young children who need it.

Large numbers of children from Appalachian rural areas and city ghettos fail to acquire even the most basic language abilities (Englemann, 1965). Present attempts to solve this problem involve providing early educational experiences such as Headstart programs, day care centers, and nursery schools. It is becoming increasingly obvious that, without direct attempts to facilitate concept development, this type of enriched environment is not always enough to prepare a child for the classroom. It seems necessary instead to structure early learning experiences so that specific language needs are met through systematic and direct teaching, not left to incidental learning (Kernes and Teska, 1968). This requires individualized teaching.

Individualized teaching, however, requires more teachers to do the teaching. If a preschool curriculum could be developed which would be effective yet simple enough to be used by inexperienced teachers, mothers, teacher-aides, college, high school and even grade school students, it might be possible to give a large number of people who are willing to help the skills to do so effectively.

In the present project, it was proposed to develop a program which untrained college students can use to teach concepts to preschool children. College students are an attractive source of help because so many of them are interested in and enthusiastic about working with disadvantaged children. This is evident from the many tutoring programs and child service organizations on college campuses all over the country.

If college students were given guidance as to how to teach, using a curriculum appropriate to language development of the very young, they could become highly effective teachers. In addition, they would learn skills which they might later apply to their own children.

I proposed to concentrate on techniques for teaching the meaning of words; i.e. the class of people, objects, events, etc. to which the word refers. Jerome Bruner and Roger Brown refer to this process as concept learning (Bruner, 1956 and Brown, 1965). The method of teaching was similar to the procedures used in the concept formation experiments of Bruner and others (Bruner, 1956). I proposed to attempt to teach simple word-concepts like red, blue, yellow, and other color words; horse, cow, and other animal words; circle, square and other shape words, etc. The concepts taught in this program may not have been the most important for the child to know nor do him any good in and of themselves, but there was reason to believe that the method would work equally well for other concepts as well. The first step was to develop a method and programmed lessons for a few words, and then, if the method seemed feasible, develop additional programmed lessons for other words.

The objectives of this project were twofold: (1) to develop a program to teach concepts to young children which can be used by college students as teachers, and (2) to test the program using Juniata college students and Appalachian children.

II. METHOD

A. Teaching Young Children Concepts: Over the past few years a preschool program for teaching concepts has been developed by Anne R. Sanford at the HCEEAA Preschool Project for the Developmentally Handicapped Children in Chapel Hill, N. C. (Sanford). The curriculum is aimed at developing concepts which are appropriate to children at the preschool level and includes lessons in shapes, colors, numbers, body parts, animals, relation concepts of big-little, same-different, etc.

The instruction is based on a visual discrimination procedure in which the child must discriminate the correct from the incorrect example of the concept over a series of trials. The primary feature of the program is the combined use of an "errorless" discrimination training procedure and positive reinforcement (Terrace, 1966). During the training trials, "errorless" learning is promoted in two ways: (1) the discrimination training is broken down into small simple steps and sequenced so that the child starts with very simple discrimination problems and progresses only gradually to more difficult ones, and (2) the teacher models the appropriate responses for the child and provides cues whenever necessary. In this way the likelihood that the child will make an error is greatly reduced. After each "errorless" training trial, the child is immediately reinforced. The rate of progress through the program is determined by performance on the criterion trials which are presented at the beginning and the end of each sequence of training trials. A short diagnostic test is used in the beginning to evaluate the child's pre-existing skills. A detailed description of the program is given in Appendix A.

There are several advantages to the HCEEAA Preschool Program described above which make it feasible to use with college student volunteers. First, the instructional program is highly structured and easily understood, requiring little experience on the part of the teacher to administer. Secondly, the "errorless" learning procedure combined with positive reinforcement makes the learning experience rewarding for both teacher and child. Both are immediately delighted with the child's success. Third, the program is performance-based, with the evaluation built directly into the instructional program, enabling the teacher, in a simple and efficient manner, to progress through the curriculum as fast as each child is able. Fourth, the initial diagnostic test provides a procedure for determining the child's existing skills, allowing the teacher quickly and easily to determine what to teach.

The HCEEAA Preschool Program has several disadvantages, however, which limited its usefulness for the purposes of my project. First, no standard programs for teaching concepts are immediately available to the teacher. Instead, each teacher is instructed on the methods of breaking down and sequencing concept discrimination problems and is expected to program her own lessons. This requires considerable skill and effort on her part. Second, the instructional materials are not readily available. Each teacher is responsible for making her own stimulus cards and other materials. Third, the evaluation procedure is not in a form which is easily administered. There is no standard procedure to follow or materials to use.

During this project an effort was made to develop a preschool instructional program which would retain the advantages of the HCEEAA preschool model while eliminating its disadvantages for use by college student teachers. In this project, the HCEEAA procedures were modified in several ways. First, concept teaching materials and stimulus materials for 22 concepts were fully developed, massed produced and put in booklet form so that each individual college student teacher had their own copies. With these modifications, the college student teachers were responsible only for administering the programs, not for developing them; and the college student teachers no longer needed to be instructed on how to make the stimulus materials nor take the time to make them. Instead they needed only to be told how to use them.

The 22 concepts which were included in the teaching program were three bodyparts (head, knee, and thumb), three animals (horse, cow, and duck), three shapes (circle, cross, and triangle), five verbs (drinking, kicking, jumping, throwing, and pouring) four prepositions (in, under, between, and beside), and four colors (red, blue, yellow, and green). We tried to select concepts of varying levels of difficulty because the children in our project ranged from 2-6 years of age and some were more advanced than others in their language development.

Secondly, the initial and final evaluation procedure was standardized and simplified so that it was easily understood and administered. Thirdly, a record-keeping system was designed to allow the college student teachers to chart the child's progress with little effort. The primary

emphasis of the project then, was to develop and test an instructional kit which provided a complete set of teaching materials and methods needed to teach simple concepts to a child. A description of the concept programs developed for the project, sample pages from a concept program booklet, instructions for using the concept teaching materials and evaluation procedure, and copies of record sheets designed for the teaching project are given in Appendix B.

B. Training College Students to Teach Concepts to Young Children: The next step of the project was to explore the feasibility of teaching college students to use the instructional program developed during the first stage of the project. The training procedure used by the HCEEAA Preschool Project shows teacher-trainees how to use the "errorless" discrimination method with positive reinforcement, how to use behavior modification techniques to shape and maintain attention, and how to keep systematic records of the child's performance. Each trainee observes a trainer modelling the teaching procedure, engages in role-playing the part of the teacher with the trainer, is videotaped while teaching a lesson to a child, is critiqued by the teacher, and finally re-teaches the lesson.

The advantage of the HCEEAA training procedure is that it works well with inexperienced as well as experienced teachers. The primary disadvantage of the training for the purposes of my project was that each teacher is individually trained. Training large numbers of individuals using this method is a very time-consuming process.

In this project, a training procedure was developed which was administered to groups of college student volunteers. College student teachers watched a videotaped presentation of the teaching procedure; instead of role-playing with a trainer, students role-played with each other; instead of learning how to develop their own programs, students were presented with programs which were already developed. In this way it was possible to develop a modified training procedure which was used to train groups of college student teachers in a short period of time, thus approximating more closely the normal orientation procedure for college student volunteer programs.

III. EVALUATION

A. Subjects: Sixty-six college students participated as teachers in the Preschool Tutoring Project. The students were recruited by sending letters, describing the general nature of the project, to the 1150 undergraduates enrolled at Juniata College. Fifty-nine children, aged 2-6, participated in the program. Of the 70 families with preschool children contacted in Huntingdon, 43 (61%) participated in the study, 16 (23%) agreed to participate but were eliminated because their children were too advanced for the project and 11 (16%) refused to participate. Sixteen additional children were recruited from a preschool daycare center in Petersburg, a small rural community nine miles from Huntingdon. Out of the 66 college student teachers participating in the Preschool Tutoring Project, 52 taught their children individually and 14 taught them in pairs. This meant that the number of cases for

data analysis was 59 (the number of children enrolled in the project) in those instances in which only one set of data for each child was collected.

B. Design: We designed the Preschool Tutoring Project to evaluate the feasibility of teaching college students to teach concepts to preschool children using the teaching materials and methods developed during the first part of the research program. Originally, it had been planned to organize and run two sessions of the preschool tutoring project at Juniata College using the following design:

TABLE I

SUMMARY OF PROPOSED DESIGN OF THREE GROUPS OF COLLEGE STUDENT VOLUNTEERS IN THE PRESCHOOL TUTORING PROJECT

Schedule for Preschool Tutoring Project	College student volunteers		
	Group I	Group II	Group III
Session I	Experimental (Trained)	Control (Untrained)	Control (Delayed Participation)
Session II	Control (No participation)	Experimental (Trained)	Experimental (Trained)

In this way we could have randomly assigned college student volunteers and children to experimental and control conditions in the first session of the project and still have provided tutoring to those children assigned to the control conditions in the second session. This design would have allowed us to compare a structured individualized teaching program (experimental condition) with no program or an alternative type of volunteer program (control conditions). However, because our project was not funded until the spring of 1972, we only had time to run one short two-month session of the tutoring project before the college student teachers went home for summer vacation and the project director left Juniata College to accept another job. We eliminated the control conditions on the basis that we could not ask parents to agree to participate in the project if we were not going to provide tutoring for their children as promised.

C. Recruitment: The recruitment of staff, college student teachers, and children for the Preschool Tutoring Project occurred during the first month of the research program. The staff was the director of the grant plus four Juniata College undergraduates serving as research assistants. The criteria for selecting the staff included a willingness to assume responsibilities, previous experience with children, research skills, and an interest in the goals of the project.

Two of the staff members had been directors of the Juniata College child service program the previous year and had knowledge of families in the community who might qualify as potential candidates for the project. Their contacts with members of the Huntingdon community were invaluable for recruiting children for the project. College students were recruited by sending a letter describing the project to all of the students enrolled in Juniata College. Of the 1150 students who received the letter, 76 attended the first organizational meeting and 66 participated in the project. Children from Huntingdon were recruited from the Huntingdon community by visiting families who had participated in other child service programs at Juniata College, daycare centers in the area and the community center of the low-cost housing project located near the college. Sixteen children were recruited from the Petersburg Daycare Center. Recruiting materials for the Preschool Tutoring Project can be found in Appendix C.

D. Training: The training for the college student teachers was conducted on the first two days of the project. The training sessions were designed to include a discussion of (1) the relationship between poverty and language deficiency at early ages and the need for a preschool tutoring project, (2) the theory and method of teaching language used in the project and its use in the HCEEAA Preschool Project, (3) the specific teaching procedures developed for the Preschool Tutoring Project including role-plays, slides and written instructions on how to use the materials, (4) the procedure for meeting with the child and family for the first time, setting up times for tutoring, becoming acquainted with the child, and evaluating the child's knowledge of the concepts included in the Preschool Tutoring Project's curriculum; with an audio-video tape of Ann Sanford, the director of the HCEEAA Preschool Project in Chapel Hill, N.C., modelling the procedure for conducting an initial visit using the materials developed for the Preschool Tutoring Project, and finally, (5) some organizational tasks for the project such as the assignment of the names and addresses of children to college student teachers (children were randomly assigned to college students initially, but scheduling and transportation problems required some switching around of assignments); the assignment of college students to small groups; information about the project's teaching resource room, and dates of future project meetings; the distribution of teaching materials; and finally the opportunity for college students to read and sign contracts outlining the responsibilities of participants in the Preschool Tutoring Project. The information concerning the teaching resource room, the teaching contracts and a calender of project events and data collection can be found in Appendix D.

E. Teaching Sessions: The teaching sessions were arranged and conducted individually by the college student teachers. Each college student teacher arranged a time and place to tutor his child. After acquainting himself with the child, he administered a short concept evaluation test to determine which of the concepts to teach the child. During the teaching sessions the college student teachers were responsible for recording, on teaching session records provided to them, the child's performance on the learning tasks. At the end of the teaching experience, the college student teachers administered a short concept

evaluation test to determine which of the concepts were learned by the child during his participation in the program.

F. Project Meetings: There were three project meetings for the college student teachers during the Preschool Tutoring Project. The first project meeting, which was held one week after the training sessions, focused on questions and problems concerning the initial visit with the family and child; some additional training on teaching techniques and materials; and the collection of college student teachers' responses to a questionnaire concerning the initial visit. The second project meeting, which was held halfway through the project, focused on questions and problems concerning the teaching sessions; a discussion about the termination of the project; and an opportunity for college students to complete a questionnaire concerning their attitudes about various aspects of their teaching experience. Two weeks later, students were mailed additional information concerning the final concept learning evaluation procedure and termination of the project.

The third project meeting, which was held at the end of the project, was concerned with the collecting of teaching materials, teaching session records, and responses to questionnaires assessing attitudes about different aspects of the project from the college student teachers, and an end-of-the-project party. Students who did not attend the final meeting were contacted individually in an effort to recover their records. One week later, a mailing was sent to the parents of children in the project which included (1) a final evaluation of what the child had learned during the project as reported by the college student teacher, (2) a brief report on the project and an expression of gratitude to the parents for participating in the project, and (3) a questionnaire asking the parents if they would like their children to participate in a future Preschool Tutoring Project.

