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A Study of the Effects of Teacher Attitude and Curriculum Structure on Preschool Disadvantaged Children. Annual Progress Report I.

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This document is the first year's report of a continuing study of the effects of two Head Start preschool experimental programs. Subjects were children from poverty areas in Grand Rapids, Michigan. Seven teachers who were most opposed to a Bereiter-Engelmann type highly academic structured program were assigned to Group I; and seven teachers least opposed, to Group II for teacher training. Three teachers from Group II and four teachers from Group I were assigned to classes in Experiment A (Bereiter-Engelmann), and four teachers from Group II and three from Group I taught in Experiment B. Observation revealed that while there was more variation among B classes than among A classes, no classes in B were similar to classes in A, either in terms of content emphasis or predominant method of instruction. At the end of the program tests were administered to the children, and teachers and parents were inventoried. Experiment A appeared to overcome initially negative teacher attitudes. Students in Experiment A (with a mean IQ of 108.1) and Experiment B (with a mean IQ of 105.7) had a higher measured intelligence than the control group (with a mean IQ of 94.8). Results were reported as a statement of progress. Research analyses and kindergarten-first grade followthrough studies will be made. (DO)

ANNUAL PROGRESS REPORT I

TO DIVISION OF RESEARCH AND EVALUATION
PROJECT HEAD START
OFFICE OF ECONOMIC OPPORTUNITY
Contract No. OEO-4150

Period of Report Covered: August 15, 1967 - August 14, 1968

Title of Project: A Study of the Effects of Teacher Attitude and Curriculum Structure on Preschool Disadvantaged Children

Contracting Agency: Western Michigan University
Kalamazoo, Michigan 49001

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A. MAJOR ACTIVITIES OF THIS REPORTING PERIOD

This first year of the two-year research project we have focused on: (1) the administration of experimental programs; (2) the collection and tabulation of first year data from Experimental and Control Group students, parents and school staff; and (3) the initiation of research analysis.

1. Administration of Experiments

As indicated in the research proposal for this study (Contract OEO-4150), Experimental Programs under investigation were the responsibility of the Grand Rapids (Michigan) Public Schools. This school system, however, allowed and made it possible for the principal and associate investigators of this study to carry out the following activities:

a. Assignment of Students

Preschool children, stratified by neighborhood area (designated

as a poverty area by OEO Criteria), were randomly assigned to either one of the two Experimental Programs conducted in the neighborhood schools or to the Control Group. These children were randomly drawn (8/67) from census pools (made up 6/67) of all children in the target (poverty) areas of the city of Grand Rapids, Michigan. The lists of children who were randomly drawn for Experimental assignment were given to the teachers who then contacted the children's parents and encouraged the attendance of their children in the Head Start Program. The teachers were not given any jurisdiction to select students. In those cases where the parents had moved or could not be encouraged to send their children to Head Start (approximately 3 per class), the teachers were provided with another randomly drawn list of children's parents to contact (the teachers were required to start at the top of the waiting list).

This same procedure was used for replacement of students who dropped out of the program during the school year. However, only those students who were in one of the Experimental Programs for seven months are included in the findings of this report. A more complete statement of the mobility of the Experimental and Control subjects is included in Attachment A.

b. Assignment of Teachers

Teachers already hired by the school district to teach in the preschool program were administered a questionnaire, Attachment B, and interviewed concerning their attitudes toward the type of Experimental Programs to be investigated. The teachers were told, that as much as possible, we wanted to take their views into account in placing them and in the conduct of the preschool program. These teachers were not informed as to the existence of an experiment, (although they later inferred this), or as to the types of preschool curriculums to be offered. On the basis of the teachers' responses, the teachers were ranked according to pro and negative attitudes toward a highly academic structured program such as the "Bereiter-Engelmann" type program (see Table 1).

The teachers were then split into Group 1, the seven who were most opposed, and Group 2, the seven who were least opposed to the "Bereiter-Engelmann" type program (see Table 1). It was inferred that those teachers in Group 1 who were most negative toward a "Bereiter-Engelmann" type program would be most positive toward the type of program offered in Experiment B.

Three teachers from Group 2, and four teachers from Group 1, were randomly assigned to classes in Experiment A. Similarly four teachers from Group 2, and three from Group 1, were randomly assigned to classes in Experiment B (see Table 2).

It is important to note, however, that the extent of negativeness or positiveness toward the academically structured "Bereiter-Engelmann" program is relative. As a matter of fact, only two teachers, one mildly and one very positive, were for a "Bereiter-Engelmann" type program prior to their assignment, 1967 (see Table 1) Two teachers were relatively neutral and the other 10 teachers were more or less against the "Bereiter-Engelmann" type program. In other words, Experiment B was bound to have had more teachers who initially favored their program than would Experiment A (the Bereiter-Engelmann Program) have teachers who favored their program.

The investigators, on the basis of personal experience, feel that this large proportion of teachers who were initially negative toward the "Bereiter-Engelmann" type program is probably characteristic of most school systems which have not experimented with such academically oriented programs. As indicated in Table 3, in spite of the random assignment procedure, random sampling from the skewed distribution of teachers, with most teachers being negative toward "Bereiter-Engelmann" type programs, resulted in attitude differences in Experimental Groups. If initial teacher attitudes are important, this means that the assignment procedures have "stacked the cards" against Experiment A in favor of Experiment B. At any rate, throughout assignment procedures, any reported positive effects of Experiment A will be difficult to interpret as attributable to a pre-program enthusiasm of the teachers, inasmuch as such enthusiasm, except in two cases, was lacking. However, on the assumption that the utility of an innovation may be partially judged on the basis of conditions which are likely to impinge on that innovation, the initial aversion of most teachers toward academically focused programs was not viewed as undesirable.

With such initial differences, simple experimental comparisons are not the most appropriate analytical methods. Rather multiple regression analysis, which will allow for some control of these initial and current differences in teachers, seems more appropriate. Through multiple regression analysis, the effects of initial as well as post-experiment attitudes of the teachers can also be controlled; and, thereby, provide a better understanding of whatever effects the experiments may have independent of these attitudes.

c. Training of Teachers

The investigators arranged for the pre-service and in-service training of teachers to be conducted under the philosophies and recommendations of two expert consultants, personally unknown and institutionally unaffiliated with the researchers.

The program consultant for Experiment A, which is sometimes identified as the "Bereiter-Engelmann" experiment, is Mrs. Jean

Osborn, a faculty member of the University of Illinois. Mrs. Osborn is an associate of Dr.'s Bereiter and Engelmann in the development of their program. The program consultant for Experiment B, is Mrs. Carolyn Parks, who is on the faculty of the Merrill-Palmer Institute and has had extensive experience in the training of preschool teachers. A description for us written by Mrs. Parks of her philosophy and the type of activities she emphasized in her in-service program is included in Attachment C, "The Nursery School for Deprived Children". It should be clearly understood, however, that the preschool program for which Mrs. Parks is consultant, is not a program of the Merrill-Palmer Institute. Inasmuch as a general description of Experiment A has been published by Bereiter and Engelmann,* a similar report from Mrs. Osborn was not obtained.

d. Surveillance of Programs

In order to assure that the Experimental Programs were conducted in accord with their program outlines and philosophies, and to avoid teacher perception of undue surveillance and harassment, it was decided that the surveillance of the classrooms should be as unobtrusive as possible. This was accomplished through several means. The preschool consultants and the associate research investigators visited each class regularly with each class being visited about once a week. The principal investigator, because he is defined by the teachers through other contacts as a "researcher", only occasionally visited the classes and this was done under the guise of other interests. All research observers are in agreement that the observed activities in Experiment A, closely followed the guidelines for the "Bereiter-Engelmann" program as expressed in their publications and in the pre-service and in-service training programs. While the observers are of the opinion that the teachers varied in competence, (although a criterion of competence was not established), no teachers in Experiment A were observed in activities which were not in accord with the guidelines for Experiment A.

As we expected, the classroom activities and the conduct of the teachers in Experiment B were observed to vary more than in Experiment A. One major concern was to determine if teachers in Experiment B were engaging in activities similar to Experiment A activities. The conclusion of all observers was that while there was more variation among Experiment B classes than among Experiment A classes, no classes

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*C. Bereiter and S. Engelmann, Teaching Disadvantaged Children in the Preschool, (Englewood Cliffs, N.J., Prentice Hall, Inc., 1966)

in Experiment B were similar to classes in Experiment A either in terms of content emphasis or predominant method of instruction. In addition, the research investigators on the basis of teacher logs and teachers' written and oral descriptions of their day to day activities, concluded that the teachers in Experiment A and Experiment B were not at all alike in either their emphasis on skill training activities or their methods of instruction. Experiment A teachers appeared to follow very closely "operant principles" for language behavior modification.

