R E P O R T R E S U M E S

ED 011 018 UD 002 460

TEACHING THE DISADVANTAGED--SUMMER INSTITUTE FOR PROFESSIONAL TRAINING OF TEACHERS, SUPERVISORS AND ADMINISTRATORS.

BY- GEWIRTZ, MARVIN H. AND OTHERS
CENTER FOR URBAN EDUCATION, NEW YORK, N.Y.

PUB DATE 30 SEP 66

EDRS PRICE MF-$0.18 HC-$4.32 198P.

DESCRIPTORS- *DISADVANTAGED YOUTH, *TEACHER ATTITUDES, *SUMMER WORKSHOPS, *INSERVICE TEACHER EDUCATION, *EVALUATION, TEACHER EDUCATION, ADMINISTRATIVE PERSONNEL, SUPERVISORS, QUESTIONNAIRES, STATISTICAL DATA, TEACHER PROGRAMS, TEACHER IMPROVEMENT, NEW YORK CITY, ESEA TITLE I PROJECT

A 7-WEEK SUMMER INSTITUTE COURSE FOR ELEMENTARY SCHOOL TEACHERS, SUPERVISORS, AND ADMINISTRATORS WHO WORK WITH DISADVANTAGED CHILDREN WAS EVALUATED BY QUESTIONNAIRE. THE PURPOSE OF THE EVALUATION WAS TO (1) MEASURE THE IMMEDIATE IMPACT OF THE COURSE ON THE PARTICIPANTS, (2) OBTAIN A SELF-ESTIMATE OF THE PARTICIPANTS' ATTITUDES, (3) EXPLORE STAFF-PARTICIPANT RELATIONS, AND (4) MAKE RECOMMENDATIONS FOR CHANGE. THE RESULTS SHOWED NO MEASURABLE CHANGE IN THE PARTICIPANTS' OPTIMISM OR SENSITIVITY ABOUT THE EDUCABILITY OF THE DISADVANTAGED CHILD OR IN A READINESS TO USE NONTRADITIONAL TEACHING APPROACHES. HOWEVER, BY THE END OF THE COURSE THE PARTICIPANTS FELT BETTER PREPARED TO TEACH THESE STUDENTS. THE EVALUATORS CONCURRED IN THIS JUDGEMENT AND SURMISED THAT THE PARTICIPANTS' CONFIDENCE HAD INCREASED DURING THE COURSE. THE DIFFERENT OBJECTIVES OF THE INSTITUTE STAFF AND THE PARTICIPANTS WAS A SOURCE OF DIFFICULTY IN THAT THE STAFF THOUGHT THAT KNOWLEDGE OF SOCIOLOGICAL AND CONCEPTUAL THEORY SHOULD HAVE BEEN THE PRIMARY OBJECTIVE OF THE COURSE, WHILE THE PARTICIPANTS WERE MORE CONCERNED WITH THE PRACTICAL KNOWLEDGE RELEVANT TO THE SITUATION. IT WAS FELT THAT THIS SUMMER INSTITUTE PROGRAM CAN BE A PROMISING WAY TO REACH THE DISADVANTAGED BY OFFERING THEIR TEACHERS PROPER ORIENTATION ABOUT THE SPECIAL PROBLEMS OF THESE CHILDREN. (NC)

CENTER FOR URBAN EDUCATION
33 West 42 Street, New York

Educational Practices Division
Nathan Brown, Associate Director

Evaluation of New York City School District educational projects funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) - performed under contract with the Board of Education of the City of New York, 1965-66 School Year.

Joseph Krevisky
Research Coordinator, Title I Projects

TEACHING THE DISADVANTAGED-SUMMER INSTITUTES FOR PROFESSIONAL TRAINING OF TEACHERS, SUPERVISORS AND ADMINISTRATORS

Research Director: Marvin H. Gewirtz, Ph.D
Consultant,
Center for Urban
Education

Elmer L. Struening, Ph.D
Research Director,
Lincoln Hospital
Mental Health Services,
Albert Einstein School
of Medicine

Evelyn A. Farrar, M.A.
Instructor,
Department of Education,
The City College,
City University of
New York

September 30, 1966

[redacted]

TABLE OF CONTENTS

I. Introduction

The education of the disadvantaged child is regarded by many specialists in the field of urban problems as the most promising escape route these children have from the whirlpool of poverty and social disruption that is already submerging so many of our unskilled urban population. Recognizing education's paramount importance, the Federal government has recently sponsored a variety of programs designed to upgrade the educational opportunities of the disadvantaged. The Summer Institutes for Teachers of the Disadvantaged, held in New York City between July 1 and August 26, 1966, represents one such Federal effort.

The critical need for this type of program in New York is all too clear. As of 1966, approximately 1 out of 4 of the city's school population (public and non-public) could be classified as disadvantaged. Moreover, all projections of population movements would indicate that this proportion will continue to rise in the immediate future.

For some years now it has been recognized by educators than the disadvantaged child presents a quite different task to the teacher that children from economically and culturally advantaged backgrounds, and that new pedogogical understandings and techniques must be employed to meet this challenge. While there is a long way to go in the development of such approaches, experience with, and research on, the disadvantaged over the last decade has provided the basis for at least the beginning of a large scale applied program for more effectively reaching these children in a school setting. The task now before us is to disseminate as rapidly as possible to the teacher in the classroom the new insights, curricula, methods, organizational devices, etc., which have been found to be of value in the educating of the disadvantaged child.

As the pioneer effort of the New York City Board of Education in the large scale training of teachers of the disadvantaged, the program of the 1966 Summer Institutes deserves particular attention. The value of future programs of this type will be considerably enhanced if we are able to apply to them insights gained from this first effort. And, in view of the rapidly growing numbers of disadvantaged children in the city's schools, it is incumbent upon us to bring a program for teachers of these pupils to peak efficiency as quickly as possible.

As with many of the 1966 anti-poverty programs, problems of funding delayed the start of the 1966 Summer Institutes' organizational activities months beyond any reasonable date. In fact, it was not until mid-May, only one and a half months prior to opening session at the Institutes, that the director was given the assignment of organizing the program. In that one and a half month period he was faced with the task of finding ten center directors, arranging for the use of a like number of junior high school facilities, recruiting several thousand participants for the program, obtaining vitae from the potential instructional staff, selecting and arranging for the delivery of curriculum and resource materials for the centers, and keeping track of the thousand and one details associated with so massive an enterprise. That the program was able to get underway as scheduled on July 1st, is nothing less than incredible--and a tribute to the intensive efforts and the organization skills of the program director and other Institute personnel. Likewise, it would have been surprising if this altogether impossible schedule had not resulted in some weaknesses of program and execution. In our assessment of the Summer Institutes, we have tried to keep these pressures of time in mind, and trust the reader will do so as well.

Whatever success we have had in conducting this evaluation is due in large part to the excellent assistance of many members of the staff of the Center for Urban Education who contributed in one way or another to this project. Dr. Nathan Brown, Associate Director, Educational Practices Division, was most helpful in establishing optimum operating conditions in the face of severe pressures of time. The Research Coordinator, Mr. Joseph Krevisky, instantly provided needed personnel, and Mr. George Weinberg acted as a most effective liaison with personnel at the Institutes and at the Board of Education.

In addition to personal observations of the Institutes made by members of the Center's staff, the project was fortunate in having the benefit of an intensive personal evaluation of the operations of the centers by Mrs. Evelyn Farrar, who has had long experience in a supervisory role in the New York City school system. Among the many people who contributed to the important detailed chores of the research, special mention should be given to Miss Karla Shepard and Miss Helene Levens who worked closely with the research director throughout the course of the project.

Finally, the writer would like to particularly acknowledge the excellent cooperation extended to him by Mr. Samuel Polatnick, the director of the Summer Institutes, the center directors and their staffs, and the participants in the Institutes. In spite of the several interruptions to their program caused by our data collection activities and despite the unhappy connotations of the word "evaluation," the fine spirit of helpfulness we encountered at every level made our task a much easier and pleasanter one than it might have been. For this, our deepest thanks.

II. A. Objectives of the Program

The basic objective of the Summer Institutes for Teachers of the Disadvantaged was, "to improve the quality of instruction in public and non-public schools in disadvantaged areas of New York City (by providing) for the training of teachers, supervisors and administrators currently teaching or preparing to teach disadvantaged students in grades 1 through 8."[1]

More specifically, the Summer Institutes set out to achieve three major objectives:

1. To acquaint the participants with the nature of the disadvantaged child, his environmental background and his specific needs.
2. To introduce the participants to new curricula, organizations, materials and electronic devices that would be useful in teaching the disadvantaged, and
3. To help the participant develop a personal sensitivity to the disadvantaged child and a sense of confidence in dealing with him in a classroom situation.

The program for the Summer Institutes was organized around four subject areas: a) English, b) History and Social Studies, c) Urban Living, and d) Mathamatics and Science.

Between July 1 and August 26, 1966, courses in each of these subjects were concurrently offered for a two week session in each of ten centers housed in schools throughout the city. Provision was made for a total of

---

[1]Teaching the Disadvantaged-Summer Institutes for Professional Training of Teachers, Supervisors and Administrators, p. 2, 1966 Proposal submitted by the New York City Board of Education, Office of the Deputy Superintendent, Instruction and Curriculum.

50 participants in each course or 200 per center for each session. Both public school and non-public school teachers were eligible to take part in the program and each participant received a stipend of $75 a week plus $15 for each dependent.

A participant could sign up for one, two, three or all four sessions, taking a new course each cycle. Altogether, a total of approximately 3,300 teachers, supervisors and administrators enrolled in the program for a median of about two courses apiece. Priority for enrollment at the Institutes was given to those who currently teach disadvantaged children or plan to do so in the near future. Apart from these priorities, enrollments were made on a first-come, first-serve basis as applications were received.

The Institutes' instructional staffs were selected from among approximately 5,000 applications received for these positions. The director of the Institutes screened all applications and selected the Center directors. Together, the Institute and Center directors then chose a head instructor and three assistant instructors for each course, and a Center materials coordinator and secretarial staff. Although pressures of time did not allow for personal interviews with prospective staff members before they were hired, the instructional staff was selected on the basis of extensive experience in working with the disadvantaged.

Normally, the participants attended a lecture or a discussion group from 9A.M. to 12-noon and from 1 P.M. to 3 P.M., engaged in independent library and research activities, although some Centers introduced variations into this pattern. In the smaller group discussion, a workshop format was usually employed to encourage maximum participation.

Each participant was provided with a basic kit of three books[2] and reading instruction materials. In addition, each instructor distributed to his group materials developed especially for the Institute program. Finally, at each Center a library was established containing a specially prepared set of books and materials on the disadvantaged.