G. Project Questionnaires: There were four questionnaires administered to the college student teachers during the course of the project: Questionnaire I concerned the initial visit and evaluation; Questionnaire II concerned college student reactions to the teaching process and materials midway through the teaching program; Questionnaire III concerned college student reactions to the Preschool Tutoring Project at the end of the program; and Questionnaire IV concerned college student willingness to become involved in another preschool tutoring project in the future. Additional data were collected from college students on the teaching contracts handed out during the initial training sessions and on the Teaching Session records. There were two data forms used for the parents in the project: Questionnaire V was mailed to parents at the termination of the project and a telephone survey was conducted one year later. Copies of project questionnaires and data forms can be found in Appendix E.

H. Results: The results for the project were not fully developed because of time constraints. We were only able to complete one short session of the Preschool Tutoring Project which prevented us from including control groups in our research design. Because the college students had only eight weeks to actually teach their

children, the effectiveness of the teaching materials and methods developed for the Preschool Tutoring Project during the first stage of the research program were not given an adequate test. Because there were no control groups of untrained college students, we were not able to compare the effectiveness of the Preschool Tutoring Project's training methods and materials with other types of volunteer tutoring programs. However, the results do provide information about the feasibility of organizing volunteer preschool tutoring projects using college students as teachers and suggest directions for future research. The results which we did collect are listed below.

1. A large number of Juniata College students were willing to volunteer to participate in the Preschool Tutoring Project in spite of the commitment in time and effort that participation entailed. In response to the initial recruiting step of sending a one-page letter describing the project to all students enrolled in the college, 76 (6%) of the 1150 students receiving the letter attended the first organizational meeting of the project. We had anticipated 20-25 respondants, at the most, from our previous experience organizing college student volunteer projects at Juniata College.

2. The two day training session for the project produced college student commitment to the project. Table 2 presents college student estimates of the amount of time that they would be willing to devote to teaching when asked immediately after the training sessions, and their efforts to complete, on their own initiative, an initial visit with their assigned parents and child during the first week of the project in order to arrange teaching sessions with their child and to evaluate his knowledge of the concepts included in the Preschool Tutoring Project teaching program.

TABLE 2

COLLEGE STUDENT RESPONSE TO TRAINING[1]

	N	mean	frequency
1. Number of hours a week students hoped to devote to the Preschool Tutoring Project.	n=54	2 1/2	1-2 = 14 (26%) 2-3 = 34 (63%) 3-4 = 5 (09%) 5 hrs. = 1 (02%)

	N	yes	no	no response
2. Number of students completing initial visit with parents and children one week after project began	n=59	45(76%)	6(10%)	8(14%)

From Table 2 it can be seen that the college students wanted to devote a mean of two and one-half hours a week to teaching, which was five times the minimum teaching time (30 minutes a week on the average) recommended during the training sessions. In addition, the table indicates that it was feasible to organize a project in which college student volunteers were given the difficult responsibility of arranging teaching sessions with their children and parents on their own and to plan a teaching program for their child on the basis of their own initial assessment of his knowledge of the concepts in the teaching program.

3. Most of the trained college student volunteers reported a high level of involvement in the teaching program of the Preschool Tutoring Project. Table 3, presented below, shows the number of college students who continued to teach their child throughout the eight week teaching program and who completed a final evaluation of their child's progress during the program; the number of teaching sessions which the college students reported to have had with their child; and the average amount of time spent by the college student in each teaching session.

TABLE 3

COLLEGE STUDENT INVOLVEMENT IN TEACHING PROGRAM[2]

	N	yes	no	no response
1. Number of college students completing program	n=66	50 (76%)	12 (18%)	4 (6%)

	N	mean	frequency
2. Number of teaching sessions with child	n=38	10.32	5-9 = 17 (45%) 10-14 = 17 (45%) 15-19 = 4 (10%)
3. Average number of minutes per teaching session	n=38	65	0-30 = 4 (10%) 31-30 = 20 (52%) 61-90 = 5 (13%) 91-120 = 7 (18%) 121-150 = 2 (7%)

From Table 3, it can be seen that 50 (76%) college students completed the teaching program. The drop-out rate was very low. Of the 12 (18%) college students who did not complete the program, five were teaching at the Petersburg Daycare Center and seven were teaching in Huntingdon. Most of the reasons reported for dropping out of the program indicated that the inavailability of the child for teaching was a primary factor. Of the five college students teaching in Petersburg, three dropped out because their children were absent more than three times in a row, one because the teacher at the day care center thought that his child was too difficult to teach, and one because she (the

college student) dropped out of college. Of the seven college students teaching in Huntingdon (five individual teachers and one pair of teachers) one dropped out because the child moved away, two because their child started speech therapy twice a week, one because the mother thought that the child was too young to participate in the program, and three because of difficult teaching situations. The difficult-to-teach children and the children from the Petersburg Daycare center were most likely to drop out of the program. Five (42%) out of the 12 children from Petersburg as compared with 7 (16%) out of 43 in Huntingdon did not complete the program. We have no teaching records for four of the 66 college students who started the teaching program.

In addition, Table 3 indicates that the mean number of teaching sessions held with the child was 10.32 or more than one a week during the eight week teaching program, and that the mean average number of minutes spent in each teaching session was reported to be 65 minutes, or over twice the suggested minimum amount of time.

4. The results concerning the teaching effectiveness of the concept programs and materials were not fully developed because the teaching program was too short and there were no control groups. However, the results do show how the teaching materials and methods were used by the college student teachers. Table 4 presents the college student reports of the number of concepts worked on during the teaching sessions, the number of concepts reported "learned" during the program, the number of college students who developed teaching activities to supplement the Preschool Tutoring Project concept programs, and the involvement of the parents in the teaching program as reported by the college students.

TABLE 4

COLLEGE STUDENT USE OF TEACHING MATERIALS AND METHODS

	N	mean	frequency
1. Number of concepts worked on during the program	n=38	3.8	1-5 = 1 (3%) 6-10 = 14 (37%) 11-15 = 14 (37% 16-20 = 6 (15%) 21-25 = 2 (5%) no response = 1 (3%)
2. Number of concepts learned during the project	n=34	6.0	1-5 = 19 (56%) 6-10 = 9 (26%) 11-15 = 6 (18%)

	N	yes	no	no response
3. Number of college students keeping records of teaching sessions	n=59	38 (64%)	6 (10%)	15 (26%)
4. Number of college students developing supplementary teaching activities	n=40	33 (82%)	7 (18%)	--

Table 5 presented below shows college student reports of the involvement of parents in the teaching program.

TABLE 5

COLLEGE STUDENT REPORTS OF PARENT INVOLVEMENT

	N	yes	no
1. Did the parent(s) seem to take on interest in the Preschool Tutoring Project?	n=40	39 (98%)	1 (2%)
2. Did the parent(s) seem to be going over or helping the child learn the concepts you were teaching in between teaching sessions, etc?	n=40	26 (65%)	14 (35%)
3. Did the parent(s) ask you about the teaching techniques you were using or about the child's progress in the program?	n=40	24 (60%)	16 (40%)

From Table 4, it can be seen that out of 22 concept programs available to college student teachers to use during the project, a mean of eight concepts were worked-on during the eight-week teaching program. The number of concepts worked on depended upon the child's level of knowledge at the beginning of the program, (i.e. some children knew all but a few of the concepts included in the Preschool Tutoring Project); the length of time spent teaching the child, and the speed with which the child learned. Because the teaching data were not fully developed and some of the teaching sessions were incomplete, a more complete analysis of the college student teaching records to uncover the factors effecting the number of concepts worked-on, was not done. However, a summary of the number of college students using each concept program and the number of children who "knew" each concept before the program began (as reported by the college students) can be found in Appendix F. This information may prove valuable when determining which concepts to include in the teaching program of future preschool tutoring projects.

The mean number of concepts reported learned by the college student teachers was six concepts. How much the children actually did learn during the project was not assessed independently of the college student evaluations and reports. It is recommended that this be done in future tutoring projects. It is also strongly recommended that one follow-up of this project is that the teaching effectiveness of the Preschool Tutoring Project concept programs and materials be further researched and developed under more controlled laboratory conditions.

There is evidence that exposure to the teaching program and materials had an impact on college students outside of the structured teaching sessions for which they were trained. College student teachers were very creative in developing ways to focus their involvement with their child on language learning. Thirty-three out of the 40 college students who responded, reported developing supplementary activities to teach concepts to children such as baking cookies of "circles," "triangles" and "crosses;" decorating a cake with verbs and animals; and taking "color" walks. A list of these activities can be found in Appendix G and could be encorporated in the teaching materials of future programs.

In addition, there is antecdotal and questionaire (Table 5) evidence that college students were able to involve the parents of the children in the language teaching process, and that college students not participating in the project became aware of some of the issues regarding language deficiencies and methods for dealing with them. Several articles describing the project and the teaching program, written by participants in the project, appeared in the college and area newspapers. Copies of these articles can be found in Appendix H.

5. The college students, the parents, the children, and the teacher at the Petersburg Daycare Center enjoyed participating in the Preschool Tutoring Project. Table 6 presents college student responses to questions concerning their attitudes about their own and their child's participating in the project. Table 7 presents the parents responses. Only the parents of the children living in Huntingdon were asked to respond to these questions (N-43).

TABLE 6

COLLEGE STUDENT ATTITUDES ABOUT PARTICIPATION IN PROJECT

	N	mean
1. Are you enjoying the tutoring program? (1=not at all - 5=very much)	n=36	4.44
2. Does the child seem to be enjoying the turoring program? 1=not at all - 5=very much)	n=36	4.28

		yes	no
3. Would you like to receive a summary report about the PreSchool Tutoring Project?	n=45	44 (98%)	1 (12%)
4. Would you like to participate in the Preschool Tutoring Project next year if it is continued? Five out of the eight responding "no" indicated that they would not be at Juniata College next year.	n=35	27 (77%)	8 (23%)
5. Would you like to help organize a Preschool Tutoring Project next year?	n-37	11(30%)	26 (70%)

TABLE 7
PARENT ATTITUDES ABOUT PARTICIPATION IN PROJECT

1. On questionnaire sent to parents at end of the Preschool Tutoring Project:

	N	yes	no
Would you be interested in having your child(ren) participate in the project next year? Five of the 7 responding "no" indicated that their children were entering school next year.	n=29	21 (70%)	7 (30%)

2. On telephone survey one year later:

	N	yes	no
Do you think that your child's participation in the Preschool Tutoring Project was a worthwhile experience?	n=30	29 (97%)	1 (3%)
Do you think your child's participation in the Preschool Tutoring Project helped him in any way?	n=30	29 (97%)	1 (3%)
Do you think your child enjoyed participating in the Preschool Tutoring Project?	n=30	29 (97%)	1 (3%)

6. Reactions of the college students to open-ended questions concerning the teaching program suggested several directions for further research and development of the concept teaching programs and materials.

(a) There is some evidence that college students felt that the concept teaching trials were repetitious, that there were too many levels in the program, and that the child became bored because he already "knew" the answer. Some of the college students mentioned that they handled this problem by "jumping around" from level to level rather than follow the concept programs as designed, others did not use as many teaching trials (5 per level) as indicated, and still others indicated supplementing the concept programs with additional stimulus materials to hold the child's attention. On the positive side, these responses suggested that college students were responding to the children as individuals and adjusted the concept programs and teaching procedures to fit the child's needs. On the negative side, the adjustment of the teaching programs seemed to be done in an unsystematic manner. One recommendation for future research, is to develop more fully the methods for individualizing concept programs through branching techniques, for example.

(b) Some college students indicated that their child "apparently" learned a concept in one session, (i.e. reached the criteria of four out of five correct responses on every level of a concept teaching program), only to forget it by the next. The criterion for when a level of a concept program or a concept itself is learned and therefore when a child should advance to the next level or next concept needs to be researched further under more controlled laboratory conditions. Different criteria may be necessary for the performance immediately after the concept has been taught. Once the appropriate criteria have been worked out, they can be encorporated into the teaching procedure.

(c) College students indicated that although the children liked the learning activities of picking out correct from incorrect instances of the concept, and of discriminating and verbalizing the concepts, they sometimes became bored with the stimulus materials. Once the concept programs are developed and tested, it is recommended that more money and resources be used to produce teaching booklets which are more varied and of better quality. The concept booklets produced for the Preschool Tutoring Project were illustrated with black and white line drawings of animals, objects and people repeated on every trial. Because of the expense and time pressures, only the color and shape booklets were illustrated with colors handprinted by two students.

(d) Although college students reported that the Teaching Session Records were difficult to use while teaching their child, 38 out of the 59 student teachers kept session records and in many cases made extensive comments on the session records concerning the child's behavior during the teaching sessions. The college students were aware of the importance of evaluating the child's performance using

behavioral criteria and of making decisions about what and how to teach their child on the basis of their evaluation.

It is believed that the evaluation techniques built into the teaching session data, and the emphasis on sharing the research process with college student participants in the Preschool Tutoring Project were very important to the success of the Preschool Tutoring Project and should be maintained and improved for future preschool tutoring projects. Through these procedures, college student teachers were able to see the value of what they were doing, not only in terms of helping their own child learn language in particular, but also in terms of helping to develop more effective teaching programs, in general.

IV. CONCLUSIONS

It was feasible to organize a preschool tutoring project in which Juniata College college student volunteers were trained to teach concepts to preschool Appalachian children in Huntingdon, Pennsylvania. The project had the following characteristics: (1) the college students participating in the project were actively involved in the research process of evaluating the teaching programs and materials developed during the first stage of the research program; (2) the college student volunteers spent a considerable amount of time and effort in teaching concepts to the children in the project; and (3) the college students, children, and parents indicated that they enjoyed their participation in the Preschool Tutoring Project.