2. Collection and Management of Data

Near the end of the Head Start Program (6/68) all preschool Experimental students present on the schedule testing days, plus 30 Control students drawn from the total control pool of subjects, were individually tested on the Stanford-Binet Intelligence Test, and on three sub tests of the Illinois Test of Psycholinguistic Abilities: Auditory Vocal Association sub test, Visual Decoding sub test, and Vocal Encoding sub test. These tests are used to make preliminary and inferential estimates of the relative impact of Experiments A and B on language development.

It is important to recognize, however, that this is the first year's report of a two-year, or possibly a three-year study of the effects of two preschool Experimental programs. On the basis of prior research findings it seems presumptous to automatically assume that initial gains in preschool are necessarily reflected in later language development in school; and the experimental impact on later intellective and social adjustment skills is our primary research interest. The results reported in the following section are merely first findings. Therefore, conclusions beyond mere conjecture as to the efficacy of either Experimental program will be deferred until the end of the second year of this study. At that time, we will have much more valid criterion data on which to make an assessment of impact. For instance, we will be able to use teacher data on social adjustment which is not the result of teacher bias from participation in one of the experiments.

In addition to the above tests, all subjects in Experiments A and B were assessed by their teachers on The Preschool Inventory and The Development Profile (see Quarterly Progress Report III). In the follow-up of subjects in kindergarten and first grade, we will assess the predictive utility of the preschool data provided by these instruments and by all other instruments against independent criterion estimates obtained at that time on social adjustment and language competencies. Not only will we then be able to identify the power of such predictors (and their sub tests) on later language skills and social adjustment, but we will be more able to discern "relevant" differences between the Experimental and Control Groups. At this point, the possible enthusiasm

of the teachers to make their classes "look good" on The Preschool Inventory and The Development Profile could, perhaps, bias our interpretations. Hence, initial estimates of experimental differences will be generally limited to observations of researchers and psychometrists not associated with the conduct of either experiment. The focus of these early estimates will be on the attainment of academic aptitudes as measured by the Stanford-Binet and the ITPA sub tests which were administered.

Other independently obtained observations and studies now available and relevant to experimental impact are:

(1) medical and dental characteristics of students;

(2) parental perceptions of their preschool child's educational and occupational life chances and experiences in school;

(3) teacher perceptions of their students' educational and occupational life chances and experiences in school;

(4) differences in parental and teacher perceptions;

(5) mobility data on disadvantaged families of preschool children in relation to the Head Start Program (see Attachment A).

3. Findings

Restated, the following findings are the first available results and are merely reported as a statement of our progress. The Final Report will include additional and much more useful data on which to base an evaluation. In addition, we are currently subjecting our data to multiple regression analysis which may modify any conjectures we would make on the basis of these early observations. Inasmuch as this is merely a Progress Report, most of these findings are simply presented in tables with their relevant questions and little interpretation or discussion of them is presented at this time.

a. Student Characteristics: Stanford-Binet

As indicated in Table 4, the mean IQ of students in Experiment A, ("Bereiter-Engelmann") was 108.1, while the mean IQ of Experiment B was 105.7. The mean IQ of students in the Control Group was only 94.8. These findings are supportive of our basic hypotheses of positive experimental effects on language development. It should also be noted that our Control Group of disadvantaged subjects tended to exhibit IQ's similar to that which other researchers have found among inner city disadvantaged preschool children. On the basis of this finding and the sampling procedures, it is assumed that the Control Group is probably a valid estimate of the populations for which Head Start Programs were designed, and, therefore, an appro-

priate criterion group for this study. Furthermore, as indicated in Table 4, there is good reason to continue the hypothesis that there are positive experimental effects.

As shown in Table 5, we were interested in comparing Experiment A with Experiment B controlling for neighborhood school and teacher attitude. Prior research has shown a relationship between neighborhood and school performance which should be taken into account. There were only two schools in this study where both Experimental Programs under investigation were carried on with children from the same neighborhood and whose teachers held positive attitudes toward that Experimental Program in which they participated. There was one other school which had both Experiments A and B. However, in that school the teacher in Experiment A was very negative toward Experiment A in both pre and post tests, while the teacher in Experiment B class of that school was very positive toward her program. Hence, simple comparisons of the students of these teachers would not provide very interpretable data.

From the findings in Table 6, it can be cautiously inferred that the initial categorization of teachers on the basis of relative disagreement with Experiment A is not positively associated with differences within Experiment A or differences within Experiment B. However, when post experiment differences in attitude are taken into account, the relevance of teacher preferences for type and emphasis of preschool program may show itself to be associated with student performance. In fact, early analysis, which has not been completed, suggests that post treatment attitudes are more relevant than pre program attitudes. We are currently collecting teacher interview data for dealing with this problem. Until this is completed, however, the relative influence of teacher attitudes, if any, is simply conjecture.

b. Student Characteristics: ITPA

While differences in student performance on the ITPA sub tests used in this study were in a direction favoring Experiments A and B over the Control Group, the differences were not significantly different (.05 level). See Table 7.

We are planning to use the data on ITPA to predict school performance and other criterion variables obtained in the first and perhaps second year of regular school for our subjects as well as to conduct factorial analysis. When this analysis is completed, we will be in a better position to discuss the findings reported in Table 7 as to their relevance as assessments of experimental effects on language development.

c. Student Characteristics: Medical and Dental

It is apparent from the findings reported in Table 8, that experimental effects are not attributable to health differences. Therefore, no plans for including medical or dental data in the multivariate analysis is planned for at this time. We are planning, however, to take samples of Experimental and Control Group children, plus samples from more advantaged populations, in the following school year to determine possible health differences among the total population of students in the system.

d. Parent and Teacher Perceptions

In Tables 9, 10, 11 and 12, tabulated parental responses to interviews are presented along with the guiding research questions.

Tables 13 and 14, present teacher responses to questionnaire items which were structured very similarly to the interview items administered to the parents.

Table 9, provides contrasting data on selected teacher and parental responses.

Inasmuch as this data is merely presented as a statement of our progress, no substantive interpretations are offered here for these findings.

In summary, it appears as if Experiment A has overcome initially negative teacher attitudes and that both Experiment A (IQ = 108) and Experiment B (IQ = 105) have resulted in higher measured intelligence than expected on the basis of Control Group performance (IQ = 94). The advantage of Experiment A (IQ = 112) over Experiment B (IQ = 103) when controlling for neighborhood and teacher attitude is of considerable interest to the researchers. However, judgements as to efficacy based on this data alone is a bit premature.

TABLE 1

FREQUENCY DISTRIBUTION OF RANKED PRE-EXPERIMENT TEACHER RESPONSES ON INVENTORY OF TEACHER PREFERENCES TOWARD "BEREITER-ENGELMANN" TYPE PRESCHOOL PROGRAMS (CB-E)

Preference for "Bereiter-Engelmann" Type Program				
Group One*	Group Two*			
Very Negative 1	Moderately Negative 2	Neutral 3	Moderately Positive 4	Very Positive 5
7	3	2	1	1

*Categorized into two equal N groups as indicated by dotted line. Group 1 includes the seven teachers who were most negative toward "Bereiter-Engelmann". Group 2 includes the seven teachers least negative.

TABLE 2

RANDOM ASSIGNMENT OF GROUP ONE AND GROUP TWO
TEACHERS TO EXPERIMENTAL
PROGRAMS "A" AND "B"

	Experimental "A" RN	Experimental "B" RN
Group One*	3	4
Group Two*	4	3

*See Table 1, for definition of groups.

TABLE 3

FREQUENCY DISTRIBUTIONS OF TEACHERS' PRE-EXPERIMENT ATTITUDES TOWARD "BEREITER-ENGELMANN" PROGRAMS

	Attitude Toward "Bereiter-Engelmann"				
	Very Negative 1	Moderately Negative 2	Neutral 3	Moderately Positive 4	Very Positive 5
		f. Experiment "A"			
Pre Test (8/67)	3	1	1	1	1
		f. Experiment "B"			
Pre Test (8/67)	4	2	1	0	0

TABLE 4

DIFFERENCES IN IQ AMONG EXPERIMENTAL AND CONTROL GROUPS:
ALL NEIGHBORHOODS COMBINED

Variables	Experiment "A" N = 136		Experiment "B" N = 138		Control N = 30		F*	p
	$\overline{X}$	SD	$\overline{X}$	SD	$\overline{X}$	SD		
IQ	108.1	17.90	105.7	16.69	94.8	13.46	7.25	p<.01

*One-way analysis of variance

TABLE 5

MEAN IQ OF EXPERIMENT GROUPS "A" AND "B",
CONTROLLING FOR NEIGHBORHOOD SCHOOL

	Experiment "A" *				Experiment "B" *			
School	No. of Classes	$\bar{X}$	SD	N	No. of Classes	$\bar{X}$	SD	N
A	2	113.1	17.97	24	2	105.80	17.60	25
B	2	112.0	15.52	24	2	101.33	13.35	24

*Teachers favored the type of experiment to which they were assigned in both experiments.