B. Objectives of the Evaluation

The word "partial" in the title of this report is intended to indicate an incompleteness in two senses. First, because of the timing of the research in relation to the project, we were unable to set up a full scale study design for this kind of evaluation.[3] And, second, it is recognized by all concerned that an estimate of whether or not the work at the Summer Institutes really "paid off" can be made only in the classrooms of those who participated in the program. For unless the participants are able to translate the understandings and techniques learned at the Institutes into their everyday classroom activities, the goals of the program will remain unrealized.[4]

With these qualifications in mind, the four objectives of this evaluation may be stated as follows:

---

[2]Loretan, Joseph E. and Umans, Shelley. Teaching the Disadvantaged, Teachers College Press, Columbia University, New York, 1966.
Passow , A. Harry. Education in Depressed Areas, Bureau of Publications, Teachers College, New York, 1963.
Barnes, Jerome. The Process of Education, Cambridge, Harvard University Press, 1960.
Middlemans, Virginia. Let's Look at First Graders, Instructional Kit, published by Educational Testing Service for the New York City Board of Education, Revised Edition, 1965.

[3]c.f. Discussion on study design below.

[4]A follow-up study is planned for the 1966-67 school year.

1. To measure the immediate impact of the Institute experience on teacher attitudes towards the disadvantaged child.

2. To obtain a self-estimate of the participant's own greater readiness toteach the disadvantaged child as a result of her Institute experience.

3. To elicit reactions of the participants and staff to various aspects of the Institutes' program and facilities, and

4. To make recommendations for change, based on these reactions.

III. Research Design and Methods.

The evaluation of the Summer Institutes' program was hampered by the same problem of time pressures as the Institutes themselves. For example, the research director was called in to begin work on the project only one week prior to the first session of the program. In the face of this most difficult schedule, it was hoped that some instruments might be available from previous similar studies for use in this study. A fast but intensive search of the literature revealed none that was completely relevant to our specific needs. Under the circumstances, it became necessary to construct our own set of instruments (c.f. Appendix) consisting of three separate questionnaires.

The first of these was designed to measure the participant's own evaluation of the Summer Institute experience. In order to be certain that all important dimensions of response would be included in such a questionnaire, an open-end form of it was administered to a subsample of approximately 100 first session participants from each of four centers. On the basis of an analysis of the results of this pilot instrument, a more extensive final Participants' Evaluation Questionnaire was devised for use with the second and third session participants.

As the second instrument, a modified parallel form of the evaluation questionnaire was developed for use by the staffs of the Institutes.

Finally, a third instrument consisting of 45 statements in a Likert-type format was constructed to measure teacher attitudes toward the disadvantaged child as well as knowledge of pedogogical insights related to this type of child. Although the items were constructed around two hypothetically separate concepts, one designed to tap affective responses and the other cognitive responses, an interaction between these two types of items was to be expected. Thus, when the responses to the 45-item scale were factor analyzed into four distinct factors, it was found that attitude and information items fell within the same factor. On the basis of the types of items constituting the four factors they were defined as: (1) a feeling of optimism concerning the educability of the disadvantaged child, (2) a less traditional, more flexible, approach to teaching disadvantaged children, (3) a sensitivity to the interpersonal needs of the disadvantaged child, and (4) a fear of being physically harmed or threatened by the disadvantaged child.[5] In reliability tests conducted on the factors, the first two were seen to be highly reliable (.82 and .70 respectively), the third factor quite weak (.39), and the fourth factor moderately high (.57). The size of the standard deviations around the factor means shows that the items were eliciting a sufficiently wide range of responses to assure us that the population regarded these as meaningful items.

---

[5]The items constituting each of these four factors are presented in the Appendix. The wording of most of the items on the first two factors is such that disagreement (hence, a minus score) would indicate a greater degree of optimism or non-traditionalism. In order to make it easier for the reader to interpret the findings in this report, we have reversed the signs of the scores of these two factors so that now a higher score means greater optimism and greater flexibility for Factors I and II respectively.

It should be noted, however, that there was no opportunity to validate these factors against any independent criteria,* hence, we are dependent entirely on their face validity of the factors in interpreting their meanings.

Except for the administration of the pilot questionnaire, no evaluation data were collected from either the first or last sessions of the Institutes. In view of the extremely short notice given to the Institute staff, it was felt advisable to allow the staff a "warm up" period in which they could work out a curriculum and gain some experience with the program before it was evaluated. The fourth session, according to the Institute Director, could well have contained an inordinately high proportion of people who had not been able to get into earlier sessions and were shifted to the last one. Since it would be difficult to measure how this shift in sessions might have affected their attitude toward the program, it was decided not to include this group in the evaluation. Thus, the research data was collected only from participants attending the second and third sessions of the program.[6]

Reactions to the program itself were collected at the end of each of these two-week sessions by means of the Participants' Evaluation Questionnaire. In order to measure the impact of the program on participants'

---

*The one independent "validation" obtained came from the director of the Institutes who filled out the inventory himself and, happily, attained the highest "correct" attitudes on all four factors.

[6]Administratively, it was easier to administer the questionnaire to all participants in the second session, although for our purposes it was not necessary to have so large a group. Therefore, we subsampled them at a 1/2 rate. In all, 955 questionnaires were analyzed.

attitudes toward s and information about, disadvantaged children, the 45 item attitude inventory was administered to the group that had just completed their second session courses and also to those who were just entering the Institute for the first time in the third session.

Implicit in this research design was the assumption that the control group (the new third session participants) did not differ in any important respects from the experimental group (the second session participants).[7] Data concerning this assumption will be presented in the findings. Over and above the information collected by means of the written questionnaires, first-hand observations of the program's operations were conducted by the research director and by several members of the staff of the Center for Urban Education who visited the Institutes throughout the summer, and by a consultant to the project who made intensive visits to all ten Centers.

IV. Findings

The findings of the research will be discussed in the same order as the four objectives of this study were presented in the previous section. First, we will examine the results of our several measurements of the impact of the Institute experience on the participants. Next, we will present in a descriptive manner, the participants' and staffs' evaluations of the Institutes. In a final section, we will discuss all of these findings along with our first-hand observations of the Institutes and, at the same time,

---

[7]Ideally, had adequate time been available for the planning evaluation, we would have pretested the participants who applied to the Institute and, on the basis of these results, established two completely matched groups. The experimental and control groups would also have been tested at the end of the sessions. Moreover, we would have included in the testing several personality variables which might be significantly related to the attitudes which the Institute program was attempting to influence.

will offer a set of recommendations based on an amalgam of these several data sources.

A. Impact of the Institute Experience on the Participants.

While we believe the ultimate value of the Summer Institutes can be measured only by the extent to which the participants are able to translate the understandings and techniques learned this summer into concrete classroom behavior, it is one of the objectives of this study to evaluate what impact the experience has had at this stage.

We have attempted to assess the impact of the Institute experience in three ways: (1) through changes in attitudes towards teaching the disadvantaged child and in awareness of the special problems he presents, (2) through a direct self-estimate by the participants of any change in readiness to teach disadvantaged children, and (3) through an estimate made by the Institute staff. The findings of each of these will be reported in this section.

1. Changes in attitudes towards teaching the disadvantaged child.

It will be recalled that attitudes towards teaching the disadvantaged child and an awareness of the pedogogical problems he presents was measured by means of a 45-item inventory administered to all participants in the second and third sessions of the Institutes. These items were then factor analyzed into four distinct attitude measures, and the participants were scored on each.

Our research design called for comparing an experimental group consisting of those who had just completed one or two sessions of the Institute with a control group of people who were just entering the Institute for the first time. On the assumption that these two groups would be essentially alike in all important characteristics, a significant difference in mean

factor scores between the experimental and control groups would indicate that the Institute experience has affected the attitude being measured by the factor under consideration. Thus, for example, if the Institute experience has had an impact on the participants, we would expect that those who have finished the Institute course would tend to produce significantly higher scores on Factor I (i.e., be more optimistic about the educability of disadvantaged children) than those who have not yet taken the course.

In addition to testing for differences between the experimental and control groups, tests were conducted to uncover differences in factor scores which might be due to other influences, such as length of teaching experience or grade level taught. The effects of six such classification variables* were tested for, along with the experimental-control differences in a series of six two-way analyses of variance (c.f. Appendix). Through this procedure, significant differences between the experimental and control groups were found on Factors I and II, but at the same time, it was discovered that significant differences on Factors I and II existed within five of the six classification groupings as well.** For example, it was found that public school teachers were significantly higher in their optimism scores than non-public school teachers.

Because these subtypes of participants (as described by the classification data) were found to hold different attitudes as measured by Factors I and II, it was necessary to determine whether or not they were disproportionately represented in either the experimental or control group. If

---

*In addition to the two mentioned, also included were: Center, course, public or non-public school teacher, and years teaching disadvantaged children.

**Only grade level was found not to be significantly related to these two factors.

they were, this would raise the question as to whether the differences found in the latter were actually attributable to the Institute experience, or to the disproportionate representation of one or another type of participant. For example, if for some reason a greater proportion of public school teachers than non-public school teachers was found in the experimental group, this fact alone might account for the difference in attitudes that exists between the experimental and control groups.

By means of analysis of variance and chi-square procedures, we tested for the differences in participant characteristics between the experimental and control groups and discovered that the experimental group did, in fact, contain both a significantly higher proportion of public school teachers and a significantly higher proportion of people taking Urban Studies than the control group. Thus, our original assumption of equivalent experimental and control groups was found to be untenable.

It became necessary at this point to control for the influence of the classification variables related to the dependent variable in order to see whether the differences originally found between experimental and control groups would remain. This was achieved by means of a multiple regression analysis using the classification data as the predictor variables and the four factor scores as the dependent variables. Then, a new set of two-way analyses of variance was run with each of the six classification variables as one set of classifications, the experimental-control group dichotomy as the other set of classifications and the residuals* of the factor scores

---

*The residuals are the original observed scores with the influence of the related classification variables removed. They now replace the factor scores as the dependent variables.

as the criterion variables. The summary analysis of variance tables are presented in the Appendix.

As a result of this final analytic procedure, it was discovered that when all other influences were controlled for, no significant differences were found between the experimental and control groups, except one.* Thus, it appears that influences other than the Institute experience itself, are responsible for the difference previously found between the experimental and control groups on Factors I and II. It must be concluded, therefore, that there appear to be no basic attitude changes (as measured by our factor scored items) taking place as a result of the Institute experience.

B. Differences associated with other classification variables.

Although the key difference we are interested in is between the experimental and control groups, the analysis of variance procedure allows us, simultaneously, to uncover any differences in attitudes that may be present between various classifications of participants. It had been mentioned earlier that significant differences were found among the subgroups of five of the six classification variables. A more detailed presentation of center differences will now be made and this will be followed by a rundown of the other differences found among the subgroups.