V. FUTURE RESEARCH

One of the most attractive features of this project was that it provided several directions for future research. One direction would be to research and increase the teaching effectiveness of the concept programs, teaching materials, and methods under more controlled laboratory conditions. Variables which determine the effectiveness of the individual concept programs need to be more fully explored, such as the number of steps to include in the discrimination training, the extent to which the "errorless" training has to be absolutely "errorless," which criterion level provides the optimal learning and retention, etc. On the basis of this type of research, the techniques and materials used to train inexperienced volunteers could be refined and expanded. A more comprehensive and colorful manual and teaching materials for teaching language concepts to preschool children could be developed.

In addition, there needs to be more extensive field-testing of a preschool tutoring project using college student volunteers with the design proposed for this project or one similar to it.

Finally, if the method does work well with college students, it might be valuable to explore the feasibility of further simplifying the program for use by other interested but untrained persons such as parents, gradeschool children, etc. Also, it would be desirable to test the program on different populations of children, developing slightly modified forms for mentally retarded, very young and very bright children.

FOOTNOTES

[1]The subjects who were not represented by the data presented in Table 2 included those participants who were not present at the meetings at which the data forms concerning these responses were administered.

[2]Because some of the college students were teaching a single child in pairs and only one set of data for each pair was reported, the total number of subjects for the remaining data analysis is 59 (the number of children rather than college students enrolled in the project). Subjects not represented by the data presented in the tables which follow included 15 participants who dropped out of the project as well as participants who remained in the program but who were not present when data were collected or for whom the particular questionnaire item was inappropriate, or for some other reason.

APPENDICES

A. Description of the HCEEAA Preschool Program for concept development

B. Preschool Tutoring Project teaching program materials

C. Letters sent to college students and parents inviting them to participate in the project

D. Preschool Tutoring Project Resource Room information, the Teaching Contract, and the schedule of project events and data collection

E. Preschool Tutoring Project data collection forms

F. Evaluation of college student use of the concept programs

G. List of supplementary teaching activities developed by the college students

H. Newspaper articles concerning the Preschool Tutoring Project

Appendix A

I. A DETAILED DESCRIPTION OF THE HCEEAA PRESCHOOL PROGRAM FOR CONCEPT DEVELOPMENT.

The instructional objective of the concept program is to enable the child to discriminate correct from incorrect examples of the concept being taught. If the concept "circle" is being taught, for example, the final instructional objective of the program would be for the child to be able to discriminate circles from other shapes. If the concept "red" is being taught, the final instructional objective of the program would be for the child to be able to discriminate red from other colors.

The concept programs are a series of visual discrimination problems of varying levels of difficulty. The problems are sequenced by order of difficulty so that the child will progress through the program without making errors. The first and simplest step of each program is to present the correct stimulus alone to the child. This is followed by simple discrimination problems in which the correct stimulus differs from the incorrect stimulus on three or four dimensions of shape, color, position, etc. As the program progresses, the discrimination problems become increasingly difficult. The number of dimensions by which the correct and incorrect stimulus differ are gradually faded until the final discrimination problem is reached. An example of a sequenced concept program is given below.

The "errorless" discrimination training procedure includes the following steps: (1) present the stimulus cards, (2) request a response from the child such as "touch circle" or "touch red", (3) cue the child whenever necessary, (4) reinforce the child immediately after he makes a correct response, and (5) record the data.

Reinforcement consists of praise, such as, "good working", "oh, you are such a hard worker", and "that's good."; physical contact such as shaking hands with child, patting child on the shoulder, and hugging child; the opportunity to play with a favorite or novel toy; and such oral reinforcement as small pieces of candy and cookies, juice crackers, etc. whenever necessary. Reinforcement is delivered in an enthusiastic and varied manner immediately after the child makes a correct response. At the beginning of the training, several different kinds of reinforcements are tried out on the child to determine to which the child responds.

A system for evaluating the child's progress is built into the training procedure. Before and after a set of "errorless" training trials, criterion trials are administered. Criterion trials are those trials in which discrimination problems are presented with no attempt to prompt the child. If the child performs successfully on four out of five criterion trials, he proceeds directly to the next step in the program. If the child fails to reach criterion on any level of the program, he is presented with additional "errorless" training trials and criterion trials until he successfully reaches criterion.

II. PRESCHOOL PROGRAM FOR DEVELOPMENT OF SHAPE CONCEPTS

I. Circle

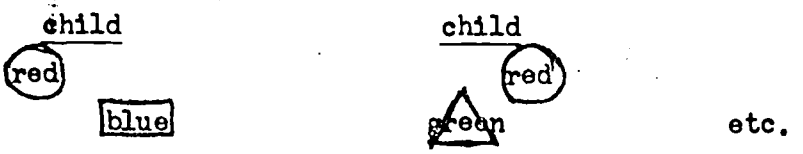
A. Instructional objective: Child will be able to discriminate cutouts and pictures of the shape of circle from other shapes.

B. Materials: Colored wooden cutouts and pictures of circles and other shapes.

C. Lessons:

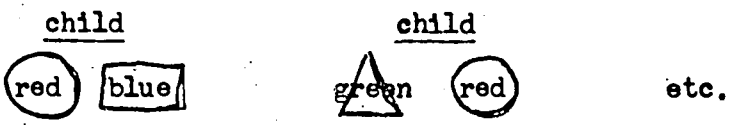
Step 1. Present red circle cutout to child with the verbal request to touch the circle. Child must touch the circle.

Step 2. Present red circle cutout and one other shape cutout of a different color with the verbal request to touch the circle. The child must discriminate circle from other shapes when the circle is cued for color and position on four out of five criterion trials.



etc.

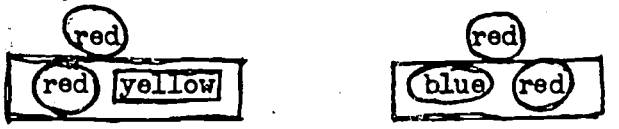
Step 3. Present red circle cutout and one other shape cutout of a different color with the verbal request to touch the circle. The child must discriminate the circle from the other shape when the circle is cued for color.



etc.

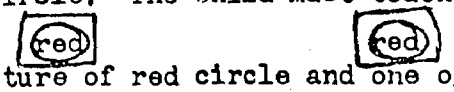
Step 4. Present red circle cutout and picture of red circle with the verbal request to put the circle on the circle. Child must match the circle cutout to the picture of the red circle.

Step 5. Present the red circle cutout and a picture of a red circle and one other shape of a different color with the verbal request to put the circle on the circle. Child must match the circle cutout to the picture of the circle.

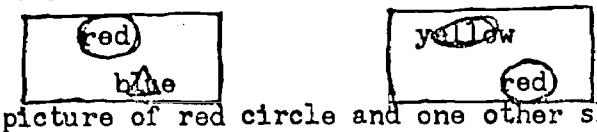


etc.

Step 6. Present picture of red circle with verbal request to touch the circle. The child must touch the circle.

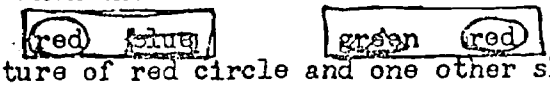


Step 7. Present picture of red circle and one other shape which is different in color and size with the verbal request to touch the circle. The child must discriminate the circle from other shape when circle is cued for color, position, and size.



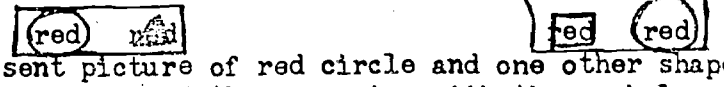
etc.

Step 8. Present picture of red circle and one other shape of a different color and size with the verbal request to touch circle. Child must discriminate circle from other shape when the circle is cued for color and size.



etc.

Step 9. Present picture of red circle and one other shape colored red but different in size. Child must discriminate circle from other shape.



etc.

Step 10. Present picture of red circle and one other shape colored red and the same size with the verbal request to touch circle. Child must discriminate the circle from other shape.

etc.

Step 11. Present picture of circle of color other than red and one other shape of same color but smaller in size with the verbal request to touch the circle. The child must discriminate circle from other shape when circle is cued for size.

etc.

Step 12. Present picture of a circle of color other than red and one other shape of same color and same size with the verbal request to touch the circle. The child must discriminate circle from other shape.

etc.

Step 13. Present picture of circle of color other than red and one other shape colored red with the verbal request to touch circle. The child must discriminate the circle from other shape.

etc.

II For square and other shapes repeat procedure.

Appendix B

Description of the Concept Programs developed for the Preschool Tutoring Project

Sample pages from the Color Concept Teaching Booklet

List of items included in the Preschool Tutoring Project Teaching Program

Instructions for using Concept Programs

Sample Teaching Session Record

Instructions for developing teaching programs

List of supplementary learning activities

Suggested procedure for initial visit and pre-evaluation

Sample evaluation form

Update information on using concept programs

Instructions for completing final evaluation, and evaluation record form

The following 15 pages include:

A Description of the Concept Programs Developed for the Preschool Tutoring Project Giving The Levels for Each of the Individual Concept Programs and the Behavioral Response Required of the Child to Complete the Level.

Sample Pages From the Color Concept Teaching Booklet.

17

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
Body Concept	Locate own "Touch ____"	Locate teacher's "Touch ____"	Discriminate own from teacher's (alternation)	touch picture	Discriminate picture			
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
Head								
Knee								
Thumb								

LAP: ANIMALS

	Level 1	Level 2	Level 3	Level 4	Level 5		
ANIMALS	Touch Toy Horse	Match Toy Horse to Picture of Horse	Match Toy H... to picture of Horse (2 cm)	Match Toy Horse to picture of Horse (2 cm)	Touch Picture of Horses		
	Level 1	Level 2	Level 3	Level 4	Level 5		
Horse							
Cow							
Duck							

LAP: Verbs

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6-7	Level 8
Verbs					Abundant	Verbage	Verbage
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6-7	Level 8
Analyzing							
Applying							
Evaluating							
Inferring							
Remembering							

LAP COLORS

	Card 3	Cards 2	3	Card 4	Cards 5	6	Cards 7	8	Cards 9	10
COLORS	Provide objects showing colors	Provide objects		Provide objects to show colored pictures	Provide crayons to children		Provide materials for children to color pictures			
		with color	without color		with color	without color	with color	without color		
	Card 3	2	3	4	5	6	7	8	9	10
Red										
Green										
Yellow										
Blue										

Language Experiences

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Levels 7-8	Level 9
PREPOSITIONS:	Touch object showing preposition	Discriminate objects showing preposition (with cue)	Discriminate objects showing preposition (no cue)	Touch pictures showing preposition	Discriminate pictures showing preposition (with cue)	Discriminate pictures showing preposition (no cue)	Describe location of objects using "where" questions — "Where is the ball?"	Use in spoken directions "put the button — on the table"
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7-8	Level 9
on								
under								
between								
beside								

SHAPE:

CIRCLE

preschool tutoring project
Juniata College

SHAPE-CIRCLE: LEVEL 1, TRIALS 1-5

Stimulus materials: SOUTH SEMINOLE TEACHERS
Procedure: Hold up to one child one at a time.

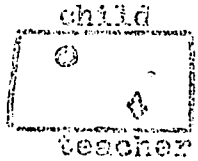
First trial: "THIS IS A CIRCLE. I CAN TOUCH CIRCLE. CAN YOU TOUCH CIRCLE? TOUCH CIRCLE." (Child must touch round stimulus object)

"THIS IS A CIRCLE. SAY CIRCLE" (Child must say "circle")

For criterion trials: "TOUCH CIRCLE"
"SAY CIRCLE"

SHAPE-CIRCLE: LEVEL 2, TRIALS 1-5
(Match round object to round object)

Stimulus materials: 3 same colored objects; 2 circles, 1 not-circle.
Procedure: Place circle and not-circle on table with circle closest to child. (Alternate left-right position of circle in random fashion)



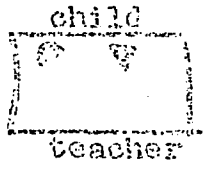
First trial: "THIS IS A CIRCLE. I CAN PUT CIRCLE ON CIRCLE. CAN YOU PUT CIRCLE ON CIRCLE? PUT CIRCLE ON CIRCLE." (Child must put circle on circle)

"THIS IS CIRCLE. SAY CIRCLE" (Child should say "circle")

For criterion trials: "PUT CIRCLE ON CIRCLE"
THIS IS CIRCLE. SAY CIRCLE"

(Match circle with circle with no one)

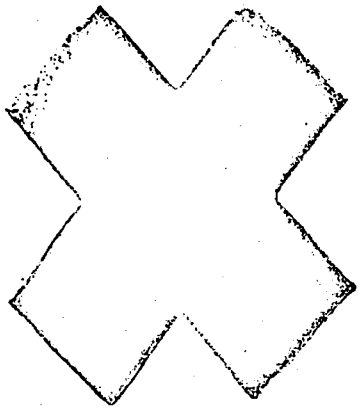
Stimulus materials: 3 same colored rectangular shapes, 2 circles and 1 not-circle.
Procedure: Place circle and not-circle on table. (Alternate left-right position of circle in random fashion).