TABLE 6

MEAN IQ OF EXPERIMENTAL GROUPS "A" AND "B"
CONTROLLING FOR PRE-PROGRAM ATTITUDES OF
TEACHERS TOWARD THE PROGRAM TO WHICH
THEY WERE ASSIGNED*

Teacher Pre-Program Attitudes Toward Experiment*	Experiment "A"			Experiment "B"		
	$\overline{X}$	SD	N	$\overline{X}$	SD	N
Negative	107.36	19.17	55	107.04	19.36	61
Positive	108.76	16.83	81	104.80	14.93	77

*It is inferred that teachers in Group I (see Table 1) who were most negative toward programs typical of Experiment A were most positive toward Experiment B type programs.

TABLE 7

DIFFERENCES ON ITPA SUB TESTS AMONG EXPERIMENTAL AND CONTROL GROUPS

Variables	Experiment "A" N = 136 $\bar{X}$	SD	Experiment "B" N = 138 $\bar{X}$	SD	Control N = 30 $\bar{X}$	SD	F*	p
ITPA Auditory Vocal	57.3	17.49	57.1	20.04	50.6	20.93	1.16	p>.05
Visual Decoding	68.7	16.78	67.0	16.92	62.73	17.53	1.73	p>.05
Vocal Encoding	56.1	16.31	54.8	12.62	50.1	15.73	1.98	p>.05

*One-way analysis of variance

TABLE 8

PROPORTIONS OF STUDENTS IN EXPERIMENTAL GROUPS "A" AND "B" WITH SELECTED MEDICAL AND DENTAL IMPAIRMENTS

Impairment	Experiment "A" N = 180	Experiment "B" N = 180
1. Proportion that needed dental work	44%	39%
2. Proportion with abnormality:		
Skin	2%	1%
Scalp	0%	0%
Eyes - Right	2%	9%
Eyes - Left	2%	9%
Eyes - Squint	2%	5%
Ears - Hearing	0%	1%
Ears - Discharge	0%	0%
Ears Packed Serumen	3%	1%
Nose	3%	1%
Tongue	0%	0%
Pharynx	0%	1%
Tonsils	6%	5%
Adenoids	7%	1%
Thyroid	1%	0%
Lymph Gland	4%	2%
Chest Shape	1%	0%
Lungs	1%	0%
Heart	1%	1%
Abdomen-Masses	1%	0%
Abdomen-Tenderness	1%	0%
Abdomen-Hernia	3%	2%
Spine	0%	0%
Genitalia	0%	1%
Rectum	0%	0%
Bones	1%	1%
Joints	0%	1%
Feet	2%	1%
Posture	0%	0%
Neurol-Mental Development	0%	0%
Motor System	1%	0%
Sensory System	0%	0%
Reflexes	0%	0%
Hemoglobin	0%	8%
Urine-Albumin	0%	0%
Sugar	1%	0%
3. Proportion with condition limiting class participation	1%	1%

a. How do the parents of children in Experimental Programs "A" and "B" and in the Control Group compare in terms of their perceptions of the life chances for their children?

b. How do the parental perceptions in Experimental Programs "A" and "B" compare with teacher perceptions of the life chances of their children?

TABLE 9

TEACHER AND PARENTAL PERCEPTIONS OF ACADEMIC AND OCCUPATIONAL LIFE CHANCES OF STUDENTS (PROBABLE OUTCOMES)

	Experiment "A" RN = 30		Experiment "B" RN = 30		Control RN = 30
	Parental	Teacher	Parental	Teacher	Parental
Percent of students that are expected to make:					
Mostly B's or higher:	80	50	69	47	60
Mostly C's:	20	37	31	43	40
Mostly D's or lower:	0	13	0	10	0
Percent of students who are expected to have a better than 50-50 chance of:					
Finishing high school:	100	87	97	80	90
Finishing college:	86	33	76	40	61
Getting a good job:	86	87	86	77	84

*A randomly drawn number of 30 students, about whom parents were administered structured interviews and teachers responded to identically worded questionnaires. See Attachment A for a description of confounding problems in the random selection of control subjects.

c. How do the parents of children in Experimental Programs "A" and "B" and in the Control Group compare in terms of their attitudes toward the program in general?

TABLE 10

PARENTAL ATTITUDES TOWARD EXPERIMENTAL PROGRAMS "A" AND "B"

	Experimental "A" N = 30	Experimental "B" N = 30	Control N = 31
Parents reporting that they heard quite a bit about the program	50%	73%	55%
Parents reporting that the school told them quite a bit about the program	50%	73%	--
Parents reporting that teachers asked them to help in the program	60%	63%	--
Parents reporting that teachers asked them to do:			
1. Legislative tasks (planning)	27%	20%	--
2. Executive tasks (carry out plans)	30%	33%	--
3. Both types of work	03%	06%	--
Percent who felt teachers should have asked them for help	27%	66%	--
Parents who reported that they would like to do:			
1. Legislative tasks (planning)	06%	20%	--
2. Executive tasks	30%	16%	--
3. Neither - no response	64%	64%	--
Percent who feel that it helps for them to talk to teachers	93%	97%	97%
Parents who felt that they had talked quite a bit with the teachers	90%	87%	--
Parents who felt that they had been able to talk with the teachers enough times	63%	70%	--
Parents who were favorable to the program	100%	100%	97%
Parents who feel that it is worth the trouble to send children to the program	100%	97%	97%

d. How do the parents of children in Experimental Programs "A" and "B" and in the Control Group compare in terms of their perceptions of the children's social adjustment?

TABLE 11

PARENTAL PERCEPTIONS OF THE CHILDREN'S SOCIAL ADJUSTMENT

	Experimental "A" RN = 30[a]	Experimental "B" RN = 30[a]	Control RN = 30[a]
Parents who perceive child as getting along very well and fairly well with other children	93%	100%	97%
Parents who felt the program helped child get along better with others	97%	97%	94%[b]
Parents who perceive child as getting along very well and fairly well with teachers	100%	100%	97%[b]
Parents reporting that child talks about working with others in the school besides the teacher (specialists, speech therapists, etc.)	46%	43%	--
Parents reporting that child needs to:			
1. get ready to do school work	54%	47%	55%
2. learn to get along with others	23%	33%	39%
3. both	23%	20%	06%
Parents' perception that program is teaching child to:			
1. get ready to do school work	40%	23%	94%
2. get along with others	10%	57%	06%
3. learn both	50%	20%	--

[a] Randomly drawn numbers of 30 students, about whom parents were interviewed.

[b] Control Group was asked if program would have helped had their children attended.

e. How do parents of children in Experimental Programs "A" and "B" and in the Control Group compare in terms of their perceptions of effects of the program on the child?

TABLE 12

PARENTAL PERCEPTIONS OF EFFECTS ON CHILD

	Experimental "A" RN = 30[a]	Experimental "B" RN = 30[a]	Control RN = 30[a]
Child looks forward to going to program	97%	100%	--
Program has made child more eager to start to kindergarten	97%	97%	94%[b]
Child frequently talks of program activities	90%	100%	--
Child thinks work is:			
1. too hard for him	03%	--	--
2. too easy for him	17%	17%	--
3. about right	80%	83%	--
Parent thinks work is:			
1. too hard for child	--	--	--
2. too easy for child	13%	27%	--
3. about right	87%	73%	--
Child acts differently at home since attending the program	77%	83%	--
Child acts better at home	83%	87%	--
How child acts better or worse:			
1. reads, looks at books	10%	02%	--
2. more talkative, better speech	04%	06%	--
3. more mature socially	43%	47%	--
4. acts worse, discipline	--	03%	--
5. no difference, don't know	33%	23%	--
Program has really helped child:			
1. will help in going further in school	87%	100%	93%[c]
2. to get better grades	90%	93%	93%[c]
3. to get a better job	83%	97%	90%[c]
4. to get along better with other people	93%	83%	93%[c]

[a] Randomly drawn number of students about whom parents were interviewed.

[b] Parents in control asked if child now looks forward to kindergarten.

[c] Parents in control group in these cases were asked if the program would have helped had their child been in attendance.

f. How do teachers in Experimental Programs "A" and "B" compare in terms of their perceptions of effects of their program on each individual child?