---

*The sole exception to this is a .05 difference found between experimental and control groups in the analysis of variance of years teaching disadvantaged children on Factor II. However, the presence of two very small cells in the 20 years and over group probably caused a higher F than one would expect from the data on this factor taken as a whole. Since all other experimental-control differences were not significant, the outcome on this one analysis of variance was regarded as a statistical happenstance.

1. Center differences.

Table 1 presents the adjusted means** on Factor I for each of the ten Centers. The significant difference across centers above indicates that when the participants' scores of the experimental and control groups of each center are pooled, their average means vary significantly across centers. Since we know from our previous chi-square and variance tests that there were center differences in teacher characteristics, this result is not unexpected.

It has already been noted that there was no significant difference found between the experimental and control groups as a whole. In order to determine if some of the centers may have significantly affected attitudes represented by the first two factors, "t" tests were run between those treatment means that appeared to have some prospect of being significant. The only significant difference between the experimental and control groups was found in Center 8, and this was relatively weak. And, since the differences in those three centers where the control mean is greater than the experimental mean are not significant, we can conclude these differences could readily have occurred by chance.

Thus, the general finding that the Institute experience has not significantly changed the attitudes measured by this factor cannot be explained on the basis of some centers being less successful than others in their teaching program. With the possible exception of Center 8 (and this was

---

**The scoring system employed allowed for a possible range of Factor I scores from approximately -13.5 to +13.5. The adjusted means are employed here in order to account for the influence of the classification variables. (Centers were not included in the regression equations.)

Table 1

Adjusted Means on Factor I for Experimental and Control Groups Within Each Center

	Experimental			Control		
Center	N	Mean	SD	N	Mean	SD
1	68	5.30	4.90	35	5.92	3.00
2	43	5.55	4.39	31	3.55	4.90
3	59	6.04	4.33	35	7.40	4.23
4	79	5.20	4.43	48	4.12	3.90
5	68	4.66	4.31	43	4.61	4.78
6	57	6.31	4.12	29	4.36	5.20
7	55	6.49	3.53	47	6.46	4.57
8	55	6.61	3.72	36	4.45	4.98
9	62	4.83	4.38	26	4.75	4.78
10	67	3.48	5.15	17	4.25	4.82

Table 2

Adjusted Means on Factor II for Experimental and Control Groups Within Each Center

	Experimental			Control		
Center	N	Mean	SD	N	Mean	SD
1	68	3.81	2.61	35	3.70	2.11
2	43	3.65	2.06	31	2.12	2.69
3	59	3.35	2.77	35	4.47	2.28
4	79	4.13	2.22	48	3.74	1.63
5	68	3.60	2.02	43	4.34	2.51
6	57	4.80	2.36	29	3.79	3.15
7	55	4.27	2.62	47	3.91	2.51
8	55	4.35	1.94	36	3.23	3.04
9	62	3.96	2.07	26	4.16	2.72
10	67	3.79	2.26	17	4.90	2.24

not a very strong difference), none of the centers can be considered unusually effective or ineffective in changing the basic attitude of optimism regarding the educability of the disadvantaged child.

The results across Factor II* are shown in Table 2. The same observations made above regarding Factor I apply here as well, the only difference being that none of the centers reveals a significant "t" between its experimental and control groups.

2. Other differences among subgroups of participants.**

In addition to the center differences described above, the analysis of variance uncovered the following attitudinal differences:

(a) Public school teachers are significantly higher than non-public school teachers in "optimism" and "flexibility."

(b) The least and the most experienced teachers tend to be less "optimistic."

(c) The most experienced teachers tend to be least "flexible."

(d) While there are significant attitudinal differences among the participants in the four courses, the pattern of these differences is not readily interpretable.

(e) No differences exist between K-6 and 7-9 teachers.

Finally, concluding our discussion of the factors, we found that none of the independent variables was significantly related to the two attitudes being measured by Factors III and IV. (It will be recalled that the first of these

---

*The possible range of Factor II scores was from approximately -9.5 to +9.5. The standard deviations ranged from approximately 2.0 to 3.0.

**The analysis of variance tables from which these findings are drawn are in the Appendix as Tables A1-A6. The means of the various subgroups (except for centers which were presented in this section) are shown in Tables A7 - A11.

factors was interpreted as reflecting a sensitivity to the interpersonal needs of the child and the second as a fear of being physically harmed or threatened by the disadvantaged child.) One possible reason for this outcome is that these two factors are much more closely related to individual personality characteristics of the participants than to the classification variables used in this study.

2. Changes in participants' feelings of readiness to teach disadvantaged children.

Completely separate from the issue of the Institutes' impact on teachers' attitudes as measured by changes in the four factor scores is the participant's self-evaluation of the extent to which the Institute experience has affected his own feelings of readiness to teach disadvantaged children.

While the former may be regarded as an "objective" measurement and the latter a "subjective" one, we felt it was important to have the latter type of measure as well as the former. For if the teacher of the disadvantaged can come away from the Institute experience with a greater sense of hope and with a greater awareness of new resources that are available to assist her in her difficult task, then much will have been accomplished. And, it should be noted, the value of this accomplishment is not diminished if the participant has not yet fully incorporated into her teaching armamentarium the techniques and understandings to which she was exposed at the Institute. Simply by recognizing what is ultimately achievable, and how to move towards achieving it, is itself an important gain.

The data for the self-evaluation was obtained from an item on the questionnaire in which participants were asked whether, as a result of attending the Institute, they feel better prepared to teach the disadvantaged child. A tabulation of the replies of our sample shows that the overwhelming majority considered the experience to be worthwhile.

As indicated in Table 3, fully 84% of the participants answered this question affirmatively and only 16% replied negatively. This result clearly indicates that the Institute has achieved one of its basic objectives, namely, to instill a greater sense of confidence and enthusiasm in the teacher of the disadvantaged child.

Table 3

Q. 6 Do you feel that as a result of your attendance at the Institute you are better prepared to teach a class of disadvantaged children?

Total	N = 955	100%
Yes, I feel better prepared	820*	84
(How?)		
Will use ideas and info., more aware of new methods and resources	494	52
Focused on needs and problems of disadvantaged children	399	42
Demonstrated importance of teacher attitudes	88	9
Buttressed previous attitudes and/or knowledge	35	4
Other	48	5
No, I do not feel better prepared	135*	16
(Why Not?)		
Course too theoretical; not enough practical aids	97	10
Nothing new; repetition of what I already knew	67	7
Negative effect of staff attitudes	15	2
"I'll have to wait and see."	13	1
No help with classroom discipline problems	11	1
Other	72	8
No reason given	39	6

*Note: The columns do not total 820 and 135 because some participants gave more than one reason.

Those participants who replied affirmatively were asked to say how they felt readier to teach disadvantaged children; those who answered negatively were asked why they felt the Institute experience did not help. In coding these data the attempt was made to classify the responses into the two basic categories of (a) increased insight into, and understanding of, the disadvantaged child's background and problems, and (b) the acquisition of new classroom techniques and curricula. The tabulations indicate that the greater readiness to teach the disadvantaged is somewhat more associated with the learning of new teaching techniques than with an increased understanding of these children.

The statistics presented in Table 3 cannot capture the quality of the responses to this question as well as the actual words of the respondents. For example, three participants who felt the Institute experience worthwhile replied:

> "Yes, /I do feel better prepared/ because of the valuable ideas I exchanged with other participants. The instructors offered practical and creative suggestions for teaching the disadvantaged child. The Institute has given me new inspiration."
>
> (Elem. Teacher, 3 yrs. experience)

> "I have gained a deeper insight into their problems. From other teachers I have learned of various approaches that worked for them. I have also learned that sympathy and compassion are hardly enough to overcome the problem. I believe we must try harder ... and I am committed to do this with more fire than I had previously."
>
> (First grade teacher, 3 yrs. experience)

> "My awareness of problems faced by the disadvantaged has been increased. I think that I will be a much more sensitive teacher in the future." (Jr. H.S. teacher, 13 years experience)

Among the reasons given for not feeling better prepared as a result of attending the Institute the ones mentioned most often by the participants were (1) the course content was too theoretical and (2) they learned nothing new from the program. But since such a small percentage of respondents said

they did not feel better prepared, these reasons were cited by a very small proportion of the population tested. Nonetheless, it is of interest to observe that one out of ten participants considered the program of no value to them because it failed to offer practical aids.

Among the minority that said they do not feel better prepared as a result of the Institute experience, the following reply was typical:

> "No. A traditional attitude was clearly shown in all areas. Nothing new or creative was made available. Most of the time it was too general rather than specific. It applied to the average child not the disadvantaged child." (Jr. H.S. teacher, 4 years experience)

3. Staff estimate of impact of program on participants.

As part of the Staff Evaluation Questionnaire, the staff was asked to estimate what the impact of the Institute program has been on the participants, and it seems appropriate to introduce the results of this question here for the sake of making comparisons with the participants' self-estimates on this same question.

The staff comments were coded into the categories shown in Table 4.

Table 4.

Q. 7 What is your estimate of the impact of the program on the participants?

Total	N = 116	100%*
Good; excellent; very noticeable	82	71
Fair; slightly noticeable; observed in some but not all	13	11
Cannot evaluate -- "wait and see."	11	9
Almost impossible to change attitudes and prejudices	2	2
Doubtful	1	1
Poor; no impact	0	0
No answer	5	4
Other	0	0

*Table does not total 100% due to rounding of percentages.

Quite clearly they are in fundamental agreement with the participants' own evaluation. Although one could say the Staff has a vested interest in a positive outcome, data to be presented later from other questions on the Staff Questionnaire would indicate they were being quite honest in their appraisals. The following two replies by staff members illustrate the type of reactions found.

> "They frequently expressed an attitude of enlightenment as a result of speaking and working together. They specifically used the word 'inspiration' in evaluation discussions."

> "As a result of discussions and our own written evaluations I estimate that the impact was strongest when the Center was working to develop specific teaching procedures and most feeble when it sought to change attitudes."

B. The Participants' Evaluation of the Summer Institutes

The primary purpose of the Participant's Evaluation Questionnaire was to elicit the respondent's estimate of the Institute program as a whole and to see what were considered to be the program's strengths and weaknesses. In addition, we were interested in finding out something about the participant's purposes in attending the Institute and what he feels he derived from the experience.

In reporting the findings of the evaluation questionnaire we will deal first with this latter set of questions and then return to the ratings of the various aspects of the Institute program. Finally, we will conclude this section with the participants' recommendations for the changes they would like to see in the program and organization of the Institutes.

Since the evaluation questionnaire was filled out at the end of the second and third sessions, there were no experimental and control groups involved. Therefore, the total sample of 955 respondents has been combined in the presentation of these data.