First trial: "THIS IS A CIRCLE. I CAN PUT CIRCLE ON CIRCLE. CAN YOU PUT CIRCLE ON CIRCLE? PUT CIRCLE ON CIRCLE" (Child must put circle on circle)

"THIS IS CIRCLE" SAY CIRCLE" (Child should say word "circle")

For criterion trials: "PUT CIRCLE ON CIRCLE"
"THIS IS CIRCLE . SAY CIRCLE"

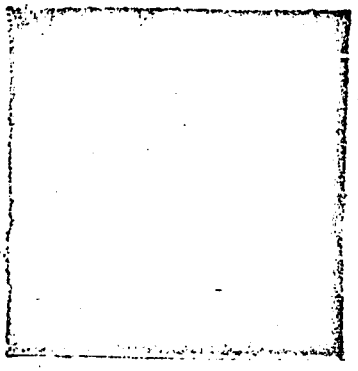


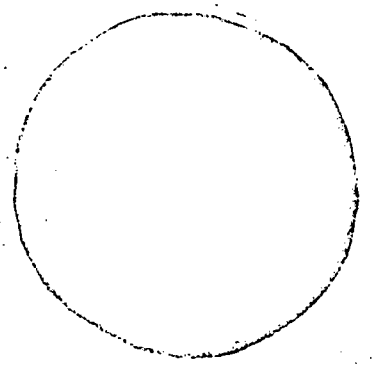
SHAPE-CIRCLE: LEVEL 4, TRIAL 1
(Touch colored picture of circle)

First trial: "THIS IS A CIRCLE. I CAN TOUCH CIRCLE. CAN YOU TOUCH CIRCLE? TOUCH CIRCLE." (Child must touch picture of circle.)

"THIS IS A CIRCLE. SAY CIRCLE." (Child should say word "circle")

For criterion trials: "Touch Circle"
"SAY CIRCLE"

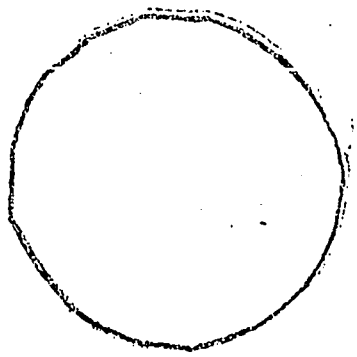


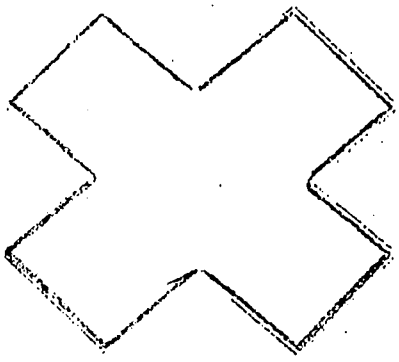


SHAPE-CIRCLE: LEVEL 5, TRIAL 3

"TOUCH CIRCLE" (Child must touch picture of circle)

"SAY CIRCLE" (Child should say word "circle")





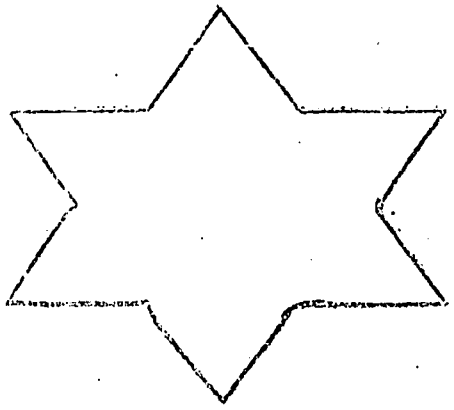
C-16

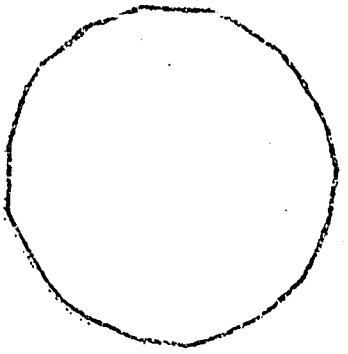
SHAPE-CIRCLE: LEVEL 6, TRIAL 1
(Touch line picture of circle)

First trial: "THIS IS A CIRCLE. I CAN TOUCH CIRCLE. CAN YOU TOUCH CIRCLE? TOUCH CIRCLE." (Child must touch picture of circle)

"THIS IS A CIRCLE. SAY CIRCLE." (Child should say word "circle")

For criterion trials: "TOUCH CIRCLE"
"SAY CIRCLE"





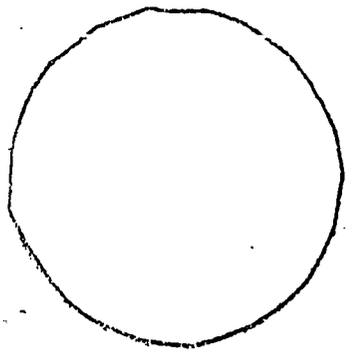
C-21

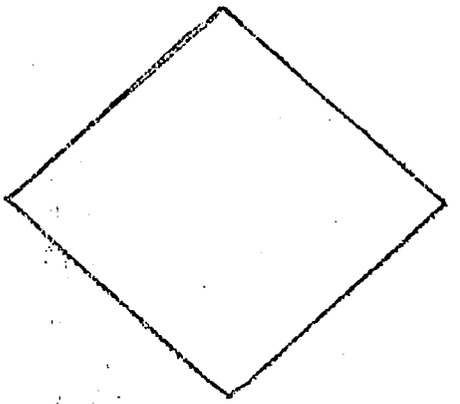
SHAPE-CIRCLE: LEVEL 7, TRIAL 1
(Touch line picture of circle with no cue)

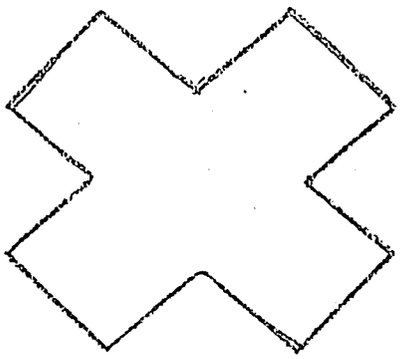
First trial: "THIS IS A CIRCLE. I CAN TOUCH CIRCLE. CAN YOU TOUCH CIRCLE? TOUCH CIRCLE." (Child must touch picture of circle)

"THIS IS A CIRCLE. SAY CIRCLE." (Child should say word "circle")

For criterion trials: "TOUCH CIRCLE"
"SAY CIRCLE"







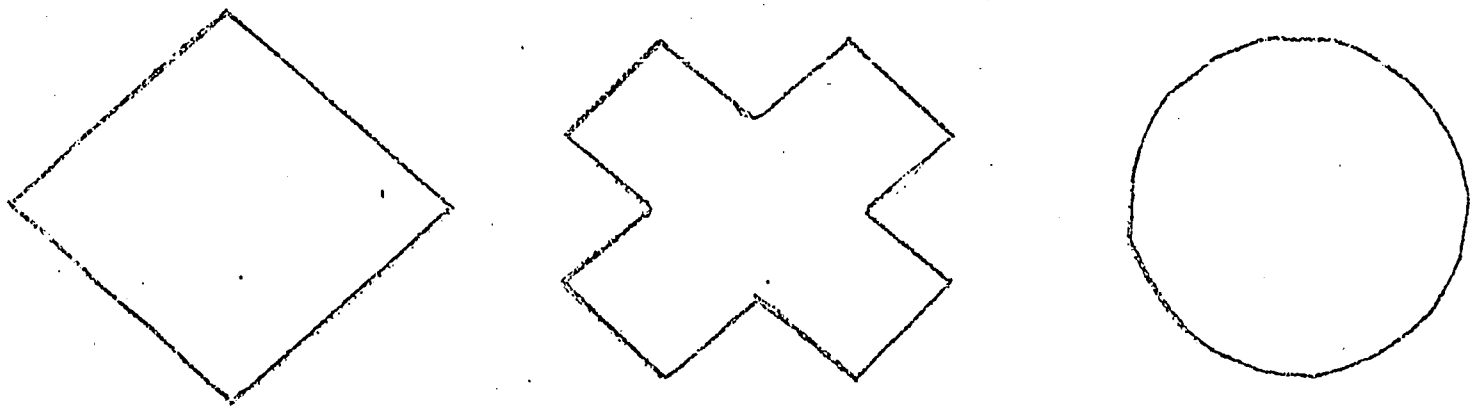
C-26

SHAPE-CIRCLE: LEVEL 8, TRIAL 1
(Touch line picture of circle)

First trial: "THIS IS A CIRCLE. I CAN TOUCH CIRCLE. CAN YOU TOUCH CIRCLE? TOUCH CIRCLE." (Child must touch picture of circle.)

"THIS IS A CIRCLE. SAY CIRCLE." (Child should say word "circle")

For criterion trials: "TOUCH CIRCLE"
"SAY CIRCLE"



C-31

SHAPE-CIRCLE: LEVEL 9, TRIAL 1
(Touch line picture of circle with no cue)

First trial: "THIS IS A CIRCLE. I CAN TOUCH CIRCLE. CAN YOU TOUCH CIRCLE? TOUCH CIRCLE." (Child must touch picture of circle)

"THIS IS A CIRCLE. SAY CIRCLE." (Child should say word "circle")

For criterion trials: "TOUCH CIRCLE"
"SAY CIRCLE"

ITEMS INCLUDED IN THE PRESCHOOL TUTORING
PROJECT TEACHING PROGRAM

1. Twenty-two programmed concept teaching booklets for six classes of concepts:

   Body parts (head, knee, thumb)
   Animals (horse, cow, duck)
   Shapes (circle, cross, triangle)
   Verbs (drinking, jumping, kicking, throwing, pouring)
   Prepositions (in, under, between, beside)
   Colors (red, green, yellow, blue)

2. Different colored stimulus materials for teaching colors (colored clothes pins, plastic eggs, ribbon, etc.).

3. Plastic animals for teaching the animals.

4. Cardboard cutouts of different shapes for teaching shapes.

5. Different types of reinforcements for the child (M&M's, sugared cereal).

6. Teaching Session Records.

7. Written instructions concerning the use of the teaching materials.

INSTRUCTIONS FOR USING CONCEPT PROGRAMS

I. Each tutoring kit contains 22 concept programs for 6 classes of concepts:

1. Body parts (head, knee, thumb)
2. Animals (horse, cow, duck)
3. Shapes (circle, cross, triangle)
4. Verbs (drinking, jumping, kicking, throwing, pouring)
5. Prepositions (in, under, between, beside)
6. Colors (red, green, yellow, blue)

II. Each concept program is composed of different levels. In each level, the child is asked to perform a different kind of behavior, (i.e., matching or discriminating the correct from the incorrect instance of a concept, or verbalizing the name of the concept, etc.) The levels are arranged in order of difficulty for the most part and the arrangement of levels is similar for most of the concept programs. In general, the behaviors that a child is asked to perform as he progresses through a concept program occur in the following order:

a.) Touch concrete objects representing concept (i.e., shape cutouts, toy animals)
b.) Match concrete objects to concrete objects
c.) Match concrete objects to pictures representing concepts (colored or line drawings printed in concept program booklets)
d.) Touch pictures
e.) Discriminate pictures representing concept from other pictures with correct response positioned closer to child
f.) Discriminate picture representing concept from other pictures with no position cue
g.) Verbalize in response to question "What is this?" (using concrete objects as stimulii)

III. Each level is composed of trials. A trial occurs each time the child is asked to make a response. Different stimulus materials are provided for each trial. For example, the trials for LEVEL of the RED-COLOR program are composed of the following stimulus pictures:

In trial 1: Child is asked to discriminate between a red cross and brown cross
In trial 2: Child is asked to discriminate between a red diamond and purple diamond
In trial 3: Child is asked to discriminate between a red circle and black circle
In trial 4: Child is asked to discriminate between a red star and brown star

In trial 5: Child is asked to discriminate between a red triangle and black triangle

As can be seen, child is asked to make the same response on each trial - to discriminate between red and other colored shape, but with different stimulus pictures. In general only 5 trials are included in the concept programs for each level. Usually more than 5 trials will be needed for any given level. In these cases, use stimulus materials for trials 1-5 over and over again.

IV. There is a standard procedure for teaching the levels of the concept programs.

A. First trial of each level. Begin each level by modeling the behavior you want the child to perform and helping the child to perform the correct response. The dialogue for the first trial is printed on the concept programs beside the words "first trial". A sample of first trial dialogue for Color Red is given below:

First trial: "THIS IS RED. I CAN TOUCH RED." (Teacher touches red to model correct response). "CAN YOU TOUCH RED? TOUCH RED." (Teacher helps child make correct response)

This modeling procedure should be used on the first trial for each level.

B. Criterion Trials. After presenting the first trial, present 1-4 criterion trials. Criterion trials (or test trials) are the trials on which the child's ability to perform the correct response is evaluated. If the child makes the correct response on all 4 criterion trials, it is assumed that he knows that behavior and is ready to progress to the next level in the program. If, on the other hand, the child makes an error on any one of the 4 criterion trials, it is assumed that he does not know the behavior and that he needs additional training before progressing to the next level in the concept program.

The only difference between criterion trials and other trials (i.e., first or teaching) is that criterion trials are presented with no cues or modeling of the correct response.