TABLE 13

TEACHER PERCEPTIONS OF EFFECT OF THEIR PROGRAM ON EACH CHILD

	Experimental "A" RN = 30[a]	Experimental "B" RN = 30[a]
Percent of students who feel that the work is:		
1. too difficult	40%	43%
2. too easy	33%	40%
3. about right	27%	17%
Percent of students for whom the teacher feels that the work is:		
1. too hard	33%	20%
2. too easy	40%	67%
3. about right	27%	13%
Percent of students for whom the teachers feel that the program will help to:		
1. go further in school	93%	57%
2. get better grades in high school	90%	60%
3. get a better job	93%	53%
4. get along better with others	93%	93%
Percent of students that teachers feel behave differently since attending the program	93%	87%

[a] Randomly drawn number of students about whom teachers responded on questionnaires.

f. How do the teachers of children in Experimental Programs "A" and "B" compare in terms of their attitudes toward the program?

TABLE 14

TEACHER ATTITUDES TOWARD EXPERIMENTAL PROGRAMS "A" AND "B": EVALUATIONS OF STUDENTS AS A GROUP

	Experimental "A" N = 6	Experimental "B" N = 7
Teachers who felt that parents knew quite a bit about the program	100%	71%
Teachers who felt that the school had told the parents quite a bit about the program	100%	100%
Percent of teachers who asked parents to help in the program	83%	86%
The type of parental aid generally requested was primarily:		
1. Legislative (planning)	0%	14%
2. Executive	100%	86%
Teachers who felt that the school should have asked parents for more help	66%	29%
Teachers who felt that the parents are capable of helping in the program	100%	86%
Teachers who felt that parents can best help by:		
1. Planning & developing objectives of program	0%	15%
2. Assisting with extra-curricular details and tasks	83%	71%
3. Doing both	17%	14%
Teachers who feel that it helps the child when teachers and parents meet	100%	100%
Teachers who feel that they were able to talk with the parents enough to help	33%	43%
Percent of teachers who felt that the parents were favorable to the program	100%	100%
Percent of teachers who felt that the parents thought it was worth the trouble to send their children to the program	100%	100%

B. PROPOSED ACTIVITIES, PERIOD: AUGUST 15, 1967 - DECEMBER 14, 1968

1. We intend to randomly assign preschool experimental subjects to the two kindergarten programs to be employed by the school system. Under the support of Follow-Through (OEO), there will be a "Bereiter-Engelmann" type program in addition to the usual kindergarten program which emphasizes adjustment and general school readiness. Since these programs are going into effect this fall we must take them into account in our design if we are to adequately assess the impact of the preschool experiences. We propose to do this as indicated in the following schematically outline. (see page 24)

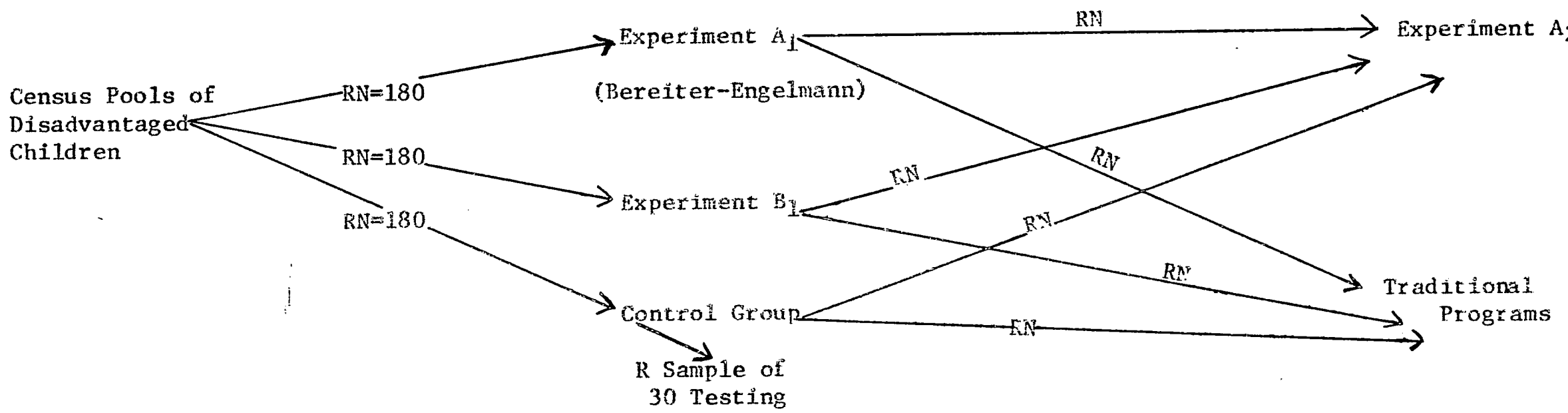
2. We will collect and tabulate social adjustment data from kindergarten teachers on Control and Experimental subjects.

3. We would also like to employ outside psychologists to do extensive adjustment inventories on random samplings of Experimental and Control students.

4. We will collect and tabulate data on teacher attitudes.

5. We will continue analytical procedures and set up multivariate procedures for the use of computer facilities.

SCHEMATIC DESIGN FOR STUDENT ASSIGNMENT



*We will have six categories to assess interaction and additive effects of type of preschool and kindergarten experiences.

C. SUMMARY OF STAFF

Paid by OEO-4150 Funds

Dr. Edsel Erickson, Principal Investigator
Dr. Jane Bonnell, Grand Rapids Public Schools, Associate Investigator
Dr. Louis Hofmann, Yeshiva University, Consultant
Ruth Jennings, Secretarial, 1/2 time
Frank Hager, Psychometrist
Sharon Wilkins, Teacher Consultant
Ernestine Blanchard, Teacher Consultant
Lulu Jefferson, Teacher Consultant
Maxine Williams, Teacher Consultant
Rodney Huntington, Student Help - Part Time
Paul Martin, Student Help - Part Time

Principal Investigator

8/30/68

Date

LOWER CLASS INTRA-URBAN MIGRATION: IMPLICATIONS FOR EDUCATION

by

Clifford E. Bryan

John Natzke

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Western Michigan University

1968

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LOWER CLASS INTRA-URBAN MIGRATION:

IMPLICATIONS FOR EDUCATION

Clifford E. Bryan
John Natzke
Orel Callahan
Earl Enge

One of the persistent problems confronting investigators who conduct survey research in an urban setting is that of the geographic mobility of the respondents who have been originally selected into the survey sample. Although this problem is generally recognized by those investigators who work in the field, most of the work done in this area has only dealt with rural-urban and inter-urban migration and not with mobility within the city, intra-urban migration. This is reflected in the census data -- only annual rates are given for migration rates moving from one city to another or from rural areas to urban areas.

This problem has become of major importance to some of the larger cities. In some large urban school systems, the rates of student turnover within a single school year for a particular school may be extremely high; those families that move from one block to the next may concomitantly be transferred from one school to another. Thus, although this issue is recognized by many educators in large urban school systems, little empirical work has been done in the area.

The high rates of intra-urban migration became increasingly salient in a phase of this investigation which dealt with samples of parents selected from a population which had been previously defined as falling

within the poverty level and which dwelled within an inner-city Poverty Area.

In experiments which had been designed to test the effects of two separate Head Start Programs, a total population of 1000 families had been identified as being inner-city residents who had at least one child who was from four to five years of age. These families were classified as being within the Poverty Target Area on the basis of levels of income.

From the initial population of 1000, 180 children were randomly selected to be placed in Program "A" which was designed for the structured approach of language instruction. The same number of preschoolers were similarly assigned to Program "B", the unstructured language program. The remainder of the initial population were defined as the Control Group, i.e., they were similar to the families in Programs "A" and "B", but their preschool children were not included in any program.

At the end of the year long preschool programs, interviews were attempted with a randomly drawn sample of parents of children in Program "A", Program "B", and the parents who had been assigned to the Control Group.

For the purposes of this survey, a table of random numbers were utilized to select a sample of 30 names each from the 180 subjects listed under Program "A", Program "B", and the Control Group. This provided a total random sample of 90 families which were to be interviewed.

During the process of conducting the interviewing assignment, it was quickly recognized that the problem of intra-urban geographic mobility

would have to be dealt with. The interviewers experienced considerable difficulty in locating many families even though the addresses of these subjects had been listed only four months prior to the beginning of the preschool programs.

For the most part, those children who had been placed in the Head Start Programs were located rather easily, for the teachers were able to provide generally correct information on home addresses. In only a few cases, the children in the interviewing samples in the Head Start Programs had been withdrawn from the Programs for reasons both known and unknown by the teachers. When this occurred, a table of random numbers was again used to replace those subjects who had left the school system; but this measure was resorted to rather infrequently due to the rather stable residential patterns of this sub-population.

On the other hand, there was considerable difficulty in locating the residences of many of the subjects who had been assigned to the Control Group. In one instance, there were eight randomly drawn parents in a row who could not be interviewed because their dwelling places had been condemned by the city. Many families had simply moved. In a few cases, these people were located by gathering information from the neighbors. For the most part, however, the investigators had to resort to the table of random numbers repeatedly in order to provide the necessary 30 cases for the Control Group. This method, while practical, did ultimately provide a rather stable sub-population for the Control Group which is not representative of the highly mobile parents in the lowest economic strata.