1. Reasons given for attending the Institutes:

One of the key issues in setting up an educational program with immediate action goals is the extent to which such a program meets the needs of its participants. To assess this the participants were first queried about their purposes in attending the Institute and then were asked about the specific understandings and techniques they derived from it. A comparison of these two sets of replies should provide some general measure of the extent to which the Institute did, in fact, speak to the needs of the participants.

It was our original intention in analyzing these data to break down the replies to these questions into fairly discrete categories such as learnings related to curriculum, learnings related to classroom motivation, learnings related to equipment, etc. However, upon inspection of the questionnaire data it became quite evident that most respondents did not reply in such specific terms. Consequently, we felt it would not do justice to the respondents to assume that those who simply said, for example, that their purpose in attending the Institute "to develop more effective classroom techniques with the disadvantaged" did not have in mind all of the previously mentioned categories. It seemed more meaningful to consider the replies as falling into one of two fundmentally different categories: (a) those concerning a better understanding of the social and psychological nature of the disadvantaged child and (b) those concerning better teaching techniques and organizational methods for reaching the child in the classroom. Although obviously both of these categories described objectives of the Institutes and were both mentioned by many participants, the relative weight given to each by staff and participants will, in our opinion, allow us to determine the extent to which the Institute satisfies the needs of the participants. (A comparison between the participants' purposes in attending

the Institutes and the staffs' concept of the Institutes' objectives will be made later on in this report.)

The purposes given by participants for attending the Institutes are shown in Table 5. It is clear from this table that learning new skills and curriculum methods for reaching disadvantaged children was far and away their most important objective. Almost 8 out of 10 mentioned this as a purpose for attending. Slightly over half of the sample gives gaining greater insight and understanding of the problems of the disadvantaged child as a reason for coming to the Institutes. Thus while each of these basic objectives is cited by a majority of the participants as things they hoped to gain from the Institutes, there is no doubt that the acquisition of concrete classroom techniques and curricula is the participants' principal motive for enrolling in the program.

Table 5

What were your purposes in attending the Institute?

Total	N = 955	%*
To improve skills and techniques for teaching disadvantaged; learning about new curricula and materials for teaching	736	77
To gain understanding and insight into the culture, life-style, and problems of the disadvantaged child	500	52
Stipend; summer employment	212	22
Exchange ideas on methods and techniques	149	16
Other	22	2

*Totals more than 100% because some participants gave more than one response.

The following quotations were selected as typical of the participants' replies to the question regarding their purposes in attending the Institute:

> "To learn specific techniques for Grade 2 that would be new to me. I had 'run dry' of new ideas after 6½ years and was hoping for new ones so I could change my approach."

> "I expected to get new information on how to teach the disadvantaged. I expected to receive tried and worthwhile suggestions."
> (Jr. H.S. teacher, 4 years experience)

> "My purpose was to gain insights into the needs of these children in order to become a more effective teacher. I also was interested in becoming acquainted with the latest scientific methods which have proven successful in teaching these children."
> (3rd grade teacher, 9 years experience)

> "To see if it was possible for teachers of the disadvantaged to actually receive information that would be truly helpful in teaching practices - something that I had not experienced in college."
> (3rd grade teacher, 4½ years experience)

The importance of the stipend as a source of motivation for participation in the Institute, is a difficult thing to assess. Since this is a less "socially acceptable" purpose for joining the program it is not likely that everyone who was so motivated would be ready to admit it openly, even though the questionnaires were completely anonymous. Thus the figure of 22 percent of the participants who gave "stipend" or "summer employment" as a reason for participating probably represents a conservative estimate. This is not to say, however, that monetary reward was usually the sole motive - or even the primary motive - for the majority of those attending the Institutes.* Only a very small proportion of participants listed it as their only purpose for attending, and where "stipend" or "employment" was mentioned, it was usually as a second or third purpose. Moreover, from our data and personal observations we believe it would be fair to say that even though money may

---

*The importance of the stipend is obviously a relative thing. We will come back to this issue later in the report.

have been an important initial factor for some people, that participation in the program itself created additional and equally strong motivations. This transition is nicely illustrated in the following reply by a participant:

2 "At first my main purpose for attending the Institute was for monetary reasons. However, after the first daily session I realized how ignorant I was in the area of the disadvantaged child. My purpose then changed to one of trying to absorb as much information as possible."

The final purpose listed in Table 5 was to exchange ideas with others facing the same problems - probably should be regarded more as an outcome of the Institute experience rather than an initial purpose. That the participants found this exchange one of the most rewarding aspects of the experience will be shown in the section below on ratings of various aspects of the program.

2. Understandings and techniques gained.

When asked what specific understandings and techniques they gained from attending the Institute, the overwhelming majority of participants were able to mention at least one such gain. Only 7 percent of the sample reported they derived little or nothing out of their Institute experience. (c.f. Table 6.) The largest number of replies - 2 out of 3 - fall into the category relating to classroom techniques, curricula, teaching devices, etc. Less than half of the participants reported that they learned something new about the culture, life conditions, problems, etc., of the disadvantaged child.

A comparison of these data with those of Table 5 shows that, as a group, the participants for the most part fulfilled their major purposes in attending the Institutes.

Table 6

What Specific Understandings and Techniques Did You Gain From Attending the Institute?

Total	N = 955	%*
An understanding of techniques, methods, new curricula; new materials were obtained	628	66
An understanding of the culture, life conditions, and/or problems of the disadvantaged	433	45
Has changed my attitudes toward the disadvantaged child - which will change my behavior	90	9
Knowledge of community and its resources - available agencies, etc.	62	6
I am not alone; other teachers have similar problems	52	5
Reinforced my current practices	25	3
Reinforced my past understandings	24	3
None; "few if any" (no further information given)	65	7
Other understandings	22	2
Other techniques	10	1

*Totals more than 100% because some respondents gave more than one response.

3. Ratings of various aspects of the Institutes' program.

On the basis of an analysis of the pilot study and about 20 informal personal interviews with participants, nine aspects of the Institute program were judged to be most important for further study. In the final questionnaire, the respondent was asked to rate each of these nine aspects on a six-point scale ranging from "not at all valuable" to "extremely valuable." A brief comment on reasons for his rating was also requested.*

*It should be noted that due to pressures of time we could not code the reasons for rating on every questionnaire in the sample on question 3. Instead we systematically selected for coding half the interviews of the second session participants. Together with the third session participants this amounted to 655 respondents in total who were coded on question 3. It is our opinion that these data accurately reflect the reactions of the participants as a whole to the various program features.

In addition to the nine program aspects, ratings were sought on two other less tangible characteristics of the Institutes which, on the basis of our preliminary work, were thought to be important determinants of the success of the program. These were (a) the level of communication between staff and participants and (b) the opportunity provided for discussion of problems and ideas among the participants themselves. The results on the latter two will be presented immediately following the findings on the program ratings.

Prior to a detailed look at the ratings of each aspect of the program and the reasons for them, it would be useful to have an overview of the mean ratings of all nine aspects of the program listed on the questionnaire. These are ranked by size of rating* in Table 7.

The first observation which should be made about these data is that, in general, the participants' ratings of the program tend to be quite high. The one exception to this is the rating of the Institutes' libraries which falls just below the 3.5 neutral point of the scale. Apart from this, all other means ** fall into the top half of the scale and several approach a mean of 5, with 6 as the highest possible rating.

From the table, it is seen that the field trips and small group discussions are rated by participants as the most valuable aspects of the program followed by the category of guest speakers. Although the Institute staff is

---

*The original rating scale which appeared on the questionnaire ranged from -3 to +3. For tabulation purposes, these were converted to a 1 to 6 scale.

**Although the differences in the top nine means appears to be not too great, with samples as large as those involved here even relatively small differences assume importance.

active to a greater or lesser extent in all aspects of the program, it will be noted that two of the three top-rated activities involve outside resources.

In the middle range of the rating list appear a group of the three top-rated activities involve outside resources.

In the middle range of the rating list appear a group of four program aspects which for the most part may be said to be more "staff-dependent": demonstration lessons, demonstrations of equipment, other staff presentations and instructional materials.

The fairly low rated reading assignments are technically an outside resource but one which requires extra participant effort. The lowest rated library is really more of an Institute facility than a program element. It was brought into the aspects to be rated list because it was criticized so strongly in our pilot study that it was felt we whould have further data about it.

Next will be examined the reasons given for these ratings in which the participants' reactions may be more fully explored. For each aspect the positive and negative reasons have been separately listed. Because some respondent gave more than one reason, the reasons total more than 100%.

Table 7

Participants' ratings of nine aspects of the Institutes' program

	Ratings (N = 955)
Field trips	4.91
Small group discussions	4.89
Guest speakers	4.80
Demonstration lessons	4.70
Demonstrations of equipment	4.69
Other staff presentations	4.63
Instructional materials	4.62
Reading assignments	4.33
Institute library	3.02

a. Field Trips

The field trips ranged from visits to local anti-poverty programs and remedial school programs, to more elaborate science trips to museums or a tour of a section of the city.

As observed in Table 8 the greatest value derived from the field trips was that it provided the participant with a better understanding of the disadvantaged community than he had had until now. Judging from the comments of the participants, very few have ever had a good first-hand look at the disadvantaged community, even though some had passed through it daily and had thought they knew about it. There is little doubt that, in general, the field trips made the most important contribution to an affective (as opposed to intellectual) understanding of the environment of the disadvantaged child.

The next largest reason for rating field trips positively was that they provided a good demonstration of what is being done elsewhere. Apparently, in visits to other community educational resources such as Head Start and other summer school programs, the participant was able to relate

his own activities to them and perhaps even incorporate into his teaching some approaches that may have been observed on these visits.

Table 8

Field Trips	Total N = 655	%*
Positive Reasons:		
Gained an understanding of disadvantaged community	164	25
Good demonstrations of what is being done elsewhere	118	18
demonstrated educational value of trips	104	16
Provided ideas for class trips	36	5
Shared common experience with participants	5	1
Other	16	2
Negative Reasons:		
No value; nothing new or stimulating	60	9
Unrealistic settings; inappropriate selection of sites	40	6
Lacked follow-up discussion or evaluation	12	2
Saw poor teaching	7	1
Other	19	3
Had no field trips	158	24
No reason given for rating	55	8

*Totals more than 100% because some respondents gave more than one response.

Thirdly, the teachers came away from the summer with a lesson on the educational value of class trips and as a corollary to this, with ideas for trips for their own classes.