The dialogue for the criterion trials is printed on the concept programs after the words "for criterion trials". A sample is given for color RED:

For criterion trials: "TOUCH RED" (Teacher leaves out verbal cue and modeling behavior)

The correct response, in this case, would be for the child to touch the red stimulus object. The child's rate of progress through the program depends upon his performance on the criterion trials in the following way:

(1) If the child makes a correct response on 4 criterion trials, then he proceeds directly to the NEXT LEVEL in the program.

(This may mean the child does not receive teaching trials on some levels.) or

(2) If child makes an error on any one of the 4 criterion trials, then begin the TEACHING TRIALS for that level.

C. Teaching Trials. Teaching trials are those trials on which the child is helped to make the correct response. Because child is not allowed to make mistakes during the teaching trials, this method of teaching is called "errorless learning". On the teaching trials, the teacher provides as many cues as necessary for the child to make the correct response. (For example, cues may include the use of first trial dialogue, modeling the correct response, guiding the child's hand, etc.) The teacher should give the child as much opportunity as possible to respond correctly before helping him. Child should be reinforced immediately after he makes a correct response.

The dialogue for the teaching trials is printed on the concept programs after the words "for later trials". A sample of dialogue for color RED is given below:

For later trials: "THIS IS RED. TOUCH RED." (Teacher should model correct response if necessary).

Five teaching trials are presented to the child. After completing the teaching trials, the criterion trials are presented again to determine whether or not the child has learned the correct response. Criterion trials provide the teacher with feedback on the effectiveness of his teaching. As before, if the child makes correct responses on all 4 criterion trials, then it is assumed that he has learned the correct response and is ready to proceed to the next level. If, on the other hand, the child makes a mistake on any one of the 4 criterion trials, it is assumed that he needs more training and is given 5 more teaching trials on the same level. Alternate teaching trials with criterion trials until child makes a correct response on all 4 criterion trials. (This is called "reaching criterion"). After child has reached criterion, he proceeds to next level in program.

Always finish teaching a concept in each teaching session with criterion trials.

Always begin teaching a concept in each teaching session with criterion trials. (i.e., When beginning a new session with a concept that child has worked on previously, retest child on the last level he has completed before starting new level. If child is continuing on the same level, start with criterion trials on that level.)

IV. Several different concept programs may be taught in a teaching session. In general spend 5-10 minutes (or until child is restless or inattentive) on each concept program. Proceed through teaching programs at a fairly rapid pace, avoid long delays or pauses, and plan a 3-5 minute break during the teaching sessions for the child to stand up and move around or do something he wants to do.

V. Keep ACCURATE SESSION RECORDS. (Students sharing teaching kits should each have a separate session record booklet.)

SESSION RECORD

Session #: _____

Tutor: _____ Child: _____

Date: _____ Time: _____ Length of session: _____

			Criterion					Teaching					Criterion				Teaching				
Concept: _____	Level: ___	Trial: ___	1	2	3	4	5	1	2	3	4	5	1	2	3	4	1	2	3	4	5
Concept:	Level:	Trial:																			
Concept:	Level:	Trial:																			
Concept:	Level:	Trial:																			
Concept:	Level:	TRIAL:																			
Concept:	Level:	Trial:																			
Concept:	Level:	TRIAL:																			
Concept:	Level:	Trial:																			
Concept:	Level:	Trial:																			
Concept:	Level:	Trial																			
Concept:	Level:	trial:																			
Concept:	Level:	Trial:																			
Concept:	Level:	trial																			

Notes:

(1) Use checkmark (✓) to indicate correct response; use "X" to indicate error.

(2) Always start and finish each concept covered in session with criterion trials.

(3) If child makes an error on a criterion trial, proceed immediately to teaching trials.

EVALUATION:

① Child reached criterion on the following levels:

Body parts: _____ level: ___ # teaching trials: ___ ; Verb: _____ level: ___ # teaching trials: ___

Animal: _____ level: ___ # teaching trials: ___ ; Color: _____ level: ___ # teaching trials: ___

Shape: _____ level: ___ # teaching trials: ___ ; Preposition: _____ level: ___ # teaching trials: ___

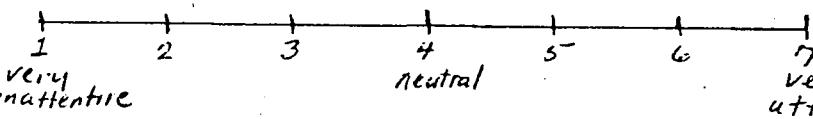
② Child failed to reach criterion on the following levels:

Body part: _____ level: ___ Verb: _____ level: ___

Animal: _____ level: ___ Color: _____ level: ___

Shape: _____ level: ___ Preposition: _____ level: ___

③ Attending behavior: (circle number)



(inappropriate response to material, out of seat) (eye contact, sitting straight in chair, responding appropriately)

RECOMMENDED CURRICULUM FOR NEXT SESSION:

Body part: _____ level: ___ Verb: _____ level: ___

Animal: _____ level: ___ Color: _____ level: ___

Shape: _____ level: ___ Preposition: _____ level: ___

(note: if a new criterion level is reached, retest next session by repeating criterion trials before beginning new level.)

COMMENTS: (reinforcement used, description of child, mother-child interaction, problems, etc.)

write on back

DEVELOPING YOUR OWN TEACHING PROGRAMS

If child completes the concepts in the teaching kits, develop your own teaching program. (i.e., colors, shapes, animals, etc., not included in Preschool Tutoring Project programs). Your teaching programs need not be as elaborate as or include as many levels as those included in the teaching kits

BUT
it is important to be
SYSTEMATIC
in what you do.

Be sure to:

1. Know what behavioral response the child is asked to perform (i.e., to discriminate between colored objects, locate color in picture.)
2. Alternate criterion trials with teaching trials so that you can evaluate the child's performance.
3. Assume child has learned the response only when he has made the correct response on 4 criterion trials in a row.
4. Keep a record of child's performance and write a description of your teaching program for the Preschool Tutoring Project. In your description include:
   a) Concept which was taught (i.e., purple, frog)
   b) Response child was asked to perform (i.e., discrimination)
   c) Materials used

SUPPLEMENTARY LEARNING ACTIVITIES

Colors

Sorting - (Cards, chips, checkers, etc)
Matching - (Bingo)
Cut and paste red paper, fabric, etc.
Tear and paste red paper, fabric, etc.
Paint with red - (Tempera and finger paint)
Change water to red with food colors. (Child may put in pretty bottle for his room.)
Paste collections of red pictures from magazine or Sears catalog.
Make red eyeglass of cellophane.
Make red bracelet of dyed macaroni.
Use crayon of red.
Mix red Koolade.
Make red paper airplane.
Dye red Easter eggs.
Make red kite.
Cut red apple, etc.
Decorate cookies with red frosting.
Make hat with red feathers or colored red.
Write in sand with box or tray painted red.
Write with red magic marker.
Spatter paint with red.
Vegetable prints of red.
Draw with red chalk.

Geometric Shapes

Make puzzles - cut out cardboard paste on support card.
Potato printing.
Spatter paint - (Use toothbrush and wire screen).
Sort different sizes and colors.
Find all the circles on a cue sheet.
Trace with carbon paper.
Imprint shape by placing paper over raised form and coloring over it.
Child glues macaroni, etc., to outline of shape drawn on cardboard.
Use template or stencil for child to draw shape.
Assemble puzzle of shapes.

Verbs

Assemble pictures of magazine pictures of people doing - sitting, hitting, kicking, similing, etc.

Animals

Make booklet of pictures of animals.
"Read" together books of animals
Listen to records of animal sounds.

Play with Matell Animal game.
Play animal bingo.
Play animal Lotto.
Assemble puzzle of animal (Program).
Sing songs about animals.
"Old MacDonald"
"Did you ever see a doggie?" (go bow-wow)
Make animal of clay.
Spatter paint outline of animal.

Prepositions

Assemble a variety of materials for child to follow verbal direction of in, etc.
Collect magazine pictures which illustrate preposition.
Sing songs with directions of where to place objects.
"I put the pencil in - (hand, thumb, etc.)
I take the pencil out -

SUGGESTED PROCEDURE FOR INITIAL VISIT AND PRE-EVALUATION

1. Introduce yourself to parent, explain project and your role in it, make arrangements (time, place, days) to meet with child on regular basis. If, for some reason, you cannot work out a schedule at this time, at least make arrangements for the next session.

2. Make friends with child. Introduce yourself to child, put him at ease, play with him, sample reinforcements.
   Sample dialogue for reinforcement sampling:
   "Look what I have for us to eat" - "for us to play with," etc.
   "What do you like to do?", "Show me your favorite toy."

3. Pre-evaluate child. Use stimulus objects rather than pictures from your teaching kit for the pre-evaluation.
   a) Orient child to task.
      Sample dialogue:
      "Let's play a learning game." "Let's play a game I know then we can play one that you want to play."
      "I have some things here I would like to play with you."
   b) Choose quiet location. Face child towards wall to limit distraction. Require attending behavior from child during pre-evaluation.
   c) Pre-evaluate child on concept included in teaching program. Record results. Record any additional information. If you are unable to complete pre-evaluation, finish it the next time.
   d) End the pre-evaluation on a positive note. Ask the child to do something you know he can do and reward him for it. Make this initial experience with "learning games" as soon as possible.
   e) Derive your instructional objectives for the child.

PRESCHOOL LANGUAGE PROJECT

Initial Interview
Pre-evaluation

Date: _____

Tutor: _____

Child: _____

Body Concept:	Verbalize "What is this?" trials 1	2	Animals:	Verbalize "What is this?" trials 1	2	Verbalize "What does he say?" trials 1	2	Shapes:	Verbalize "What shape is this?" trials 1	2	Verbs:	Verbalize "What am I doing?" trials 1	2
head (model)			dog (model)					square (model)			reading		
head *			horse *					circle *			drinking *		
thumb *			cow *					moon *			kicking *		
knee *			duck *					triangle *			throwing *		
nose											jumping *		
arm											running *		
leg													
fingers													
wrist													

Notes:
① * concepts included in program
② list additional items if possible
③ if child makes 2 errors on concepts included in teaching program,
④ if child makes 2 correct responses mastery on LMP

P-1

Colors:	Verbalize "What color is this?"		Prepositions:	Verbalize "Where is the ___?" Marks	
	1	2		1	2
Orange (could)			Behind		
Red*			Over*		
Green*			Under*		
Yellow*			Between*		
Blue*			Beside*		
Brown					
Purple					
Black					
White					

Summary:

Concepts on which child reached criterion:

1. 3. 5.
2. 4. 6.

Concepts on which child did not reach criterion:

1. 3. 5.
2. 4. 6.

Arrangements to meet with child:

Days: _____

Times: _____

Place: _____

COMMENTS: (reinforcement, parent-child interaction, home situation, etc.)

use back of sheet if more room is needed

UPDATE INFORMATION ON USING CONCEPT PROGRAMS
(Handed out at the Second Preschool Tutoring Project Meeting)

I. ON THE IMPORTANCE OF KEEPING COMPLETE SESSION RECORDS:

As you know, it is important to keep accurate, complete, up-to-date records of your teaching sessions. In addition to keeping records of your child's performance on the programs, please write down any observations, comments, descriptions you have as soon as possible after each session while they are still fresh in your mind. Of special interest are (1) descriptions of any activities or games you used in the session to supplement the teaching program (i.e. reading a book to the child and having him pick out all the reds in the picture), (2) descriptions of the type of reinforcements you are using and the nature of the reinforcement procedure (i.e. child gets one minute of free play time for every correct response he makes during the training session), (3) difficulties you are having administering the program, (4) suggestions for changes, additions, deletions, etc., etc., and (5) descriptions of additional concept programs you have developed.

Also, from now on (if you haven't already been doing it) please estimate the approximate amount of time spent on the actual teaching programs themselves out of the total amount of time and write this information on the session record sheet. If you run out of session records, more are available in the Preschool Tutoring Project Resource Room.

II. WHAT TO DO WHEN CHILD HAS SUCCESSFULLY COMPLETED A CONCEPT PROGRAM ONE DAY BUT DOESN'T SEEM TO KNOW IT THE NEXT SESSION:

Whenever the child completes a concept program, always retest it in the following session. Retest on the final level which involves verbalization (i.e. what color is this?) and on a level which only involves touching the correct stimulus picutre with no cue (i.e. touch red, when three colors are presented). If the child does not reach criterion on the touching trials, start teaching trials and continue as before until he does reach criterion. If the child does reach criterion on the touching (discrimination) level, then proceed to verbalization level. If the child does not reach criterion, begin teaching trials as before until the child does reach criterion.

If the child responds correctly on the retest with no additional training, assume that he knows it. (This is just an assumption, of course.) You may want to try another retest in a few weeks to see how the child responds. If he does not reach criterion, then begin teaching trials again. It is important to distinguish between knowing how to verbalize the concept and being able to touch (discriminate) an example of it. The child may know how to discriminate it but not verbalize it.

III. TEACHING SPECIFIC DISCRIMINATIONS BETWEEN CONCEPTS

If you went to teach your child to discriminate one color in the program from another (i.e. red from yellow) or some other specific response, you can develop a program which focuses on that particular task. An example of a program to teach a child to correctly discriminate red from yellow on four consecutive criterion trials is as follows:

Level 1, trials 1-5: When red and yellow stimuli are presented to child, he must touch red. Red is cued for position.

Level 2, trials 1-5: Repeat level 1. with no position cue.