For the purpose of illustration, the following table depicts the process of the initial identification of subjects from the Target Area,

TABLE 1

UNIVERSE: Approximately 1000 families that:

1. Are defined as within the Poverty Level
2. Live in the Inner-city Area
3. Have children 4-5 years of age

Random Selections for Programs "A", "B", and Control

	Program "A"	Program "B"	Control Group	Dates That Data Were Gathered
A. Subjects randomly drawn and assigned to Experimental and Control Group	N = 180	N = 180	N = 380	Sept., 1967
B. Random selections for Survey of Parents	N = 30	N = 30	N = 30	April, 1968
C. Actual number of interviews with original Subjects from "B" above	N = 30[a]	N = 25[b]	N = 15	April, 1968
D. Percentage of Mobility of Sample of Subjects under "B" above	0%	14%	50%	

[a] One subject had moved but remained in the Program.

[b] One subject withdrew for reasons of ill health.

the method of assigning these subjects to the three experimental groups, and the subsequent sampling of these subjects for the purpose of the exploratory survey.

From this table, it may be seen that for Program "A", there was no movement out of the school system. Although one family did change residence, the pupil remained in the program. In Program "B", one child was withdrawn for health reasons; but there were four cases in which the families had changed residence and the children were withdrawn from the program. In the Control Group, however, of the 30 subjects which had originally been randomly selected from a list of over 380 names, only 15 could be located by the investigators.

This phenomenon leads to several questions dealing with the factors of geographic intra-urban mobility, the process of the selection of subjects into the school system and the possible interaction between these two factors.

The first question deals with the selection of experimental subjects into the school system. As previously stated, there were two phases in the procedure for assigning the experimental subjects into the two different Head Start Programs. First, 1000 families with children and who lived in the Target Area were identified. Second, a table of random numbers was used to assign 180 children to each program.

The teachers were then given two lists of identification numbers. One list contained the identification numbers and names of those children who had been randomly selected into the Program. The other list, which the teachers could use as a waiting list of pupils to be used for the

replacement of subjects who dropped out while the program was in process, contained the identification numbers and the names of those families who were in the Control Group. The teachers, then, were to contact the parents who were listed in the Experimental Groups and inform them that their children had been selected for Head Start.

This procedure seems sound enough at face value. On the other hand, it may be that the teachers encountered the same type of problem that the interviewers did -- the problem of urban migration. As previously described, when the interviewers were confronted with this difficulty, the only immediate solution was to turn once again to the random table of numbers, select a replacement, and then try to arrange an interview. What then happened was that by a process of repeated elimination and replacement, the interviewers contacted and interviewed only those parents who had, for the most part, lived in the same residence since the time that their addresses had been recorded at the beginning of the experiment.

It may have been that the teachers resorted to somewhat the same type of solution. Having been given a list of randomly selected children, they may also have encountered situations where those who had been initially identified no longer lived at the same address. They, in turn, used a similar method of substitution, e.g., they took from the randomly drawn waiting list in order to ensure that the classroom quotas were filled.

A second explanation that may be of some value is that those who were selected into the system may have refrained from moving during the

school year so that their child could remain in the school. There seems to be a tendency for some parents to not want to move during the school year from one school system to another. If this is true, it may be that the preschool program for disadvantaged children helped to reduce mobility. In order to pursue this question farther, it would be valuable to study other urban and rural areas in order to assess the impact of education upon migration.

However, the second explanation which has been suggested may not be as explanatory of migration as the first. For example, while attempting to locate parents in the Control Group, one interviewer encountered eight different sub-standard houses in one day that had been condemned. It was noticed, however, that these particular residences were all located along a main thoroughfare; it may have been that some major construction was to be undertaken in this area. It did not appear that the majority of the residences or those who were included in the Programs were located in such areas as might be immediately removed.

It does seem as though both explanations may have some value. By a process of sorting and substitution, the teachers replaced those originally drawn subjects that could not be located with the more accessible children that were listed in the randomly drawn waiting group to replace those who had moved or rejected participation. Furthermore, once the children were placed in the preschool program, the parents may have been less likely to change residential locations.

On a broader scale, there are many implications for educational practice. It may be that many educational programs are inadvertantly designed for those people that are rather stable. The results of this particular sample seem to imply that the more stable people are the ones that tend to be selected into the preschool programs. Again, this may lend a greater amount of residential stability to families once the preschool children have been placed in school.

On the other hand, those who seem to exhibit a high degree of intra-urban migration may be difficult to contact for placement in programs. Furthermore, school administrators and teachers may be more reluctant with regard to undertaking the frequently unrewarding task of attempting to contact these types of people.

The evidence from this small sample does seem to point for some need to consider the differential rates of intra-urban migration between income groups. This may be a factor for consideration in the planning and construction of education programs and policies for inner-city schools. Perhaps there are more poor urban migrants than there are rural urban migrants. Finally, this study has demonstrated a need for further study of intra-urban migration rates as it is related to school attendance, academic performance, teaching practices and educational programs.

ATTACHMENT B

B_1 - Inventory of Teacher Attitudes Toward Academically Structured Preschool Programs*

Introduction

Your responses to the following questions will not affect your assignment to the Preschool Program for disadvantaged children. You have already been accepted as a teacher. We would like, however, to be able to have some idea of what kinds of activities you prefer for preschool children. Some of the questions you may not feel prepared to answer at this time. Even so, we would like you to answer all questions. Throughout the school year we will again ask you for your views so that we may benefit from your experiences. If the Preschool program is to be administered wisely we will need to know your thoughts. There are no wrong answers from our standpoint. A blank page is provided for any additional comments you may care to make. Thank you.

Instructions

Which one of the following pairs of statements of abilities would you prefer children to have at the completion of a year of preschool? Check only one for pair even though both may be desirable.

1. a. Ability to play alone without supervision _____
   b. Ability to explore their environment with curiosity _____

2. a. Ability to communicate their feelings to their teacher _____
   b. Ability to play with paints and clay with enthusiasm _____

3. a. Ability to name colors and objects _____
   b. Ability to distinguish words and pictures _____

4. a. Ability to recognize and name vowels and consonants _____
   b. Ability to perform simple if-then deductions _____

5. a. Ability to play alone without supervision _____
   b. Ability to name colors and objects _____

6. a. Ability to perform simple if-then deductions _____
   b. Ability to explore their environment with curiosity _____

7. a. Ability to distinguish words and pictures _____
   b. Ability to play cooperatively with their peers _____

8. a. Ability to interact with adults and teachers without emotional upsets _____
   b. Ability to name positive and negative instances of concepts such as tools and toys _____

9. a. Ability to play constructively with paints and clay _____
   b. Ability to use affirmative and negative statements in response to questions and commands _____

*This title did not appear on questionnaires given to teachers.

10. a. Ability to communicate their feelings to teacher _____
    b. Ability to recognize and name vowels and consonants _____

11. a. Ability to use polar opposites and prepositions _____
    b. Ability to attend school without unusual fears _____

Please answer the following questions by writing in the one code number in the space which best represents your answer.

Code Number:
5. I agree very much
4. I agree somewhat
3. I am not sure
2. I disagree somewhat
1. I disagree very much

1. _____ Preschool programs for disadvantaged children should focus on the academic objectives of language skills and relegate nonacademic objectives, such as social adjustment, to a secondary position.

2. _____ Preschool programs for disadvantaged children should focus on social adjustment and getting the children to like school, and relegate academic objectives such as specific training in the use of adjectives and consonants to a secondary position.

3. _____ Poor children as compared to rich children need more practice in getting along with their peers.

4. _____ Language skills, among disadvantaged preschool children, are best developed through the use of guided play activities.

5. _____ Poor children profit unusually from activities which allow them to explore without the guidance of the teacher.

6. _____ Intensive direct instruction for the major part of each school day in the use of language, involving rote learning, practice, etc. is inappropriate for young preschool children from economically disadvantaged homes.

7. _____ Teachers should not interfere with the child who seems to prefer not to participate in the instructional activities.

8. _____ Intensive direct instruction in the use of language skills such as the use of vowels and consonants, producing rhyming words, if-then deductions, etc. will produce stress or anxiety in the children.

9. _____ The major task of a teacher of preschool children from economically disadvantaged homes should be to widen their breath of experiences through play, trips, storytelling, reading, etc.

10. _____ Readiness for later school can best be developed by focusing on social adjustment and motivation.

11. _____ A highly businesslike and academically oriented class for preschool disadvantaged children would violate the child's need for close affectional relations with the teacher.