Among those who did not rate the trips highly, a small proportion of respondents (9%) felt the trips they took were not sufficiently new or

stimulating, and 6% criticized them for an inappropriate or unrealistic se lection of sites. It should be noted that 24% of the participants said they had no trips.

b. Small Group Discussions

As seen in Table 9, practically every reason given for a positive rating on the small group discussions related to the same basic theme: the freedom provided by these groups for the interchange of ideas and experiences by participants. Apparently the teachers valued highly this opportunity to actively cope with the problems of how to reach the disadvantaged child, and to explore these issues in a way which larger lecture groups did not permit.

A small minority of the participants felt the small group dis ussions too aimless and were not sufficiently relevant to the disadvantaged child.

Table 9

Small Group Discussions Total N = 655		%*
Positive Reasons:		
Greater freedom and participation; exchange of ideas	404	62
Catharsis, therapeutic; "not alone"	28	4
Other	21	3
Negative Reasons:		
Generalities, aimless, formless; not relevant to disadvantaged child, uninteresting, uninformative	93	14
Participation by individual discouraged by staff	20	3
A few individuals "took over," others weren't heard	18	3
Not applicable to teachers own needs/interests	10	2
Other	21	3
Had no small group discussions	32	5
No answer given	50	8

*Totals more than 100% because some respondents gave more than one response.

c. Guest Speakers

The principal reason why a guest speaker was rated highly is that he brought a new and authoritative voice to the Institutes. While every last speaker was not highly rated, for the most part they were considered people with something of real interest to say, who spoke from long personal experience in their areas of speciality. From the questionnaire comments, it appears their contribution to the participants' deeper understanding of the disadvantaged community was substantial.

Table 10

Guest Speakers	Total N = 655	%
Positive reasons:		
An authority; brought new dimensions and ideas; affected attitudes	370	56
Relevant; pertinent to subject; interesting	99	15
Other	13	2
Negative Reasons:		
Nothing new; too general; not appropriate for program	86	13
Did not understand or know about teaching	25	4
Too narrow; not relevant to grade level	24	4
Speaker aroused antagonism	15	2
Sales talk	11	2
Other	54	8
Did not have any guest speakers	18	3
No reason given	40	6

*Totals more than 100% because some respondents gave more than one response.

When the speakers were not rated highly, it was mainly because the participants did not feel their contribution was sufficiently relevant to the program. Other smaller groups of participants felt that some of the speakers who attempted to deal with pedagogical techniques were themselves not sufficiently aware of the teacher's job, or they resented the fact that they had to sit through presentations which were not appropriate to their grade level. (This latter complaint was made primarily by junior high school teachers who sat through talks describing new methods for teaching reading in the first grade.)

d. Demonstration Lessons*

In Table 11 the first two categories of the positive reasons for rating demonstration lessons highly could be said to add up to just about the same thing. The participants found in them something of direct value to their own development as a teacher. For smaller groups of respondents, the opportunity the lessons provided for more student participation was important to them, as was the opportunity to hear the criticisms made.

When the demonstration lessons were rated low, it was usually because they were considered ineffective presentations of the material. Other critical comments made by smaller groups were that they were too theoretical and were not geared to the proper grade level.

It should be noted that 30% of all participants said they did not have demonstration lessons. This breaks down among the courses as follows: Urban Studies 37%, History and Social Studies 21%, Math and Science 13%, English

---

*Demonstration lessons were of two types: those conducted by staff members and those conducted by participants. While it might have been useful to have these separated out for analytical purposes, we felt it was necessary not to extend an already overlong questionnaire.

13%. Thus while one might normally not expect to find demonstration lessons in all Urban Studies courses, in view of the importance of demonstration lessons as a way of transmitting classroom techniques it is surprising to find some respondent in other courses saying they had no demonstration lessons.

Table 11

Demonstration Lessons	Total N = 655	%*
Positive Reasons:		
Helpful to compare performance, learned how to handle problems	162	25
Effective presentations	83	13
Provided student participation and discussion	39	6
Criticism was valuable	30	5
Other	14	2
Negative Reasons:		
Ineffective presentations; not well done	51	8
Unrealistic situations; too theoretical	26	4
Not geared to grade level	26	4
Nothing new; same lessons plans	15	2
Insufficient or no discussion	10	2
Other	15	2
Had no demonstration lessons	15	2
Had no demonstration lessons	197	30
No reasons gi...	58	9

*Totals more than 100% because some respondents gave more than one response.

e. Demonstrations of Special Equipment

Table 12 shows that most of the reasons given for plus ratings of these equipment demonstrations concern their contribution to the classroom tools of the teacher. Twenty-seven percent of the respondents felt they were important additions to their lessons presentations. Eight percent of the respondents said they learned how to operate the equipment demonstrated. (It is likely that many who gave the first reason also learned how to operate equipment for the first time but did not happen to mention it specifically.)

Almost 1 in 10 participants saw equipment demonstrated with which they were already familiar. Others who were negative to the demonstrations said

Table 12

Demonstrations of Special Equipment, etc.	Total N = 655	%*
Positive Reasons:		
Good for classroom use and lesson reinforcement	175	27
Learned how to operate machines	52	8
Other	30	5
Negative Reasons:		
Good for new teachers only; nothing new for me	50	8
Equipment ineffectively demonstrated	35	5
Unrealistic; schools often lack equipment	22	3
Cannot replace a good teacher; taught little or nothing	20	3
Other	18	3
Had no demonstrations of equipment	172	26
No reasons given	61	9

*Totals more than 100% because some respondents gave more than one response.

they were ineffectively carried out. A very few dismissed this aspect of the program by saying the equipment is not available at their schools or that it cannot replace a good teacher.

It should be noted that over one in four of the participants indicated they had no demonstrations of equipment. This rises to 31% among the Urban Studies group, which is not unexpected. However 17% of the Social Studies, 15% of the English and 11% of the Math and Science groups also made this claim.

f. Other Staff Presentations

In this category was meant to be included all staff presentations which were not demonstration lessons or demonstrations of equipment (Table 13). That this intended meaning was not entirely clear to all the participants is shown by the fact that 95 people claim never to have had any other presentations by the staff - a situation which is patently impossible. The content of the replies of the rest of the respondents, however, leads us to believe that the category was responded to as intended.

The categories employed in the coding of positive reasons attempted a division in terms of content, organization of materials and the instructor's ability to get it across. Obviously all three of these overlap to an extent, and each is saying the same essential thing in a somewhat different way, namely, the instructor was doing an effective job.

In some ways, the negative reasons may provide more useful information for this aspect of the program. Apparently the main reason the instructors' presentations were not highly rated is that they were ill-prepared and badly organized, although it must be noted this opinion was held by only 16% of the participants. Ten percent felt they were irrelevant in the kinds of

material they presented, and 6% thought the instructors were lethargic or incapable. Again the overlap of the three categories should be noted.

Table 13

Other Staff Presentations	Total N = 655	%*
Positive Reasons:		
Valuable context; excellent source of materials	178	27
Well organized and prepared	154	24
Capable, dynamic instructors	107	16
Other	31	5
Negative Reasons:		
Poor organization, preparation and/or presentation	102	16
Irrelevant; poor sources of materials	67	10
Lethargic, incapable instructors	41	6
Other	31	5
Had no other staff presentations	95	15
No reasons given	77	12

*Totals more than 100% because some respondents gave more than one response.

g. Instructional Materials

As seen in Table 14, just over a quarter of the participants considered the instructional materials of value because they were directly useful to their own needs as a teacher, while an almost the same number regarded them as "pertinent to the course." (Once again, this may represent an artificial coding division. Those who fall into the second category may, by implication, be saying the material will be of ultimate value to them, too.)

Table 14

Instructional Materials	Total N = 655	%*
Positive Reasons:		
Will help my teaching; good material for my use	181	28
Pertinent to course	160	24
Other	26	4
Negative Reasons:		
Not enough attention given to materials; insufficient amount of materials	83	13
Not realistic or pertinent to needs; nothing new	73	11
Needs variation; too rigidly sub.-matter oriented	21	3
Little or no instruction on usage of materials	15	2
Other	18	3
Had no instructional materials	98	15
No reasons given	75	11

*Totals more than 100% because some respondents gave more than one response.

It is of importance to note that among the main reasons given for not rating the materials higher is that there was not enough attention given to this aspect of the program, and that insufficient amounts of materials were available. From a reading of the questionnaire responses, there is little question that the instructional materials were regarded by many participants as extremely valuable "concrete" information they could take back to their jobs.

The same theme is present in the second main complaint about this phase of the program, namely, that the materials presented at the Institute were

not pertinent to the teacher's needs or presented nothing new. In both main reasons given for rating this aspect low, it is apparent that in quantity and quality the instructional materials fall somewhat short of the needs of the participants.

h. Reading Assignments

A majority of respondents found the outside reading assignments of value to them. The main reason for this rating was that they provided necessary adjuncts to the lectures and stimulated further discussion. On

Table 15

Reading Assignments	Total N = 655	%*
Positive Reasons:		
Valuable; necessary adjuncts to lectures; stimulated discussion	320	49
Exposure to new sources of materials	53	8
Stimulated further thought and reading	19	3
Other	13	2
Negative Reasons:		
No value; limited; boring	80	12
Already versed in content	62	9
Too theoretical; not realistic or practical	47	7
Should have been discussed	46	7
Too much assigned reading	29	4
Not enough leeway; no available bibliography	25	4
Other	35	5
Had no reading assignments	31	5
No reasons given	50	8

*Totals more than 100% because some respondents gave more than one response.

the other hand, there was a relatively large proportion who expressed dissatisfaction with the assignments (it will be recalled they were ranked eighth out of the nine aspects of the program that were rated). No one reason for the negative rating was wholly predominant. Table 15 shows those which were mentioned frequently enough to be separately categorized.

i. Institute Library

Of all nine aspects of the Institute which the participants were asked to rate, the library facilities were regarded to be the program's worst aspect. It was described by almost half of the participants as being too limited in the kinds of materials one would need for research. Thirteen percent said it was not necessary for their work and that they did not use it, and other groups complained about the fact that the hours were inconvenient, that it did not lend books (although several centers did), and that its physical facilities were poor.

The problem of the library facilities is directly related to the issue of where and how the afternoon period of the day should be spent. Some center directors interpreted the 2-hour independent research period to mean that the time should be spent at the center itself. Others gave the participants the opportunity to work at other libraries, or wherever they could find appropriate materials.

Table 16

Reading Assignments	Total N = 655	%*
Positive Reasons:		
Valuable; comprehensive; varied	92	14
Helpful for research	25	4
Exposed available new material	8	1
Other	21	4
Negative Reasons:		
Inadequate; too limited; needs more books	323	49
Not necessary; didn't use it	82	13
Should have more convenient hours; should lend books	56	9
Poor physical facilities; too hot, too noisy	38	6
Insufficiently related to course content	34	5
Other	28	4
Had no Institute Library	46	7
No reasons given	44	7

*Totals more than 100% because some respondents gave more than one response.