Level 3, trials 1-5: When red and yellow stimuli are presented to child, he must touch yellow. Yellow is cued for position.

Level 4, trials 1-5: When teacher alternates the request to touch red with request to touch yellow, child must touch correct stimuli. The correct stimulus is cued for position. (For example - the teacher might ask the child to touch red on the first trial, yellow in the second and third trials, red on the fourth trial, and yellow on the fifth trial.)

Level 6, trials 1-5: Repeat level 5. with no position cue.

Level 7, trials 1-5: Alternate in a random fashion holding up red and yellow stimulus objects and ask the child "What color is this?".

If you want help developing any special programs please come by the Preschool Tutoring Project Resource Room.

IV. THE PRESCHOOL TUTORING PROJECT WILL HAVE THE FINAL MEETING ON MONDAY MAY 8, 7 P.M., ROOM 200, GOOD HALL.

Please bring all record sheets and program materials with you to this meeting. It is very important that all records and supplies are returned at this meeting. thank you.

INSTRUCTIONS FOR COMPLETING FINAL EVALUATION, ETC.
Preschool Tutoring Project
(Sent to College Students on April 20, 1972)

The preschool tutoring project will end officially for the Spring term on May 8 with a meeting for all tutors at 7 p.m. in 200 Good Hall. There are several things we would like you to do before that meeting:

1. Complete a final evaluation of your child's knowledge of each of the concepts in the teaching program. The purpose of the final evaluation is to determine the highest level on which the child can reach criterion (four correct responses) on each of the concept programs. The procedure for the final evaluation is as follows:

(a) Begin with the verbalization level without cues of each concept program. i.e. the verbalization level for colors is level 12; shapes -- level 11; body parts -- level 8; animals -- level 7; verbs -- level 7; and prepositions -- level 8.

(b) Present trials as if they were criterion trials -- provide NO cues or modeling of the correct response when presenting the trials nor any feedback on performance after the child responds. (i.e. do not correct the child if he is wrong nor praise him if he is correct. You may want to commend him for working hard or paying attention however.)

(c) Present trials for the verbalization level until the child responds corectly four times (and therefore reaches criterion) or until he makes an error. If the child reaches criterion, circle the number of the level on the final evaluation form which is enclosed in the appropriate place. If the child makes a mistake, drop back to the next easiest level without cues and present trials. Work backwards through the program until you reach a level on which the child can reach criterion. Record the number of that level on the final evaluation form.

EXAMPLE: To evaluate colors, start with the verbalization level (level 12) of the color program. For each color, hold up colored stimulus objects and ask the child to verbalize the color until he has either responded correctly four times or until he has made a mistake. On the colors where the child reaches criterion, circle level 12 on the evaluation sheet. On the colors where he makes a mistake, drop back to level 9 (where child must discriminate the color from two other colors) and present trials. (Level 10 is ommitted because it provides cues). If child fails to reach criterion level 9, drop back to level 7, and so on until he does reach criterion. When presenting trials, do not ask the same questions four times in a row. Instead alternate the colors to which the child is responding in random fashion. An example of evaluating colors might be to hold up RED stimulus object and ask, "What color is this?" and then a BLUE object and ask, "What color is

this?" and then a GREEN object, and so on until all colors have been completed.

Repeat this procedure for shape, body parts, verbs, prepositions, and animals. If you have any questions about the final evaluation procedure call or come by the Preschool Tutoring Project.

2. Tell the parents the date of your last teaching session with the child, if you have not already done so.

3. Take your child to the May Day carnival, May 5 or 6, as a farewell activity if possible. Instead of having an end-of-the-project party, the Preschool Tutoring Project will provide some money (50%) for you and your child to use at the carnival. Be sure to ask the parents' permission before inviting your child. Enclosed is a permission slip for the parent to sign. Bring your signed permission slip to the Preschool Tutoring Project sometime next week to collect your carnival money. Anyone who does not have transportation notify the Preschool Tutoring Project next week. Tutors at Petersburg should talk to Mrs. Norris about contacting parents and making arrangements.

4. You will not be asked to write a final report to the parent at the end of the project. Instead, we will send a letter shortly after the May 8th meeting to thank the parents for participating in the project and to report their child's progress in the project based on your final evaluation reports. We would encourage you to thank the parents and tell them goodbye on your own, however. Thank the parents and tell them goodbye on your own, however. They will certainly appreciate more personal farewell from you.

5. Do not forget the final meeting for all tutors May 8, 7 p.m., Good Hall, Room 200. Bring all records, teaching materials, and anything else that is relevant.

Tutor's Name _____

Child's Name _____

Date _____

Final Evaluation Form

Please circle the number of the most advanced level on which child has reached criterion.

Concepts	Level reached in final evaluation	Comments
Body Parts:		
head	1 2 3 4 6 7 8	
knee	1 2 3 4 6 7 8	
thumb	1 2 3 4 6 7 8	
Animals:		
horse	1 2 4 5 6 7	
cow	1 2 4 5 6 7	
duck	1 2 4 5 6 7	
Shapes:		
circle	1 3 5 7 9 11	
cross	1 3 5 7 9 11	
triangle	1 3 5 7 9 11	

Final Evaluation, p. 4.

Concepts	Level reached in final evaluation	Comments
Verbs:		
drinking	1 2 3 5 7	
kicking	1 2 3 5 7	
throwing	1 2 3 5 7	
jumping	1 2 3 5 7	
pouring	1 2 3 5 7	
Colors:		
red	1 3 4 6 8 10 12	
green	1 3 4 6 8 10 12	
yellow	1 3 4 6 8 10 12	
blue	1 3 4 6 8 10 12	
Prepositions:		
in	1 3 4 6 8	
under	1 3 4 6 8	
between	1 3 4 6 8	
beside	1 3 4 6 8	

Child's Name _____

Parent's Name _____

Tutor's Name _____

CONCEPT	Knew before program	Learned in program	CONCEPT	Knew before program	Learned in program
Animals:			Body Parts:		
Horse			Head		
Cow			Thumb		
Duck			Knee		
Colors:			Prepositions:		
Red			In		
Blue			Under		
Yellow			Between		
Green			Beside		
Verbs:			Shapes:		
Pouring			Circle		
Drinking			Cross		
Jumping			Triangle		
Throwing					
Kicking					

The above evaluation indicates those concepts within our program which your child knew before the project began (column I) or learned during the project (column II). Only the concepts circled were being taught by your child's tutor; some concepts were not taught for lack of time. Also it was not expected that all the children would know all the concepts, since children of varying ages were included in the program. Many children did not receive checkmarks for concepts they partly knew, since our evaluation was based only on the child's ability to vocalize it to the tutor.

APPENDIX C

I. LETTER USED TO RECRUIT COLLEGE STUDENTS FOR PROJECT

College student - beware!

Rumor has it that there is another program on campus asking for volunteers. Funded by H.E.W., the program (Preschool Tutoring Project) is attemptimg to construct packaged programs to be used by college students for teaching pre-school children basic concepts.

Don't let them fool you by their promises to give you "valuable experience in working with children" or the "deep personal rewards of actually doing something to combat ignorance and poverty." They really aren't interested in you at all. What they are really interested in is the children.

If you have been in past programs which in some way resembled this one and were frustrated by your lack of accomplishment or feeling of helplessness, we can assure you that Preschool Tutoring Project will be different. We are presently working to construct step by step packages designed to teach single concepts (circle, square, etc.) by a systematic presentation to the preschooler. We will provide the packets, the training, and the child for the program to last from March 6 to May 6. What we ask from you is a couple hours each week to meet with your child and administer the program.

Language deficiency is probably the biggest single cause of failure by elementary students in the public school system. Failure is a very real part of poverty. We don't have any answers yet, but this program may provide us with a start.

If you are also interested in helping the children, fill out the form below and return it to Susan Dobson (Box 393) or Dave Beahm (Box 135). Come to the organizational meeting to be held Wednesday, February 9 at 7:00 p.m. in G-200. Don't miss this opportunity to become involved.

- -

I am interested in learning more about the Preschool Tutoring Program.

Name_____

Box # _____

II. LETTER USED TO RECRUIT PARENTS FOR PROJECT

Dear Concerned Parent,

Recent developments in the area of child care have shown that the most crucial period of learning for children may occur before the child reaches school age. Programs such as kindergarten and Head Start were begun to try to teach preschool children basic concepts and ideas before they entered first grade.

In keeping with these findings, Juniata College is about to begin a new program for teaching preschoolers between the ages of two and five a few of the basic concepts which the child will need when he begins school. Students from the college have volunteered to help provide free tutoring services for preschool children from any interested families.

College students will be happy to meet with your child in your home or at any other suitable place at times which are convenient. The tutors will probably meet with your child a minimum of two times a week for eight weeks. A report describing your child's progress will be given to you at the end of that period. Since this is our first attempt at such a program, much of what we do may need to be changed and improved; we would welcome your help and suggestions at any time.

If you are interested in the free tutoring sessions for your child, regardless of whether or not he or she is in any other preschool program, and would like to know more about the program, contact Dr. Julie Drews from 8:00 to 5:00 week days at phone number 643-4310 or after hours at number 643-2331.

Appendix C, continued.

III. A REPORT ON THE RECRUITMENT PROCESS. (Written by Susan Dobson)

We began recruitment by contacting various organizations. We went to approximately six churches with no luck (finding no one available to talk to). We talked to the Director of Public Assistance, who said that he could not release names to the public. His suggestion was that we give him form letters which could be taken directly to the families and they could decide. This was impossible for our program since time was an important factor and this would have taken up to two to three months. This is an important source to remember for future reference, however. From there we went to the Child Welfare Service, where we were confronted with the same confidentiality problem. This would also have taken more time.

Sources where we did receive lists of names of prospective children for the program were Head Start, Day Care Centers, and Nursery Schools and one church nursery. When we contacted these people, they were able to give us names of other children. Altogether we contacted 70 families with preschool children in the Huntingdon area. Eleven of the 70 ( ) contacted were not interested in participating in the Preschool Tutoring Project for a variety of reasons including one mother who was afraid that her son would be bored in Kindergarten if he participated in the program, and one who seemed protective and did not feel her son was ready for the program. A few mothers gave the impression (although they did not say anything) that they did not care for the idea of college students coming into their homes. Sixteen of the 70 contacted (%) wanted their children to participate in the program but their children proved too advanced.

Forty-three of the 70 contacted (%) did participate in the program. The parent (s) who accepted our program mostly asked questions concerning the dynamics of it, i.e. what would their child be learning?, how often would the tutor be seeing him?, would he be leaving the house?, etc. The recruitment procedure in Huntingdon went much more smoothly after we began contacting the friends of people we contacted initially. We found that the mothers who were enthusiastic had talked the project up among their friends and the attitudes were much more receptive. We found that when we could say "Mrs. X gave us your name thinking you might be interested. Her son, _____, is going to be in the program," the mothers were much more amenable to listening to us. An important part of the recruitment is to explain exactly what the program is, and how we obtained their name. To personalize the approach, we made ourselves familiar with their child's name and approximate age. In addition to the 43 children in Huntingdon, 16 were recruited from the Petersburg Daycare Center giving us a total of 59 children in the program.

IV. PUBLIC RELATIONS MATERIAL ABOUT THE PRESCHOOL TUTORING PROJECT

PRESCHOOL TUTORING PROJECT
Juniata College
Huntingdon, Pennsylvania

Teaching Language to Young Children. Certain language skills are expected of a child when he enters the first grade. Yet there are large numbers of children who fail to learn these prerequisite language skills during their preschool years and who, therefore, are behind in school the moment they begin. The Preschool Tutoring Project hopes to help young children from two to five years of age learn the language they need to function effectively in school.

The Preschool Tutoring Project is funded by the U.S. Office of Education, Department of Health, Education, and Welfare, Washington, D.C. The project director is Dr. Julie Latane Drews, Assistant Professor of Psychology at Juniata College. The other members of the staff are David Beahm, Gerald Congdon, Susan Dobson, and Linda Merz, all undergraduates at Juniata College. The project is a model program designed not only to teach young children language but also to learn more about the learning process itself, the specific nature of the language deficits which are likely to occur in the early years of development, and efficient methods of remedying these deficits.

Individualized Teaching. At present, other programs have been established to provide preschool educational experiences such as those at Headstart, day care centers, and nursery schools. The Preschool Tutoring Project plans to take a somewhat different approach to teaching language. They plan to provide a more structured early learning experience in which specific language needs are met through systematic and individualized teaching.

The project will use teaching techniques and curriculum materials which are effective yet simple enough to be used by college student volunteers, which are rewarding for both teacher and child, and which allow systematic, immediate evaluation of the child's performance during the learning process itself, enabling the teacher to progress through the curriculum as fast as each child is able. The individualized curriculum for each child will be based on a pre-evaluation of his existing language skills. Basic concepts which he is lacking but which are appropriate to his age level will be taught. These might include such basic concepts as colors, shapes, animals, prepositions, and verbs.

Program to start March 7. The teachers for the Preschool Tutoring Project will be Juniata College student volunteers. These students will participate in training sessions

conducted by Anne Sanford, a professional trainer from the HCEEAA Preschool Project in Chapel Hill, North Carolina. After the training sessions, each college student will meet with a child individually for the remainder of the spring semester. Specific arrangements concerning the time and place of the meetings will be made in consultation with the parents before the project begins. At the end of the program, a summary report for each child will be made available which will describe his existing language skills and his progress during the project.