ATTACHMENT B

B_1 - Inventory of Teacher Attitudes Toward Academically Structured Preschool Programs*

Introduction

Your responses to the following questions will not affect your assignment to the Preschool Program for disadvantaged children. You have already been accepted as a teacher. We would like, however, to be able to have some idea of what kinds of activities you prefer for preschool children. Some of the questions you may not feel prepared to answer at this time. Even so, we would like you to answer all questions. Throughout the school year we will again ask you for your views so that we may benefit from your experiences. If the Preschool program is to be administered wisely we will need to know your thoughts. There are no wrong answers from our standpoint. A blank page is provided for any additional comments you may care to make. Thank you.

Instructions

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   b. Ability to explore their environment with curiosity _____

2. a. Ability to communicate their feelings to their teacher _____
   b. Ability to play with paints and clay with enthusiasm _____

3. a. Ability to name colors and objects _____
   b. Ability to distinguish words and pictures _____

4. a. Ability to recognize and name vowels and consonants _____
   b. Ability to perform simple if-then deductions _____

5. a. Ability to play alone without supervision _____
   b. Ability to name colors and objects _____

6. a. Ability to perform simple if-then deductions _____
   b. Ability to explore their environment with curiosity _____

7. a. Ability to distinguish words and pictures _____
   b. Ability to play cooperatively with their peers _____

8. a. Ability to interact with adults and teachers without emotional upsets _____
   b. Ability to name positive and negative instances of concepts such as tools and toys _____

9. a. Ability to play constructively with paints and clay _____
   b. Ability to use affirmative and negative statements in response to questions and commands _____

*This title did not appear on questionnaires given to teachers.

10. a. Ability to communicate their feelings to teacher _____
    b. Ability to recognize and name vowels and consonants _____

11. a. Ability to use polar opposites and prepositions _____
    b. Ability to attend school without unusual fears _____

Please answer the following questions by writing in the one code number in the space which best represents your answer.

Code Number:
5. I agree very much
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3. I am not sure
2. I disagree somewhat
1. I disagree very much

1. _____ Preschool programs for disadvantaged children should focus on the academic objectives of language skills and relegate nonacademic objectives, such as social adjustment, to a secondary position.

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8. _____ Intensive direct instruction in the use of language skills such as the use of vowels and consonants, producing rhyming words, if-then deductions, etc. will produce stress or anxiety in the children.

9. _____ The major task of a teacher of preschool children from economically disadvantaged homes should be to widen their breath of experiences through play, trips, storytelling, reading, etc.

10. _____ Readiness for later school can best be developed by focusing on social adjustment and motivation.

11. _____ A highly businesslike and academically oriented class for preschool disadvantaged children would violate the child's need for close affectional relations with the teacher.

Attachment C

A NURSERY SCHOOL FOR DEPRIVED CHILDREN

Carolyn Varner Parks*

The recent upsurge of interest in the area of early childhood education has led to much heated debate and controversy around the area of curriculum. The traditional nursery school appears to be under particularly heavy fire. Research designs keep appearing which explore the effects of new curriculum or adaptations of older curriculum ideas. These designs are usually conceptualized in some manner which allows comparison between the experimental curriculum and the "traditional" approach. For the most part these designs offer little or no definition of the "traditional" approach and no curriculum to be used in such an approach. One must certainly question research which fails to define its terms; therefore, it seems important to establish some base lines about the meaning of the traditional approach. To establish this base line, one should look first at the goals and aims of nursery schools in the past when presumably most nursery schools would have to be categorized as traditional. Sears and Dowley (p. 821, 822) in trying to establish such goals made the following point:

> Although trends are noticeable, no universal philosophy of nursery education has emerged. In fact, little or no attempt to integrate a set of theoretical concepts is evident. In a

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*Consultant, Grand Rapids, Michigan, Preschool Program, 1967-68.

survey of objectives such as this one, we can only discern common concerns related to areas of child learning and growing. In addition to the general aims of meeting needs and providing scope for growth, the specific aims seem to fall under the following headings (Italics mine):

1. Meeting organic needs and establishing routine habits: Eating elimination, sleeping, washing, dressing and undressing.

2. Learning motor skills and confidences: Climbing, running, jumping, balancing, learning to use the body effectively.

3. Developing manipulatory skill: Using scissors, crayons, paste, paints, clay, dough, etc., building with blocks, working with puzzles, beads, typing, buttoning.

4. Learning control and restraint: Listening to stories, sitting still, reacting to music, etc.

5. Developing appropriate behavior, independence-dependence in adult child relationships, coping with fear, angry feelings, guilt, developing happy qualities, fun, humor, healthy optimism.

6. Psycho-sexual development, identification, sex role learning, concept formation, self-understanding and self-esteem, creativity, academic subject matter.

If one examines these goals, they appear to be comprehensive enough to insure growth for any preschool age child and appropriate as a basis for curriculum planned for deprived preschoolers. However, as Sears and Dowley point out, these are specifics which have traditionally been superceded by the larger goal of meeting needs and providing for growth. The prime question then becomes one of determining how these basic considerations affect, alter or support the use of a "traditional" approach with deprived preschoolers. Let us look first at meeting the needs of these children. Although few people would deny the multiplicity of the needs of these children,

research now indicates that the most blatant needs, and perhaps the most urgent ones, are those needs that fall into the area broadly defined as the area of cognitive development; that is, these children have definite needs in the areas of concept formation, classification ability, language and related areas of development. There appears to be general agreement that this is a legitimate area of need which must play some part in the kind of experiences offered deprived children. The question of what experiences and in what manner has produced a diversity of curriculums and programs for the deprived preschooler. In order to think clearly about the many programs now in effect, it seems useful to classify programs into one of the following three categories:

The first category would be composed of those programs of general enrichment which include cognitive development as a general goal, but offer no systematic method to obtain this goal. The criticism often directed toward this program is that due to the gravity of the needs of the deprived child, this type of program can not provide for growth or meet the specific needs of the deprived child. These programs are often labeled as traditional because teaching differs only in degree, and not substance, from programs offered to middle-class children. Head Start groups, either by accident or design, would appear to fall into this category.

The second category would be composed of a few experimental programs which have only the development of a particular academic skill as their goal. This program differs radically from the

approaches used historically in nursery schools. The program is exemplified by the Bereiter and Engelmann (1967) program whose approach is highly structured and tutorial in feeling tone. The primary criticism directed at this program is that it basically offers growth opportunities in only one area.

The third category includes those programs which offer some systematic approach for the development of cognitive skills but do not ignore other areas of development. Hodges and Spicker recently reviewed such programs in The Young Child.

From their description, these programs appear to be traditional nursery school programs which emphasize cognitive development in a systematic manner. The net results of these "intervention" programs are not known; however, the authors reached the conclusion that "the intellectual functioning of disadvantaged children can be substantially raised by home intervention, preschool curriculum intervention or a combination of both." The finding, that intellectual gains can be made by deprived children using a modified traditional curriculum, should be of paramount interest to nursery school educators. This type of programming offers an alternative to the general enrichment program or the highly structured program. It would appear to be a comfortable and logical alternative for many educators since they can more readily sanction a program which considers all areas of development but makes provisions for known needs in the cognitive area. Another important point would be that nursery school teachers already teaching deprived children could more easily adapt to such programming and would require a minimum of further training.

The results of these programs seem to point the way for curriculums which are a modification of the traditional approach. The following curriculum is an attempt to spell out such a modification. It is a program which uses a traditional framework, a definitive teaching role and offers systematic experiences related to the area of cognitive development.

DESCRIPTION OF A TRADITIONAL PROGRAM WITH A COGNITIVE ORIENTATION

This program differs little from the traditional program in terms of equipment or room arrangement. In keeping with its traditional heritage, teaching centers are maintained for the following activities: creative activities, manipulative activities, block play, dramatic play, water play, science activities, book corner and outdoor play.

Children have freedom to select from a variety of activities at all times, just as in the traditional program, but choices are more limited than those often presented in traditional programs. These limitations are felt to be important since many culturally deprived children may have had few experiences in making decisions, particularly in the area of selection of materials for play.

The basic mode of group interaction in this program consists of shifting small groups within the larger group. These groups usually have available an adult who serves as a resource person or anchor person for the group. This type of grouping seems necessary in order to maximize the growth of the culturally deprived child. Such groups

offer a chance for more meaningful interactions and relationships between children, as well as between teacher and child. Language development and concept formation seem most likely to occur in small groups where teacher can listen, and can tell children the names of things, and can answer questions and promote further learnings. These groups are changing and formed by the children and are in no way related to ability grouping. This type of voluntary grouping, along with a choice of activity, are parts of the traditional program which are maintained in this experimental curriculum.