4. Participants' recommendations for changes in the Institutes.

As part of their questionnaire, the participants were asked to recommend changes they would like to see made in six different areas of the Institutes' operations: program, facilities, materials, schedule, organization and staffing. Ninety percent of the respondents replied to this question, some with only one or two recommendations and others with several. To enhance the clarity of presentation of these data the answers are grouped within the original six suggested areas. They are ordered

in Table 17 according to the total number of recommendations made in each area. A word of caution must be offered: the relatively low percentage associated with each recommendation listed within the areas should not be interpreted to mean these express the opinion of only a small number of people and therefore do not warrant special attention. Rather, we regard those recommendations as those that the most salient in the minds of the respondents who were replying to an open-ended, not a check-list, type of question. (In our opinion, for this kind of situation, a check-list would have presented even more problems of interpretation.) Hence, the percentage probably reflect a conservative estimate of the number of participants who would agree with the recommendation. In discussing the findings, the relative size of the recommendation will be our focus of interest.

Table 17

What recommendations would you make for changes in the Institute's program, facilities, materials, schedule, organization or staffing?

	Total N = 955	% *
Program:		
More practical teaching techniques needed	162	17
More demonstrations; demonstration classrooms	118	12
More trips; more contact w/ the community	88	9
More outside/specialized speakers	71	7
Separation of math and science	70	7
Practice teaching; fieldwork with d.c.	29	3
More emphasis on Puerto Rican, or other ethnic gr.	18	2
Organization:		
More small groups; seminars, not lectures	148	15
Better organization; clearer objectives	113	12
Divide course by grade level	69	7
Use Urban Studies as basic course for all	18	2
Staff:		
Better prepared, more experienced staff	147	15
Should be current teachers of d.c.	57	6
More professional staff-participant relationship	37	4
Staff should be college instructors	12	1
Schedule:		
Longer period for courses	82	9
3 hrs. at Center; independent research (?) in P.M.	76	8
Less busy-work	62	7
Materials & Equipment:		
More, more useful, newer materials	145	15
More equipment demonstrated; more A-V, etc.	65	7
Facilities:		
Better libraries; use of outside libraries	147	15
More accessible Centers; better parking, etc.	35	4
Other	155	16
No answer	98	10

*Totals more than 100% because some respondents gave more than one response.

a. Programming

Not unexpectedly, the largest number of recommendations were made in the area of programming. Once again the theme of a more practical orientation of the courses was sounded as the principal recommendation within this set. This was followed by a call for more classroom demonstrations which might be regarded as a restatement of the need to concretize the presentation of new curriculum and teaching methods for the teachers of the disadvantaged. Taken together we find that over one out of four participants in the course makes one or both of these recommendations.*

The recommendation of more trips comes primarily (16%) from the Urban Studies groups whose community visits provided such good sources of stimulation for this course. Similarly, the suggestion for separating math and science must logically be considered only among those who had taken this course. When this group is looked at separately, almost 1 in every four participants in the Math and Science course makes this recommendation.

The call for more outside speakers and speakers who are specialists in their areas reinforces the earlier finding that outside speakers are a valuable adjunct of the program but they must be selected with care. The relatively small number of participants who ask for the inclusion of practice teaching into the Institute program is rather surprising in view of the stress on the practical found throughout their other replies. (Perhaps there is some reluctance on the teachers' part to expose themselves to a "real life" situation before their peers, particularly with new curricula and methods.)

---

*Since 3% made both, the actual number of respondents making at least one of these recommendations is 26%.

b. Organization

The recommendations concerning organization fall into three categories, two of them quite specific as to how the Institute is structured, while the third concerns the presentation of program content and could, perhaps, as well have been placed under the heading of program recommendations.

The most frequent recommendation mentioned under organization is for an increase in small group discussions and, the other side of the same coin, a paring down of the number of staff lectures. As we have already seen, the small group discussions were rated among the highest of the nine aspects of the program reported in the previous section, so that this recommendation for more of the same is not surprising.

The second highest recommendation in this group concerns the organization of the courses and a clearer statement of their objectives. For some participants this was one of their strongest criticisms of the Institute. In all fairness, the weakness in organization may be in part attributed to the fact that this is the first time the Institutes have been given, to say nothing of a time schedule that left little opportunity for developing a tightly-knit curriculum. But, at the same time, differences are apparent among the Centers as well: this recommendation ranged from 6% in one Center to 20% in another. Differences were found also between the courses with only 8% of the participants in the Urban Studies making this recommendation, compared with 15% of those in the English courses. (The remaining two, History, and Math & Science, were just at the 12% average.)

The recommendation to divide the courses by grade level may be interpreted as still another way of saying, "I want material that is pertinent to my own needs." Most (though not all) of the Centers attempted to break

the small groups down homogeneously by grade level. However, there was still some discontent among the junior high school teachers, for example, who had to listen to presentations by guest speakers and staff lecturers on issues that concerned only the younger elementary school child. The recommendation to organize by grade level was found to a somewhat greater degree in English and Math and Science than in the other two groups.

c. Staffing

Relatively speaking, one of the largest categories of recommendations is for a more adequate Institute staff. While the staff was rated quite highly on the whole, there were apparently enough instances of individual staff members not being fully prepared for their task, or not being sufficiently able to convey their material, to evoke this type of response in the recommendations. Another recommendation on staffing was that Institute staff should be drawn from teachers who are currently teaching disadvantaged children so that they would be speaking directly out of their own experience.

d. Schedule

The three recommendations in this area concern three discrete aspects of the schedule: total time spent in courses, total time spent at the instructional center, and the use of time away from the center. While each of these recommendations is made by a relatively small number of participants, they are of some interest because they are apparently attempts to rectify some often-mentioned sources of discontent.

The first recommendation, that the sessions be made longer reflects the feeling expressed by many participants that too much ground was being covered in too short a time.*

---

*In fact, several participants muttered darkly about the time--usually about 40-45 minutes--taken away from the course in filling out our evaluation questionnaire.

The recommendation for spending only 3 hours at the Center relates back in part to the problem of inadequate library facilities. Apparently the participants feel they should be trusted to do independent research on their own in the afternoon and strongly resented being cooped up at the Center during this time, particularly in the hundred degree heat of last summer.

The recommendation for less "busy-work" was placed under the heading of 'schedule' although in some respects it is a program recommendation as well. In a word, the participants do not want to be asked to do meaningless assignments, and apparently many of those given this summer were judged so. This request would hold true for any student at any time, but in view of the time pressures of the Summer Institute Schedule, it is particularly apropos here.

e. Materials and Equipment

The recommendation for additional, more useful, and newer materials flows directly from the findings of the previous section of this report where this aspect of the program was specifically rated. While the materials provided by the staff were on the whole greatly appreciated, apparently they were still of insufficient quantity and quality to satisfy the needs of the participants. To a lesser, but still significant, degree, the same comment applies to the demonstration of equipment.

f. Facilities

This heading contains one major recommendation with which we are already quite familiar--the need for better library facilities at the Centers and/or the availability of outside library facilities.

While the recommendation for more accessible Centers and parking facilities is a relatively minor one, from personal observations at the Centers it is clear that participants having to move their cars in the middle of the morning could be a real time-waster.

g. Communications between staff and participants

The level of communications between staff and participants was generally rated high by most of the participants, with the mean rating on this question being 5.01 on a six-point scale. However, while many participants gave their highest rating to staff-participant communications, a not unsubstantial number gave it a rather low mark. From these ratings and personal observations at the centers it must be concluded that while most staff members seemed to be communicating effectively, a definite minority had difficulty in this area.

On the positive side of the issue, participants offered the following comments:

> "The staff was friendly and professional; they made you feel welcome at any time to speak to them. There was a feeling... that we were all here to become better teachers and people."
>
> "Staff was very skillful in channeling and guiding question and answer periods. Very relaxed atmosphere with a sense of mutual respect."
>
> "All participants were given an opportunity to discuss problems facing them. Workable solutions were usually evolved."
>
> ".....It was instructor led rather than instructor dominated."

Those who rated communications low commented:

> "Most staff were okay, but some were very close-minded. 'My way is the right and only way,' etc. Participants resented lack of work on part of staff."

"I feel the staff was well-meaning but did not realize the needs of the participants."

"Staff had pre-set ideas. They were not flexible in accepting the experiences and suggestions of the participants."

h. Communications among participants

Preliminary data from the pilot study indicated that simply the opportunity for meeting and sharing experiences with other teachers might turn out to be one of the most valuable "aspects" of the Institute program.

The final questionnaire contained a rating scale for this aspect and the results confirmed the pilot study impression. With a mean rating of 5.14, the opportunity to discuss problems and ideas with other teachers at the Institute was apparently considered more valuable by the participants than any other single aspect rated. And many of those who did not rate it highly did so because the opportunities for discussion were too limited. Some typical comments on this question were the following:

"I found it extremely valuable because it was then I got some concrete suggestions."

"Teachers had a chance to discuss problems and successful teaching methods--an excellent opportunity for exchange of ideas among teachers of the disadvantaged."

"It gave me the feeling of not being alone. I saw others had problems like mine and I learned from what they are doing."

Those who rated the opportunity for discussions among participants negatively are represented by their replies:

"Except for our discussions outside of class we had very little opportunity for discussions."

"This is the most valuable part of the program, but I'd like to see it on a more formal basis in class, rather than at the bus stop."

"Interaction among the participants was very limited because of the instructor-dominated program."

C. The Staffs' Evaluation of the Summer Institutes.

Because the staffs of the Institutes bring a wholly different perspective to an assessment of what took place in the summer program, no evaluation would be complete without including their views as well. This was accomplished both through informal discussions with staff members and through a Staff Evaluation Questionnaire (c.f. Appendix.) The questionnaires were distributed to all center directors who in turn gave one to each member of his staff to fill out and return by mail in a stamped envelope provided. Since the questionnaires constitute a more systematic sample of staff opinion, and since the offer of anonymity allowed for frank replies, these data will be used as the basis for the staff evaluation. However, the informal discussions with staff members will be brought in where appropriate.

One hundred and eighty staff questionnaires were distributed and one hundred sixteen completed questionnaires were received, a return rate of 65%. While this was a lower rate than one would wish*, it represents a sufficiently large proportion of the total staff population to allow us to feel fairly confident that the opinions expressed represent that of the entire staff. Moreover, there seems to be a relatively even distribution of returns over the ten centers and among the four courses, so that we can say that no one group's reactions are being unduly weighted in the total returns. In the descriptive analyses that follows, all data will be percentaged on the total base of 116 cases.