Appendix C

Dear Parents,

As you know, the first week of May marked the conclusion of the Preschool Tutoring Project for the spring semester at Juniata College. We wish to thank you and your child for sharing these few months with us in a learning experience that we hope has been beneficial to us all.

Since we first contacted you several months ago, much has happened that you may be interested in. Over sixty college students have been meeting with preschoolers on an individual basis from week to week.

In addition to the benefits we hope your child has gained, we want to express our thanks for all the help you have given us in our learning experience. We are just beginning to understand the complicated process of language development which each of us as a child has gone through. This project has been one more step toward a more complete understanding which can benefit us all.

Finally, we must add a word of appreciation from all the college students who thoroughly enjoyed working with you and your child. The experience gained will long be remembered by them as some of the most real and rewarding of their college years. Thank you once again for your participation.

From the staff of the Tutoring Project,

Julie Drews
David Beahm
Jere Congdon
Susan Dobson
Linda Merz

APPENDIX D
ORGANIZATIONAL INFORMATION GIVEN TO STUDENTS AT TRAINING SESSIONS (March 6, 1972)

PRESCHOOL TUTORING PROJECT

RESOURCE ROOM

The resource room for the Preschool Tutoring Project is located in the basement of Good Hall (G-107). The purpose of the room is to provide a place for you to go if: You have any questions concerning your child or teaching program; if you want additional information about the Preschool Tutoring Project teaching materials and methods, language development in children or other related information; if you want help in constructing your own teaching programs or designing supplementary activities; or if you just want to talk to somebody. The resource room will also be used for group meetings and will be a place for you to contact your team leaders if necessary and/or desireable.

Listed below are the hours that the resource room will be open and the resource person who will be available during that time:

Monday	Tuesday	Wednesday	Thursday	Friday
	11-12 Congdon		11-12 Congdon	
1-4 Merz	1-2 Congdon 2-4 Merz	1-4 Dobson	1-4 Congdon	1-4 Dobson
7-10 Beahm		7-10 Beahm		

CONTRACT HANDED OUT TO COLLEGE STUDENTS AT TRAINING SESSIONS (March 6, 1972)

PRESCHOOL TUTORING PROJECT

JUNIATA COLLEGE

Goals:

The preschool tutoring project has several goals. These are:

(1) To teach language to preschool children;
(2) To learn about early language development, the nature of deficiencies in early language development, and methods for remedying these deficiencies; and
(3) To develop a model college tutoring program which can be used at Juniata and other colleges.

Participation:

There are certain responsibilities which must be met if the project is to be successful. If you agree to participate in the project, you will have several responsibilities:

(1) Maintain a minimum amount of participation in the project by meeting with your child once a week on the average for at least 30 minutes. More extensive participation is desireable and could involve meeting with the child 3-5 days a week for 1 hour or longer. The exact number of meetings and length of sessions beyond the minimun is up to the individual participants to decide.

(2) Keep appointments when possible, and notify parents and team leader when not.

(3) Keep accurate, complete records. There will be four kinds of records: a) the Pre-evaluation (Pre) - a record of the child's existing language deficiencies; b) the teaching session records - a description of each teaching session including the time, date, location of lesson, the concepts which are learned, the rate of learning, etc.; c) the Language Acquisition Profile (LAP) - an up-to-date record summarizing the child's progress throughout the project; d) a profile of the child and his home situation.

(4) Attend meetings. There will be 4 scheduled meetings:

(a) Next Monday night, March 13, 7 p.m., 200 Good Hall
(b) Monday night, March 20
(c) Monday night, April 10
(d) Final meeting Monday night, May 8

In return, the project agrees to provide the following:

(1) a child
(2) training in tutoring skills
(3) teaching materials and record-keeping techniques
(4) guidance and help throughout the project
(5) a resource room (Good Hall)
(6) experience

If you would like to participate in the project, please sign the following:

I would like to participate in the Preschool Tutoring Project and agree to fulfill my responsibilities.

_____

I hope to devote approximately _____ hours a week to the project.

Appendix D, continued

SCHEDULE OF PROJECT EVENTS AND DATA COLLECTION

January 26-February 22, 1973	Recruitment of children
February 9	Recruitment of college students and organizational meeting in which project briefly described and the dates for the training sessions were announced.
March 6-7	Three training sessions for college students.
March 13	The first Preschool Tutoring Project meeting. QuestionnaireI (concerning the initial visit) was completed by the college students.
April 12	The second Preschool Tutoring Project meeting. Questionnaire II (concerning the teaching program) was completed by the college students.
April 20	A mailing about the final evaluation and termination of the project to college students.
May 5-6	Termination of the project and a carnival for the children.
May 8	The final Preschool Tutoring Project. Questionnaires III and IV were completed by the college students.
May 15	A mailing to parents including a final evaluation of the child's progress, a letter thanking them for participation in the project with a brief report of the project, and questionnaire V.
March 15, 1973	A telephone survey to parents concerning their attitudes about participating in the Preschool Tutoring Project.

APPENDIX E

PRESCHOOL TUTORING PROJECT DATA COLLECTION FORMS

Questionnaire #1 (College Student)

INITIAL VISIT WITH CHILD

Tutor _____

Child _____

Initial meeting with child (and parent)
Have you met with your child?
no
yes
if no, why not? Did not have time
Tried but nobody was home
Other (please specify _____
_____

(After you do complete your initial meeting with your child, please stop by the resource room to complete this form.)
If yes, please answer the following questions:

I. CONTACTING CHILD

Did you make contact with child on first attempt or did it take several attempts? first attempt
two attempts
more than two attempts
(please explain)_____
_____

II. MAKING ARRANGEMENTS TO MEET WITH CHILD ON REGULAR BASIS

Did you make arrangements to meet with your child on a regular basis? yes no
if no, why not?
if yes,
(a) what arrangements did you make? time of day: _____
days of week:_____
location: in home
other (please specify_____
_____

(b) is the home a convenient place for tutoring child on regular basis? is it quiet? yes no
Does mother want child to leave home for tutoring?
yes no no preference
Do you want to take child out of home for tutoring?
yes no no preference
please explain:_____
_____

(c) when was the child available for tutoring?
anytime, every day
anytime, some days
mornings
afternoons
other (please specify)

III. DOING THE PREEVALUATION

Did you do a preevaluation? yes
no
started but was unable to finish

if yes, please answer the following:

(a) what were the results? (put check mark ( ) by concepts child knew and (X) by concepts child did not know)

Body Parts:	head _____	Prepositions:	in _____
	thumb _____		under _____
	knee _____		between _____
			beside _____
Animals:	horse _____	Colors:	red _____
	cow _____		green _____
	duck _____		yellow _____
			blue _____
Shapes:	circle _____		
	cross _____		
	triangle _____		
Verbs:	drinking _____		
	kicking _____		
	throwing _____		
	jumping _____		
	pouring _____		

(b) Did you encounter problems with the pre-evaluation procedure?
yes no (if yes, please explain:)

(c) Did you modify procedure? no
yes, (please explain)

(d) Did you test for additional items? yes no (if yes, please describe)

IV. OTHER ACTIVITIES WITH CHILD IN ADDITION TO PRE-EVALUATION?

What other activities did you do with child? (please describe)

V. CONDITIONS UNDER WHICH PRE-EVALUATION TOOK PLACE

(a) Were you alone with child?
- alone with child
- parent present
- siblings and other children present

(b) Was it quite?
- very quiet
- somewhat quiet
- very noisy (please explain)_____

_____

VI. INITIAL IMPRESSION OF CHILD

(a) Was child responsive?
- shy, withdrawn
- friendly
- very friendly
- comments:

(b) Did child have good attending behavior?
- very attentive
- somewhat attentive
- very inattentive
- comments:

(c) Do you anticipate any problems? (if so, please explain)

VII. GENERAL COMMENTS, OBSERVATIONS, QUESTIONS, ETC. (write on back if necessary)

Questionnaire #2 (College student)

TEACHING PROGRAM EVALUATION

I. Please write any comments, questions or problems you have with the following aspects of the teaching program:

A. Keeping records

B. Holding child's attention

C. Teaching materials - (i.e. stimulus objects, pictures, no. of levels)

D. Teaching effectiveness - (i.e. does child seem to be learning?)

E. Teaching location -

F. Developing new concept programs

G. Administering reinforcement

H. Other - please specify (use back of sheet, if necessary)

II. Does the child seem to be enjoying the tutoring program?

NOT AT ALL	NOT VERY MUCH	SOME WHAT	PRETTY MUCH	VERY MUCH

Please comment:

III. Are you enjoying the tutoring program?

NOT AT ALL	NOT VERY MUCH	SOME WHAT	PRETTY MUCH	VERY MUCH

Please comment:

IV. SUGGESTIONS

Questionnaire #3 (College Student)

PRESCHOOL TUTORING PROJECT

1.a. Did the parent(s) seem to take an interest in the Preschool Tutoring Project? yes no

b. Did the parent(s) seem to be going over or helping the child learn the concepts you were teaching in between teaching sessions, etc.? yes no

c. Did the parent(s) ask you about the teaching techniques you were using or about the child's progress in the program?
yes no

2. Did you develop and/or use any teaching activities for the child to supplement the concept booklets? (i.e. pasting red pictures when teaching red or having your child teach you, etc.)
yes no

If yes, please describe the activity you liked best in the space below: (use other side if necessary)

3. Please describe the reinforcement which worked best for your child.

4. Please describe one of the worst problems you had when teaching your child.

5. Please describe one of the most successful experiences you had when teaching your child.

Questionnaire #4 (College Student)

PRESCHOOL TUTORING PROJECT

Name _____

Address _____
(your box number for next year if you know it)

Child's name _____

Parent's name _____

Parent's address _____

Please answer the questions below:

1. Would you like to receive a summary report about this Preschool Tutoring Project? yes no

2. Would you like to participate in a Preschool Tutoring Project next year if it is continued? yes no

3. Would you like to help organize a Preschool Tutoring Project next year? yes no

Questionnaire V (parents)

PRESCHOOL TUTORING PROJECT

There may be another Preschool Tutoring Project starting in September.- Please indicate below whether or not you would be interested in having your child(ren) participate in the program.

_____YES _____NO

If you checked yes you will be notified in September if there is a program.

If you checked no, please indicate why. Thank you.

Parents' Name _____

Address _____

Please return this form in the enclosed envelope as soon as possible. Thank you.

TELEPHONE SURVEY FOR PARENTS

1. Do you think that your child's participation in the Preschool Tutoring Project was a worthwhile experience?

   Yes_____ No _____ Why?

2. Do you think that your child's participation in the Preschool Tutoring Project helped him in any way?

   Yes_____ No _____ Why?

3. Do you think your child enjoyed participating in the Preschool Tutoring Project?

   Yes _____ No _____ Why?

Session Record

Session #: _____

Tutor: _____ Child: _____

Date: _____ Time: _____ Length of session: _____

		Criterion					Teaching					Criterion				Teaching				
Concept: _____ Level: ___ Trial:		1	2	3	4	5	1	2	3	4	5	1	2	3	4	1	2	3	4	5
Concept:	Level:	Trial:																		
Concept:	Level:	Trial:																		
Concept:	Level:	Trial:																		
Concept:	Level:	TRIAL:																		
Concept:	Level:	Trial:																		
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Concept:	level:	trial																		

Notes:

(1) Use checkmark (✓) to indicate correct response, use "X" to indicate error.

(2) Always start and finish each concept covered in session with criterion trials.

(3) If child makes an error on a criterion trial, proceed immediately to teaching trials.

session #: _____ (cont.)

EVALUATION:

① Child reached criterion on the following levels:

Body parts: _____ level: ___ # teaching trials: ___ ; Verb: _____ level: ___ # teaching trials ___

Animal: _____ level: ___ # teaching trials: ___ ; Color: _____ level: ___ # teaching trials ___

Shape: _____ level: ___ # teaching trials: ___ ; Preposition: _____ level: ___ # teaching trials: ___

② Child failed to reach criterion on the following levels:

Body part: _____ level: ___ Verb: _____ level: ___

Animal: _____ level: ___ Color: _____ level: ___

Shape: _____ level: ___ Preposition: _____ level: ___

③ Attending behavior: (circle number)

1 very inattentive (inappropriate response to materials, out of seat) 2 3 4 neutral 5 6 7 very attentive (eye contact, sitting straight in chair, responding appropriately)

RECOMMENDED CURRICULUM FOR NEXT SESSION:

Body part: _____ level: ___ Verb: _____ level: ___

Animal: _____ level: ___ Color: _____ level: ___

Shape: _____ level: ___ Preposition: _____ level: ___

(note: if a new criterion level is reached, retest next session by repeating criterion trials before beginning new level.)