The scheduling of this program is done by using time blocks of undefined lengths. This procedure is followed since groups will differ in terms of group makeup, time available and other factors. The teacher's role in these time blocks varied according to the purpose of the time block, although the teacher always tries to utilize herself to maintain the group atmosphere described by Thompson (1944). This atmosphere is one "in which the teacher would attempt to become a warm friend, a guider and in general would more actively participate in children's play experiences as an interested and helpful adult." (Sears and Dowley) Activities for each time block and the teacher's role in each are described below.

BLOCK I

This time period most closely fits the period of free play of the traditional program. Small unstructured groups center around the teaching areas such as creative activities, manipulative activities, block play, etc. Materials for daily programming are

selected on the same basis that materials are selected for traditional programs. This means that activities are available which fit the capabilities of the children and provide for a maximum of growth and learning. Teachers could be guided in their selection of materials for this time block by existing nursery school literature such as Hartley, Frank and Goldenson's, Understanding Children's Play: Katherine Read's, The Nursery School, and other curriculum books.

The adult's role in this time block consists of stationing himself at one of the main teaching centers (those which appear to be of most interest to the most children such as block play or the creative table) and working primarily with those children who group around them. This grouping is voluntary and may be due to the nature of the activity or the child's relationship with either his peers or the adult. The adult concerns himself primarily with those children around him and uses himself to guide and extend the children's learnings in the fashion described by Wann, Dorn and Liddle, in Fostering Intellectual Development.

When the adult senses that some children have reached the satisfaction level for constructive play in a particular center, he moves to another center. It is hoped that some children from the original group will form part of a new group at this center. In this way, the adult serves as an anchor person for a nucleous group and is using himself as a guide for children's activities. By this method, it appears that adults may be able to establish meaning-

ful learning experiences for children while moving them through a variety of activities. Again, the child is given a choice. He may move with the teacher, he may stay with his own activity or he may move to another group which may or may not include a teacher. The teacher, however, by using himself as a sensitive leader limits these choices, particularly, for children who can make few choices. The use of the adult as an anchor person differs from the traditional role of the teacher in programs where teachers remain stationery at the same activity and wait for children to join them (zoning) or programs where teachers float from one group to the other offering aid and assistance.

In using an adult as an anchor person, certain precautions should be taken. Teachers should plan to rotate themselves periodically from group to group during this time period and also plan to work with other small groups during the day. The teacher must also be sensitive to the relationships created by this kind of group structuring. It would be possible for the non-sensitive teacher to be encouraging unhealthy dependent relationships or to be depriving children of the opportunity to grow in their ability to select and maintain their own play interest.

Because of the many precautions that need to be taken in using adults in this manner, this use of the adult as an anchor person may be more appropriate at the beginning of the school experience of the disadvantaged child. After an initial period of guidance from the teacher, children may be able to work more indepen-

dently and the teacher may switch to more traditional methods of interaction.

This time block is terminated by a short cleanup period. Putting away blocks and accessories, manipulative toys and creative materials is necessary for later time periods. Here the teacher's role is one of helping and guiding children in the cleanup of the room. The teacher should try to establish the kind of atmosphere which makes cleaning up a job to be done and one in which most children are expected to participate. There should be no emphasis on having children put away those things which they have used since some children may hesitate to use materials if they have to put them away later. The teacher should remember to give children some warning that cleanup time is approaching and what the next activity will be. She should also remember to thank children for their help and not make an issue over the fact that all children do not participate equally in task. It seems important to establish the idea that everything does not have to be spic and span in order for the program to continue. The teacher and children should do those things which establish order in the room, but tasks like sweeping up or washing paint cups can be done later or after children have gone home.

The teacher should also be aware that cleanup time offers children a good chance to practice classification tasks. The teacher in giving a child a task such as "putting the little cars in the green box" is requiring the child to discriminate the small cars from everything else in the room and also is requiring the use

of color concepts and the understanding of a word such as "in". The teacher must be available to help children avoid misclassification and to guide them toward clearer classifications. This practice can not be conducted when children are required to put away one thing before using another or the teacher does all the cleaning up, or the teacher does not provide specific containers or places for equipment.

BLOCK II

This time period is reserved for snack time and differs very little from the traditional program in terms of the teacher's role. It should be noted that the teacher's role is to encourage and direct conversation. Perhaps conversation only concerns the kind of juice and where it comes from or the weather or topics coming from the children's own interest. The adult should serve as a genuine listener about any topic but may also use this time as a time to introduce a concept to children and find out what their ideas are. Such concepts might include questions such as, "What do you think a mother does?" "What do you think a policeman does?" "What do you think about bosses?" "Why does the snow melt?" These are only a few ideas, but the teacher should be aware that children are like other people in the sense that the more ideas they have around a concept the more ideas they may have about a concept. By listening and directing interesting conversations with children, the teacher can be encouraging both language development, concept formation and developing socially acceptable behavior.

As in the traditional program children should be allowed to help prepare or get ready for their own snack and when possible should pour their own juice or help in other concrete ways. Snacks should be served around small tables composed of several children and an adult. Here as in the first time block the adult primarily concerns himself with those children in his own group.

BLOCK III

This block of time is reserved for outdoor play or other active play. The teacher's role and the nature of the activities do not differ from that of traditional programming. Teachers again can be guided from existing literature such as Moore and Richard's Teaching in the Nursery School. (p. 39-43).

BLOCK IV

This block of time differs most radically from traditional programming. It is a time for focusing upon cognitive activities. It is assumed that such focusing requires that the room be relatively free of distracting elements such as use of motor equipment, large blocks, paints or materials left over from previous activities. As in previous time blocks, the child is given a restricted choice of activities. He may choose either a structured, teacher-directed activity or an activity which centers around self-correcting equipment such as fit-a-space, peg boards, parquetry blocks, puzzles, certain types of Montessori equipment, etc. The teacher should use such equipment to set up a variety of centers so that children may work individually or in small groups with or without a teacher.

Two important points should be made to the teacher at this time. The first is that children should be taught that this is a special time for learning activities and that people need a relatively quiet atmosphere in which to think best. The teacher should realize that this restraint will not be equally attainable for all children and should provide activities for those children who are not yet ready to participate in all parts of this time block. The teacher should impress upon children that this is a special and a fun time. The teacher's interest and enthusiasm in cognitive activities are important in establishing children's interest and enthusiasm for such activities.

The teacher-directed activities focus on the development of cognitive skills and particularly on the development of concepts. The importance of helping children develop adequate concepts becomes understandable if we assume that the ability to use concepts and symbols is basic to logical thinking, and that such thinking is a prerequisite for success in school and necessary in order to cope with the complexities of living in our society.

If we want to help children obtain concepts we must know how concepts are formed and provide those experiences which facilitate such development. Sigel, in Hoffman and Hoffman, makes the following statements concerning the development of concepts.

> Concepts are required through a complex set of processes. The child had to learn to recognize and identify objects. That is to say, he has to learn that objects exist, have permanence and differ one from the other. Identification and subsequent naming follow. Further, he must learn not

> only to identify the whole object, but also to define its manifold characteristics. He learns that various objects have multiple characteristics and attributes; a chair is something more than to sit on. In addition to such discrimination he learns to perceive commonalities among diverse stimuli. Diverse items are organized into classes or categories that are labeled in conventional terms. Language both facilitates and directs this categorization process, since it provides the tools by which to identify the commonalities. (p. 210)

This process is one that is occurring in the lives of young children every day in both the home and school situation, however, it may be that the deprived child has learned few concepts or has not learned conventional terms for such concepts. The nursery school should offer experiences which contribute to concept formation in all blocks of time. It is assumed that children are learning when they manipulate and explore their environment; however there are some indications that small groups which are teacher-directed offer essential supplementary experiences which not only increase children's ability to classify but also broaden the basis for such classification. Sigel and Olmsted in some recent research with deprived kindergarten children found that these children developed greater classification skills using a small group training procedure which they called "guided discovery." By using this technique, children were able to produce more groupings of real objects and were able to increase the variety of criteria used for classification. The technique involved small groups meeting for 15-20 minutes daily for 20 sessions, which were removed from the larger group, and guided by the teacher in an examination and discussion of objects, their relationship to each other, similarities, differences, etc.