The findings of the Staff Evaluation Questionnaire will be presented as follows: the objectives of the Institutes as perceived by the staff,

---

*In fairness to the Institute personnel, it should be mentioned that our questionnaire was received by them just about one week before the courses closed at the end of a long and tiring summer and just after they had completed a long evaluation questionnaire for the Institute Director.

what the staff considers to be the most and least valuable aspects of the Institute program, and, finally, what recommendations the staff has in several areas of the Institutes' operations.

1. Relative importance of the Institutes' objectives.

By listing the objectives in order of frequency of mention we have presented in Table 18 the staffs' importance of the Institutes' hierarchy of objectives. In order to highlight the principal finding we have divided the responses into that objective considered most important and then a column to all others of second order importance or lower. From this tabulation we should be able to infer something about the staff's general orientation to its task.

The first objective listed in the "most important" column is essentially concerned with the psychological attitudes of the disadvantaged child and how teacher attitudes might be influenced through a greater understanding of these attitudes. Similarly, the second objective focuses on an understanding of the sociological mainsprings of the problems of the disadvantaged child. Together they constitute an attempt to provide a picture of why the child is the person he is and what, given this understanding, the teacher can do to create the most effective possible interaction with the child. Thus the primary objective of almost 3 out of 4 of the Institute staff is to provide a basic understanding of the psychological and sociological nature of the d.c. and to show how this understanding can be used to reach the child.

The third "most important" objective named by the staff is to enhance and develop teaching skills. If we were to include the next category also into a combined objective of providing concrete classroom tools for the

Table 18

Of the several objectives of the Institute which did you personally feel was the most important? second most important?, etc.	Primary N	Primary %	Secondary or Lower N	Secondary or Lower %
Total	116	100	116	*
To affect teacher attitudes in working w/ the d.c., to appreciate the potential of d.c.	43	37	26	22
To develop a full understanding of the life-styles, value patterns, and attitudes and beliefs of d.c.	39	34	26	22
To enhance and develop varied pedagogical skills (re. d.c.); methodology and techniques.	21	18	67	57
To provide the latest thought and theory on new subject matter and curricula; new literature.	5	4	41	35
Interstimulation in group discussion; exchange of ideas and sharing of experiences.	3	3	26	22
To provide an understanding of urbanization and its impact on society and its institutions.	3	3	7	6
Knowledge of school-community relations and/or interaction.	1	1	8	7
To provide knowledge about the community and its resources or agencies.	1	1	9	8
To introduce ways of motivating the disadvantaged child.	0	0	7	6
Other	0	0	4	3

*Totals more than 100% because some participants gave more than one reason.

teacher, we see that somewhat less than 1 in 4 members of the staff consider this a primary objective.*

The ranking of the less than-primary objectives by frequency of mention verifies the conclusion drawn above: that the objective of teaching specific techniques and curriculum matters relevant to the disadvantaged was the most important secondary objective of the Institute staff. The implication of this finding will be discussed in greater detail in a later section of this report.

2. Aspects of program regarded of most value.

This question was designed to yield a ranking of aspects by frequency of mention. Due to the differences in method employed, this ranking is not strictly comparable to the participants' ratings of the various program aspects. However, we believe it is a fair statement to say that the general pattern of each groups' evaluations of the program reveals an impressive measure of agreement. Inspection of Table 19 indicates that an extremely high proportion of the staff regards the small group discussions as a most valuable phase of the program. In this assessment, they are in general agreement with the participants, who, it will be recalled, also rated the small group discussions highly.

The high ranking given to the field trips also agrees with that of the participants.**

---

*Several of the remaining categories could probably fall into the basic division "understandings" and "techniques," but since they represent a very small portion of the total, it does not affect the outcome one way or the other if left as separate categories.

**The relatively small percentage of staff who regarded this as a valuable aspect may be accounted for by the fact that not all groups went on trips, and these percentages are based on the full staff sample. On the other hand, only those participants who experienced trips were included in the calculation of the trips' mean rating.

Table 19

Q. 2. - In your opinion, which aspects of the Institute program (i.e. speakers, demonstration lessons, small group meetings, trips, etc.) were of most value to participants? Q. 3. - Of least value to participants?

	N (116)	% (*)
Most Value		
Small group discussions	91	78
Trips	41	35
Demonstration Lessons	35	30
Guest Speakers	29	25
Large Lectures	15	13
New Materials	6	5
Use of socio-psychological techniques	4	3
Learning of basic elements; lesson plans, etc.	4	3
N. A.	2	2
Other	8	7
Least Value		
Guest speakers	46	40
Large lectures	19	16
Inadequate library facilities	9	8
Busy-work; wasted afternoon hours	7	6
Films	7	6
Trips	6	5
Inappropriate/inadequate materials	5	4
Small group discussions	3	3
Demonstration Lessons	2	2
Learning of basic elements; lesson plans, etc.	1	1
N. A.	17	15
Other	4	3

*Totals more than 100% because some participants gave more than one answer.

Demonstrations fall into the middle group on both staffs' and participants' lists, while staff lectures and instructional materials are rated toward the low end of both lists. (The objectivity of the staffs' evaluations is appreciably enhanced by their willingness as self-critical as this.) The one exception to the general agreement between staffs' and participants' evaluation of program aspects is with regard to guest speakers. Apparently the staff, on the whole, was not as impressed with the speakers as the participants were. This evaluation is confirmed by the fact that 40% of the staff considered the guest speakers to be the least valuable aspect of the program. This one exception aside, however, the staff and participants evaluate the various aspects of the program in essentially the same way, an outcome that gives added substance to the findings and to the recommendations which might flow from it.

3. Staff recommendations for changes in the Institutes.

Each staff member was asked what changes he would make in six basic areas of the Institutes' operations if he were setting up the Institute again next year. (To be sure that no important suggestions falling outside these six areas could be missed, we also added another general question soliciting other recommendations.) These data have been tabulated within the six areas and are presented in a series of tables below. Suggestions made by even relatively few staff members have been included on the assumption that a recommendation may have some idea value even though it does not occur to many people. The information contained in these tables requires little additional interpretative comment.

a. Selection of participants

From the questionnaire responses and from our personal discussions with staff members it was quite apparent that the kind of participants taking part in such a program can make a real difference in the ability of the group to accomplish their objectives in the short period of time available. Participants attending primarily for the stipend can be a disruptive influence out of proportion to their members.

Thus, several of the recommendations made most often (e.g. "Admit only those with true commitments") reflect the need for a more careful selection of participants, both for the sake of the Institute and of the other participants (Table 20).

A second theme (not unrelated to the last) apparent in these recommendations is to limit participation to those who are most likely to use or benefit from the experience, such as current teachers of the disadvantaged, and inexperienced teachers. Some instructors said they found it hard to understand why, for example, per diem substitutes were among the participants or why a teacher of eighth grade English was part of a Math and Science group. Apart from the question involved as to the proper use of federal funds, the intent of these recommendations was to try and insure that every participant in the Institute would all be there only because he is seeking information that would be of immediate interest to him.

Table 20

Staff recommendations concerning the selection of participants.

Total	N (116)	% (*)
Should be limited only to those who are teaching d.c. at present	29	25
More careful screening; admit only those w/ true commitments	25	22
Priority given first to inexperienced teachers	25	22
Enrollment should be restricted to only one's specific subject area	19	16
Expand selection to include other/all school personnel	13	11
Applications should be approved/recommended by their administrators (principal; a.p., etc.)	13	11
No supervisors to attend same session as teachers	12	10
Earlier notification of participants to allow time for preparation and orientation	11	9
Separate institutes for JHS and elementary school teachers	10	9
More minority groups represented; less stress on Negro	7	6
Separation of experienced and non-experienced teachers	6	5
More equitable distribution of grade levels	3	3
Have a waiting-list to replace drop-outs	3	3
Limit enrollment to 1 or 2 sessions	3	3
Other	18	16
No changes; satisfied with present selection process	6	5
No answer	8	7

*Totals more than 100% because some participants gave more than one recommendation.

b. Program content.

The outstanding feature of Table 21 containing staff recommendations for changes in program is the stress placed on expanding its practical aspects -- at least three of the categories of recommendations may be so regarded. By contrast, only two of the smallest categories recommended greater emphasis on theoretical understandings and attitudinal changes. Thus, whether out of response to participant pressures, or out of their own analysis of the program, the staff apparently agrees with the participants' call for a program that is more relevant to their every day classroom needs.

The one other recommendation made with some frequency is for a greater uniformity of programming among Centers. This may reflect a problem caused by the lack of time available to set up the 1966 Institutes. One would expect that given sufficient pre-planning time a satisfactory core curriculum could be developed for use at all centers.

Table 21

Staff recommendations concerning program content.

Total	N (116)	% (*)
More uniformity and standardization among Centers	21	18
Greater opportunity to develop teaching techniques	16	14
More practice teaching	13	11
Allow instructors more leeway to create their own programs	9	8
Greater stress on subject matter	9	8
Courses in other areas (music, art, health, etc.)	8	7
More sociological insights and background of the disadvantaged	6	5
Combine social studies w/ Urban Studies	5	4
More materials for demonstration and distribution	5	4
More emphasis on discipline problems	5	4
Greater stress on affecting attitudinal change	3	3
Arrange separate courses for administrators	2	2
Less emphasis on subject matter	2	2
Participant evaluation reports	2	2
More preparation by students through assignments	2	2
Other	23	20
No changes necessary	13	11
No answer	5	4

*Totals more than 100% because some participants gave more than one recommendation.

c. Organization and time schedule

As seen in Table 22, the recommendation most often made by the staff regarding the organization and schedule of the Institutes is for a session longer than two weeks.

That this same recommendation was made by a much smaller proportion of participants may simply reflect the staff's greater awareness of the possibilities of additional material that could be covered.

The suggestion of separating math and science into two independent courses is made by just about every instructor of that course, and by every director. Further, the staff members in this subject are in particular called for a careful assignment of participants to grade level groups, each with an instructor who is thoroughly familiar with the curriculum of that level.

The third most salient recommendation in this set is for the Urban Studies course to be made basic for all participants. Apparently, there was some inevitable overlap among the various courses when each tried to give the incoming participant some understanding of the kinds of the adaptation a disadvantaged child brings into the learning situation. Those who recommend the Urban Studies as a base course generally feel that these kinds of issues can be handled there and the subject courses could then be devoted exclusively to methodology and curriculum.

Finally, the problem of the use of the afternoon hours for "research", and the concomitant issue of a shorter work day, form the basis for recommendations of a small group of staff members to eliminate the research and either eliminate the afternoon hours or to have more flexibility with them.