COMMENTS: (reinforcement used, description of child, mother-child interaction, problems, etc.)

write on back

APPENDIX F

COLLEGE STUDENT USE OF INDIVIDUAL CONCEPT PROGRAMS

Concept	Number used During Teaching Program (as reported by college stdents, N=40)	Number Excluded from Program Because Child "Knew" the Concept Before the Program Began (as reported by college students, N-40)
BODY PARTS:		
head	12	37
thumb	12	34
knee	12	34
ANIMALS:		
horse	14	37
cow	14	37
duck	18	26
SHAPES:		
circle	26	11
cross	24	8
triangle	24	10
VERBS:		
drinking	09	29
kicking	06	36
throwing	04	37
jumping	06	36
pouring	09	34
PREPOSITIONS:		
in	09	35
under	11	27
between	14	12
besides	15	14
COLORS:		
red	26	17
green	25	11
yellow	21	13
blue	26	12

Appendix F, continued

1. Number of college students using the indivudual concept programs rank-ordered from most to least used concept, (as reported by college students, N=40):

circle	(26)	horse	(14)
red	(26)	head	(12)
blue	(26)	thumb	(12)
green	(25)	knee	(12)
cross	(24)	under	(11)
triangle	(24)	in	(09)
yellow	(21)	pouring	(09)
duck	(18)	drinking	(09)
besides	(15)	kicking	(06)
between	(14)	jumping	(06)
cow	(14)	throwing	(04)

2. Number of children who "knew" the concept before the program began rank-ordered from most to least "known" concept, (as reported by college students, N-40):

head	(37)	under	(27)
horse	(37)	duck	(26)
cow	(37)	red	(17)
throwing	(37)	besides	(14)
kidking	(36)	yellow	(13)
jumping	(36)	blue	(12)
in	(35)	between	(12)
thumb	(34)	circle	(11)
knee	(34)	green	(11)
pouring	(34)	triangle	(10)
drinking	(29)	cross	(8)

APPENDIX G

SUPPLEMENTARY TEACHING ACTIVITIES

Of the teaching activities developed by the college students to supplement the concept booklets, those reported as being the "activity you liked best" are given in the table below.

Teaching colors:
- Picking colors out of the environment (in the child's room, from cars in the parking lot, umbrellas on a rainy day, etc.)
- Coloring water with food coloring
- Baking colored cookies (using food coloring)
- Cutting and pasting colored construction paper
- Playing "red" light by driving around town trying to catch red lights
- Reading books and pointing out the colors in the pictures
- Playing with colored M and M candy
- Drawing with specific colored crayons
- Giving the child a "red" ride or "circle" ride. ("I'd gallop up to something red or circular in the room or outside and say 'touch red' or 'touch circle' while carrying the child piggy back")
- Taking a "yellow" walk -- a walk in the A and P grocery store or outside picking out as many different yellow objects as possible.
- Making and eating yellow Jello
- Making a yellow collage by pasting yellow pictures on yellow construction paper
- Coloring Easter eggs
- Coloring coloring books
- Stringing colored beads
- Painting picutres and describing the colors used
- Making a "red" book by pasting different red pictures on a piece of paper each time
- Making red kool-aid. Combined teaching color red with verb drinking
- Eating blue jelly beans

Teaching shapes:
- Pasting shapes cut out of magazines
- Baking cookies in different shapes
- Playing bingo with shapes
- Baking a cake and decorating with shapes
- Using carbon paper to draw shapes and numbers

Teaching body parts:
- Drawing people on thumbs and other fingers to make "finger friends"
- Cutting out pictures of body parts and making a collage

Teaching prepositions:
- Sewing with needle and thread and describing "in" and "out" motion of needle

Teaching Verbs:
- Going to the trampoline to teach jumping
- Baking a cake with verbs written on it for decoration

Appendix G, continued

General activities:

Alternating role of playing teacher
Going to the college library, cafeteria
Playing made-up games
Singing and finger plays
Show and tell where child gives verbal description of his toys, etc.

APPENDIX H

News articles about the Preschool Tutoring Project.

Used in area news media.

Pictures and copy [illegible] being used in May Alumni Bulletin.

[illegible] 2/6/1

Professor Gets Grant

Dr. Julie L. Drews, Juniata College (Huntingdon, Pa.) has received an $8,000 HEW grant for training college students to teach language skills to children, according to Dr. John N. Stauffer, president of Juniata.

An assistant professor of psychology, Dr. Drews describes the Pre-school Tutoring Project as "a model program designed not only to teach young children language but also to learn more about the learning process itself, the specific nature of the language deficits which are likely to occur in the early years of development, and efficient methods of remedying these deficits."

The teaching techniques and materials of the program are simple enough to be used by student volunteers who will teach the children on an individual basis. The primary teaching techniques are "errorless discrimination training and positive reinforcement." The visual discrimination of shapes, colors, numbers, and relation concepts, such as big - little, same - different, etc., begins with very simple problems and moves gradually to more difficult exercises. The teacher models or cues the appropriate responses and praises the child each time he is successful. If it is found to be effective, this simplified, pre-school curriculum could be used by parents, student aides, or even grade school students to give preschool youngsters individualized training in language skills.

The program will be tested by using Juniata College students and children from the Huntingdon area. The four students who will assist Dr. Drews are: David Beahm, Ossian, Ind.; Gerald Congdon, Stroudsburg, Pa.; Susan Dobson, Milford, Del.; and Linda Merz, Philadelphia, Pa. They will supervise 60 student volunteers who will serve as teachers.

The staff will be trained by Anne Sanford, a professional instructor with the HCEEAA Preschool Project for Developmentally Handicapped Children, at Chapel Hill, N. C., which served as a model for Dr. Drews' program. After the training sessions, each student will teach one child for the rest of the spring semester. At the end of the program, a summary report will describe the existing

Appeared in the Juniatian on March 22,1972.

Dr. Drews Initiates Preschool Project

by Valorie Priddle

"This is yellow Jeffrey. Say 'yellow'?"

"Ye-blow!"

"Fine, now Jeff, put yellow on yellow?"

On March 13, sixty-five Juniata students volunteered to forfeit their hard earned vocabulary for eight weeks to help pre-schoolers start building theirs. The Preschool Tutoring Project, initiated on this campus by Dr. Julie Drews, has as its main goal the teaching of language to preschool children. Large numbers of children enter school without essential language concepts like the meaning of between, behind, beside, in and under. At a highly individualized level, the Project hopes to convey not only the meanings of these five prepositions but also verbs, colors, shapes, animals and body parts.

The two other main goals are:

Preschool Project

2. to learn about early language development, the nature of deficiencies in early language development, and methods for remedying these deficiencies; and

3. to develop a model college tutoring program which can be used at Juniata and other colleges.

The Project has drawn its needed resources from several pools. The U.S. Office of Education, Department of Health, Education, and Welfare supplied the funds; the HCEEAA Preschool Project in Chapel Hill, North Carolina provided a professional trainer, Anne Sanford, to conduct the volunteer training sessions; and families in the Huntingdon area as well as the Petersburg Day Care Center furnished the kids.

Letters to the Editor

Appeared in the Juniatian on April 19, 1972

Letters to the editor should be addressed to: Editor, The Juniatian, Box 667, Juniata College, Huntingdon, Pa. 16652. The editors reserve the right to print only non-libelous and responsible content and to edit all letters and commentaries submitted to The Juniatian. The staff also reserves the right to publish all full signatures unless the writer can supply valid reason for omitting his name.

I'M A TUTOR! ! ?

Kids kind of just learn things, right? I mean it's all very simple and once a kid hears someone talking about a yellow lemon he knows what yellow is and what lemons are Of course! This is perfectly obvious to all biochem majors and probably even people majoring in nuclear physics. The only reason education majors take so many "education courses" is that they don't want to take fascinating things like "Quantum Mechanics." It isn't as though they learn anything.

"This is yellow, Cindy. I can touch yellow. Can you touch yellow? Very GOOD! . . . Touch yellow. . .touch yellow. . .touch yellow . . .tou. . .Cindy, say yellow."

"Yell."

"God girl. Now touch yellow. Say YELLOW."

"Yello"

"GOOD! Touch yellow. Say yellow."

"YELLOW! ! ! ! "

(Kids are also conceited little brats all too ready to indicate their low opinion of your intelligence; it was very obvious to her that, after all her trouble, I still didn't know what yellow as.

"Let's try something else. Can you touch triangle, Cindy? Very good! Say triangle."

"I want an M&M."

(So much for 'behavior modifiers'!)

"Cindy this color is yellow. Let's find all the yellow things in the room. . . . What color is this?"

"Yellow! ! ! "

"You're right! This shape is a triangle. Let's separate all the triangles in the bag." . . .the moment of truth. . . "Cindy what color is this?"

"Triangle."

Any entomologist can (and will) tell you that the most effective reasponse is beating the kid on the head: But one thing you learn in all those required ed courses is, hopefully, that if the kid makes a mistake it is your fault, and the kid should beat you on the head. "Ouch. Very good. Cindy. Now. The circles is beside the blocks. Touch the circle beside the blocks. GOOD!" Since of course you use many concrete examples to illustrate your concepts, you have to be extremely dexterous to shuffle the various items around. If you aren't fast enough she is able to answer the question before you have a chance to ask it.

So then you decide to ask someone who will give you a chance (because you can beat them on the head if you goof) and so you go to see Dr. Mitchell about changing your major. But he's out running so you go to one more tutoring session. The dream of an intelligent, calm, controlled adult patiently and lovingly sharing the wisdom of the ages with a young, unformed, eager mind . . . teaching . . . such blissful joy . . . holding up a green cross . . .

"What color is this Cindy?"

"IT'S GREEN ! ! ! !"

"GOOD! What shape is it?"

"CROSS! !"

"Hey WOW! ! You really know it now! That's good! What color is this?"

"It's yellow and it's a circle and I bet you can't run faster than me."

"You know something? I bet I can't. Let's go for a walk and look for blue things."

"O.K. Know somepin'? You're my friend."

Thanks Cindy. I really like you too. Sorry Dr. Trexler—nursery schools have sand boxes too.

by Pat Lichty

Appeared in the Juniatian on April 26,1972.

PRESCHOOL PROGRAM
Dear Editors,

This is directed to the four students who wrote the letter in regard to the pre-school tutoring program. It is obvious they have very little knowledge of this project which they have gone to such lengths to criticize. First they make the point that constant repetition of a single excercise will discourage the child. This is true, but then again only through moderate repetition can a three year old retain what he has learned. The object of this program is to teach a wide variety of concepts (colors, shapes, animals, verbs, prepositions, and body parts). The tutor is not to sit down for three hours with his child and drill him on a single color or animal. During a teaching session the child can be drilled on any number of different concepts, and the exercises are widely interspersed with periods of play. (The maximum suggested length for a teaching excercise is five minutes.)

The letter also refers to bribes for good behavior and threats for bad which stunt a child's curiosity. First of all, the cardinal rule for handling the children is: never say anything negative (not to mention threats or physical force) while teaching. We do reward children in various ways for good conduct, and if some people consider it bribing, that can't be denied. But this must been seen in the context of the entire program. Children are not born knowing what is good and what is bad. Therefore, when the teaching first begins, the child is rewarded with something he likes (candy for example), so that he will identfy learning as a pleasing experience. Then the physical reward is supposed to be phased out and replaced by verbal reinforcement. Finally, by the end of the program hopefully the child should desire to learn for the sake of learning. Whether this works or not depends on both the child and the tutor.

Another criticism was that the children are confined to a single environment; the lounge in particular. If the only place which these students come in contact with the preschool children or tutors is in the lounge, then these students must be spending too much of their time there. Many tutors vary their tutoring locations between the child's home, their own rooms, and other points on campus. Even the tutors who work at the day care center move from room to room or take their children outside when possible.

The suggestion made in the letter that the tutors in the program should learn the basics of preschool education shows only how uniformed these four students are. Before we met our children there were three instruction sessions for all tutors. Two of these sessions were held by a woman who is in charge of a similar federally funded program for underprivileged and retarded children in North Carolina. She spoke and showed slides on methods for teaching these kids. Aside from that there have been meetings for everyone involved in the program and also meetings of small groups under the direction of a leader for the purpose of discussing problems. Also there is a resource and materials room in Good Hall which is open daily and staffed by psychology majors who are involved in the program. Tutors can go there to get help with any particular problems which they might have.

Of course, with sixty-five college students and sixty-five preschool children in a program such as this, some tutors will be more successful than others. Obviously everyone will have problems at times, and some tutors will not handle things very well. Anyone has the right to criticize, but I think that it is only fair to the people who have worked for this program to make criticisms on the basis of an overall knowledge of the program's goals and methods, rather than making a few casual observations and implying from these that the entire program is harmful, as these four students have apparently done.

Sincerely,
Leslie Whittaker

Appeared in the Juniatian on March 26, 1972.

March 20, 1972

Dear Editors,

In regards to your article in the March 22, 1972 issue on Dr. Julie Drews new pre-school tutoring project, some of those sixty-five students who have given up their "hard-earned vocabulary" might just be doing more harm than good.

For example, the constant repetition of one exercise for an extended length of time causes the younger child to become fidgety, unhappy and discouraged. When bribes are offered for performance, as has been the case, (for example, M&M's, lollipops, and being allowed to use the piano), as well as threats of a spanking or being hit if they don't comply, the child's intellectual curiosity is anything but stimulated. The child's curiosity should be used as a teaching aid, not as a lever for performance. In addition, keeping a child in a lounge instead of varying the environment on a perfectly nice day, does little but add to a child's anxiety.

It is our suggestion that these students should give up some of their time in order to learn at least the basics of pre-school education, if it s only to be done by a few hours of observation in the campus nursery school. We would like to make clear that not all of the tutors make these mistakes, some we have seen are extremely efficient but there is that number who seem to know nothing of pre-school education. Thank-you. (We might add that a copy of this is being sent to Dr. J. Drews.)

Yours truely,
Neal K. Hutchinson
Elaine Persbacker
Terry Schroeder
Luann Staniulis

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