TRAINING PROGRAM

Because these findings seem relevant to the purposes of this time block both in terms of objects presented and the teacher's role, the entire training procedure is presented in the following pages:

If teachers regard the findings of Sigel and Olmsted as important ones and the training procedures as something which could be tried with younger children, they, then must develop ways of bringing these experiences into the classroom. This time block is designed to give the teacher the opportunity to bring these activities or similar activities into the classroom. These activities can be presented as teacher-directed games along with other games whose purpose it is help children identify and describe real objects and to move to higher levels of abstraction and to learn some basic classifications. It does not seem advisable to attempt to spell out <u>all</u> possible games for teachers but rather to discuss some general guidelines for these games and to present a few examples to stimulate teachers thinking and planning for their own classrooms. It seems important to note that games offered to children should have definite names and procedures. A sameness in format is needed in order that children have the security of knowing how the game is played and what they are expected to do. Games should also be developed which can be altered in content when the teacher wishes to help children explore other properties or characteristics of objects. An example of this type of game might be one which is called the "Search and List" game. The

teacher asks each child to secure from the room something which fits into a particular category such as "red." The teacher then discusses the objects with the children in much the same way as described in the research training procedures, thus helping children to understand that red can be a characteristic of a number of different things. The teacher could then make a list of the objects for the children pointing to each object as she writes the word. Hopefully, this listing will help children understand that there is some relationship between the word (a symbol) and the object. After the children understand how to play this game, the teacher can use it as a vehicle for not only discussing other color concepts but also as a means of exploring other properties of objects. This is accomplished by simply asking children to look for objects which are round, wooden, plastic, metal, etc., or objects which can be used in a certain way such as those which are used to sit on, to drink out of, etc. A sophisticated version of this game might be one which required children to look for things which have two properties such as red and wooden.

The research procedure and the above game have been presented in order to give the teacher some ideas and guidelines in developing games which are relevant to the teacher's own group. Both procedures involve giving children a chance to focus on the properties of objects. They involve manipulation and discussion of real objects. Additional games which continue this process and try to establish some relationship between objects and some symbol for the object are presented in the following pages.

SCREEN GAME

Have children identify an object hidden behind a screen or barrier by the sounds made by the object. Include a motoric response after identification.

For example, have children to name musical instruments from the sounds they make and then demonstrate how they are used.

Another suggestion might include taping sounds made by real objects which are available as pretend objects in the nursery school. Ask children to identify the objects and bring them to the group for discussion. This might include sounds made by animals, transportation media and mechanical instruments such as telephones.

BAG GAME

Using a bag or pillow case, place several objects inside. Have children identify objects by feel. Remove objects and discuss them after all children have guessed the content of the bag. Useful for teaching concept of shape, dimension, weight, etc. Can also be used as a classification task by including objects belonging to one class such as color, material, etc.

These two games and similar games are means of giving children practice in recognizing a whole concept (for example, a drum) from a characteristic of the object (its sound). We react daily to this kind of symbolishm. For example, the ringing of a telephone brings to mind the whole object, its function and appropriate behavior. This same

type of process is occurring when we read the word, telephone, however, before developing the ability to use written symbols, children are able to deal with those symbols which are related perceptually to the whole object. The feel, sound, taste, or smell of an object may stand for the whole object. It seems important to begin with real objects and some symbolic property before presenting games based on pictures or pretend objects which are also symbols for real objects.

WORD GAME

Giving each child a turn, print the name of an object available in the room, on a small slip of paper. Read the word to the child and have him bring the object to the table. Match word and concrete item. For example, print the word "telephone" for a child. Have him find the telephone in the doll corner and match it with the word.

For older children, words and objects could be separated and rematched.

In this game the teacher is not attempting to push children into reading, but is trying to establish some relationship between an object and a symbol for the object (a word).

PICTURE GAME

The teacher uses a large assortment of pictures which can be placed into a broad category such as animals, furniture, transportation, etc. Children are assigned some member of that category and are

given those pictures which fit into their category. For example, one version of this game might be called the Animal Picture Game. Children would have such categories as cats, dogs, horses, cows, etc. Each child would take those pictures which fit into his category after the teacher has presented the picture and it had been identified by the group.

In this game and similar games, children are being given the opportunity to discover that a variety of abstractions can stand for the same or similar objects. We have no difficulty in identifying a picture of a dog either from a photograph, a stylized or naturalistic picture or a cartoon, but these are categorizing skills which young children are in the process of developing which may be facilitated by this type of game.

THE SAME GAME

Here, teachers are requiring children to look for objects which are like certain objects she presents or the picutre she presents of an object. This process requires that children be attentive to the characteristics of an object and discriminate it from a variety of things which are similar to it. Knowing likenesses and differences are essential when one tries to categorize a variety of things as well as being important skills necessary to reading and other school related activities.

An example of this game might be one which involved the use of pegs and the pegboard. Children might be required to select a peg like the

one the teacher selects or place it on their own board or the teacher might use blocks of a particular shape or color and ask children to select a duplicate block. Each child might be given a box in which to place his selection.

After children have had much practice with real objects, the teacher might present pictures of objects and ask children to match real objects to the pictures. For example, the teacher might use flash cards which contain the alphabet and ask children to pick out plastic or wooden letters which match the picture of the letter. The purpose of the game is not to teach the alphabet but to give children practice in discovering those things which are alike.

Commerical lotto games also offer children practice in matching those things which look alike. The teacher should be very sure that children understand that these are pictures of objects and that they have some idea about what these objects are before using such games a great deal in the classroom. Lotto games present pictures of real objects and are useful as symbols but do not replace experiences with concrete objects.

The games which have been presented do not preclude the use of other types of experiences during this time block. This time can also be used as a time when teachers present other concepts which are not easily presented in a game form. Science experiences such as those described by Haupt, in Science Experiences for Nursery School Children, short neighborhood field trips and follow-ups, story-writing, films, etc., might also be presented in this time block or

during the earlier period designated as Block I. Ideally, different types of learning groups would be available at the same time during this time block and children would have the opportunity to participate in one or more groups during this time, however, the number and extent of such activities should reflect the nature of the group, the staff and the time available.

BLOCK V

This time is reserved for lunch in those programs which include lunch. The purposes of lunch and the teacher's role are similar to those described in the time block reserved for juice. Teachers should try to involve children, periodically, in meal preparation and daily in responsibilities such as table-setting. Learning the accepted placement of the plate, glass, fork, spoon, and napkin may be new experiences for children. Table-setting also requires that children learn the one to one relationship necessary for a complete place setting. The teacher should try to establish a warm and relaxed atmosphere around the lunch setting. This means that few rules will be made concerning manner of eating and selection of food. Children should be given the opportunity to select or refuse the food which is available. Teachers should name foods and ask children if they would like to have some but should not pressure children into selection. Adults should set a good example both in the terms of the food they select and manners used during eating. It seems highly improbable that the child who is required to use "please" and "thank you" and not treated courteously by the teachers is learning very much about

manners. Perhaps the better way is to treat children courteously and let manners develop as a matter of imitation.

Children and adults should be seated at small tables with at least one adult at each table. The adult is responsible for establishing and maintaining a real conversation with children. Topics of conversation might include the foods available (color, texture, origin, etc.) nursery school activities which have happened today, plans for tomorrow, or other topics of interest to the children. Teachers should encourage all children to participate and she should serve as a genuine listener. These conversations can offer children a chance to practice language, learn new concepts, establish ideas about group interchanges and add to their ideas about socially acceptable behaviors around meal-time.

Since many programs have lunch in their playrooms, definite plans for after lunch activities and dismissal should be made by the teacher. Activities which offer a great deal of body movement may need to be offered at this time if children have been in relatively non-active activities (which includes lunch) for a fairly long time. Perhaps the teacher offers the choice of music, block play, doll corner play, outside play or a story group for those children who are ready and able to listen. The number of activities available to children at this time may well be dependent on the space available and if the staff must be in the process of getting ready for another group. At any rate, teachers should look at their particular situations and make those plans which seem best for them and their children. Children should be given some warning that it is almost time to go

home and helped in obtaining wraps or products to be taken home. The teacher should try to greet the person who picks up the child and establish a warm relationship with them but she should not use this time for a conference with parents since these are best handled when the child is not present.

SUMMARY

The preceding pages have been an attempt to spell out a skeleton framework of an experimental curriculum for deprived preschool children. The curriculum is an adaptation of traditional nursery school programming and operates basically by using small groups, both spontaneous and teacher-directed, within the larger group. The focus of these groups is on cognitive development and specifically on concept formation. It is assumed that these small groups, which involve much interaction and verbal exchange between children and teacher, will facilitate language development. It seems logical to assume that children who have had many chances to discuss and explore their environment as well as to ask questions about it, will have more language available to them and progress in their ability to use language.

This curriculum has not focused on activities which are specifically language related or on books and related activities. This does not mean that books are not present in the classroom or that reading does not occur. It is assumed that teachers will use relevant books to extend children's learnings during all time blocks as well as to help children discover that books are sources of answers to their questions. It also means that the teacher presents books

which have some meaning to children, which can be looked at by children or read to children during any time block. The one thing that does not seem desirable is to try to set a designated time during the day when every child will be involved in a story group and read books which may not be relevant to either the child's interest or his environment.

All of the curriculum suggestions which have been presented are not seen as recipes for teachers but rather as suggestions and ideas which they may find helpful and adaptable in their own situation.

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