TABLE 22

Staff recommendations concerning organization and time schedule

	N.	%
Total	(116)	(*)
Longer time for each course	44	36
Separate math and science	33	28
Urban Studies as basic course for all	22	19
Shorter time for entire Institute	13	11
More pre-planning (i.e. during previous year)	16	14
Separate course by grade level and/or subject area	11	9
Eliminate "research hours" and use for demonstrators and group work	10	9
Shorter time schedule per day	9	8
More demonstrations by master teacher; Experimental classrooms	5	5
Flexibility in use of P.M. hours	5	4
Too demanding and repetitious a schedule for instructors	5	4
More adequate Center libraries	4	3
All instructors not needed for all presentations	3	3
Longer group sessions	3	3
Need more materials	3	3

TABLE 22 cont'd

Offer more courses	3	3
Standardization for P.M. hours	2	2
Other	28	24
No changes necessary	22	19
No answer	4	3

*Totals more than 100% because some participants gave more than one recommendation.

d. Staffing

Table 23 reveals that 26% of the staff members were of the opinion that the staffing of the first Summer Institute established a pattern that works well and should be maintained. Another 14% of the recommendations concerned the need for additional clerical help to handle the job of producing special course materials. (On visits to the centers we often observed instructors hunched over typewriters or mimeograph machines).

Most of the remainder of the recommendations, however, concern suggestions for improving the competence of the professional staff. These can be categorized into two basic recommendations: (1) that staff members be extremely well grounded in the subject area they are teaching, and (2) that staff members should be experienced at the same grade level they are teaching at the Institute. While the first of these was obviously the intent of those responsible for staff selection, judging from this set of responses and the participants' recommendations for a better prepared staff, it is clear that there is room for improvement in this area.

e. Facilities and equipment

The major recommendations contained in this group concern a problem that was common to most, but not all centers (table 24). It was the inaccessibility of the host school's audio-visual office and science equipment and materials. This necessitated a frantic scurrying around by directors and staff members to round up the equipment and materials at their home schools. (In the two instances where the center director happened to be in his home school, the problem of course did not arise).

TABLE 23

Staff recommendation concerning staffing of Institutes

	N.	%
Total	(116)	(*)
Additional clerical help and assistants (re. lab.) necessary	14	12
Instructors should be teachers (experienced), not supervisors	12	10
Earlier notification and orientation	11	9
Staff should have specific background in the subject area they are going to teach	10	9
More careful and just selection of staff	10	9
Each team should represent the various grade levels	10	9
Better selection of head instructors; less autocratic	7	6
Personnel should be comparable to grade level being taught	6	5
An A-V specialist or coordinator for special demonstrations	6	5
Should have background in Urban Studies type of course or comparable experience	6	5
Greater cooperation and coordination among and within staffs	5	4
Should be selected from special-service schools	4	3
Restrict staff to supervisors only	4	3
Interviews for prospective staff members	3	3

TABLE 23 cont'd

Each area should have at least one representative from parochial school system	2	2
Staff should be selected by center director from within that school district	2	2
Other	16	14
No changes necessary	30	26
No answer	10	9

*Totals more than 100% because some participants gave more than one recommendation.

TABLE 24

Staff recommendations concerning facilities and equipment

	N.	%
Total	(116)	(*)
More equipment needed; a-v, duplicating, etc.	73	63
More adequate libraries	49	42
More materials needed	38	33
Improved physical facilities: parking, lunch area, air-conditioning	14	12
Newer, more varied texts and materials	13	11
Need to use outside libraries	9	8
Centers should be in disadvantaged areas	4	3
Bus available for trips	1	1
Other	18	16
No changes necessary	4	3
No answer	3	3

*Totals more than 100% because some participants gave more than one recommendation.

One would hope that in the future arrangements could be more readily made to have the host school's equipment available during the summer.

The other principal recommendation is the not unexpected one for better library facilities. The possible solution to this problem will be discussed in detail in the next section of this report.

f. Guest speakers

The substantial amount of staff criticism of some guest speakers is reflected in the list of recommendations, the top two of which may be considered together as calling for a better calibre person for this role. The recommendation that speakers be used during the afternoon period would seem to deal both with the problem of having more time for instruction and a more constructive use of the afternoon period (table 25).

V Discussion and recommendations

This partial evaluation of the 1966 summer Institutes for Teachers of the Disadvantaged had four main purposes:

1. to obtain some objective measure of the impact of the Institutes on participants' attitudes towards teaching the disadvantaged.

2. to obtain the participant's own estimates of the value of the Institute experience.

3. to describe the strengths and weaknesses of the Institutes' operations, and

4. to make recommendations for ways in which future Institutes might be improved.

This discussion of our findings will be based primarily on the data collected in the questionnaires completed by participants and staff, supplemented by the impressions gathered by observers in their personal visits to the centers.

TABLE 25

Staff recommendations concerning guest speakers

	N.	%
Total	(116)	(*)
More appropriate selection; more qualified	24	21
Should be prepared lists of capable, informed speakers for each subject area	18	16
Speakers should be pre-arranged	17	15
Speakers were good; inspiring	17	15
Use speakers during afternoon period	9	8
More from slum community; those who are working with disadvantaged should address smaller groups	8 6	7 5
Make more $ available at each center for speakers	5	4
Should represent diverse points of view	5	4
Speakers who are involved in curriculum revision	4	3
More speakers	4	3
Eliminate or limit guest speakers	2	2

TABLE 25 cont'd

Follow-up discussion and/or activities after each speaker	2	2
Should be professional scholars	1	1
Other	13	11
No answer	11	9

*Totals more than 100% because some participants gave more than one recommendation.

The statistics themselves, valuable as they are, cannot possibly describe fully the flavor and spirit of the Institutes. This can be gotten only from first-hand observations of the program in action which were gathered by members of the professional staff of the Center for Urban Education who visited the centers. We shall rely heavily on those observations to flesh out the statistical findings of our research, and will begin this section with some of these observations in order to set the stage for later discussion.

Perhaps one of the most important things that can be said regarding the Summer Institutes is that they took place; for to the great majority of the New York City school personnel who participated in this progran, the Institutes represented a real "breakthrough" in our efforts to deal with the problem of how more successfully to educate our school's disadvantaged children. The simple fact that the Institutes occurred held out the promise to many that teachers can count on increased assistance from the Board in their efforts to reach the disadvantaged child.

Thus one of the things which most impressed a visitor to the Institute centers was the searching and inquiring attitude that characterized the great majority of those participating in the program. This was most readily observed in the small groups where the most spirited discussions were held and where more people had an opportunity to express themselves.*

Unlike the average college class where the student tends to be a more passive receiver of information, most of the members of these groups were active participants, measuring what was said against their own classroom experiences, and constantly questioning and probing for information of value.

In the main, the atmosphere of the Institutes' classrooms was that of professionals engaged in an intensive, cooperative effort to find workable

*Perhaps one of the most unexpected "pay-offs" of the program was the rise in mutual respect between the public and non-public school participants.

and meaningful solutions to the difficult problems confronting them.

The visitor was also struck by the variety of extremely relevant activities that could observed taking place at the Institutes. While there was a considerable range in the types of activities carried on at the centers, the visitor could not fail to note the large amount of enthusiasm and creativity invested in these activities. For example, on the occasion of one visit, an Urban Study group was grappling with the issue of parent attitudes toward open enrollment through the technique of role-playing,** at another the instructors in a social studies group were engaged in a presentation of non-textbook instructional materials, and at a third a presentation of how to teach new math to the disadvantaged was taking place; all of the courses visited employed team teaching in a living demonstration of its possibilities; at some centers participants made their own books as an example of how the children might create something meaningful to his own background; demonstrations of how to employ a new classroom telephone as a communications and language arts aid were given by a representative of the phone company; guest experts came to discuss the latest innovations in the social studies and 1st grade curricula, etc. The staff's production during the summer of instructional materials for use with disadvantaged was additional evidence of their dedication to their tasks. In short, the enormous potential of the Institutes as a training ground for teachers of the disadvantaged was clearly evident on all sides.

**The switching of racial roles in this situation led to some deep insights, as well as to some very hilarious exchanges.

How well did these efforts succeed? This question can be answered ultimately only in terms of what happens this fall and in future years in the classrooms of the participants. For no matter what anyone says at this juncture concerning the effectiveness of the Summer Institutes, the only thing that really counts in the long run is how well this experience gets translated into more effective activities. A proposed research design to evaluate the classroom effects is shown at the end of the appendix.

Nevertheless, it was considered useful as part of this interim evaluation to try to obtain some measures of the more immediate impact of the Institute experience. This was done in three ways: (1) by means of a specially constructed attitude inventory whose items were factor analyzable into four separate attitude scales, (2) through a direct question on the Participants' Evaluation Questionnaire asking whether or not, as a result of taking the Institute course, they felt readier to teach a class of disadvantaged children, and (3) through the staff's estimate of the participants' reactions to the Institute experience.

It will be recalled that our results with the attitude inventory showed no difference between the experimental and control groups on any of the four scales, thus indicating that the Institute experience had no measurable impact on the four underlying attitudes represented by these scales: (1) optimism regarding the educability of the disadvantaged child, (2) a readiness to use non-traditional approaches with the disadvantaged child, (3) a sensitivity to the disadvantaged child's personal needs, and (4) the threat of being physically harmed by the disadvantaged child.

These results deserve some interpretive comment. First of all, it must be pointed out that to effect a basic change in people's attitudes on important issues, or on modes of approach that have long been held, is not

an easy thing to do even under the best of circumstances.*

But a second possible explanation of these results and perhaps a more relevant one, is that the participants may not have been focusing on the kind of understandings typified by many of the items in the first two of these scales, but were instead concentrating on the more practical aspects of the Institute program. This interpretation is given support by the fact that almost 80% of the participants listed learning specific skills on classroom techniques as a purpose for coming to the Institute.

The second method used to measure the immediate impact of the Institute -- the participants' own estimate of his readiness to teach disadvantaged children -- showed that 84% of the respondents feel they benefitted from the experience and do feel better prepared to teach disadvantaged children as a result of it. This is a most impressive outcome. Quite apart from any basic changes in attitudes toward the disadvantaged that may or may not have occurred in a given teacher, if he feels more confident about doing his job because he now has more curriculum ideas or classroom techniques to draw on, then the Institute experience can be said to have had a very meaningful impact. Again it must be said the proof of the pudding will be when the teacher attempts to put these understandings into practice. But unless he feels he has learned something of value, he will not even try.

Finally, it will be recalled that the participants' self-estimate of the impact of the Institute is supported by the observations of the staff. Seventy-one percent of the staff members felt that the Institute experience has had a good or excellent impact and another 11% said it was fair or mixed.

*As many psychological studies have shown, new information is often distorted by an individual to fit his existing attitudes, or it may be blocked out altogether. The conditions under which the information is introduced is an all-important valuable.

Summarizing the results on the impact of the Institutes it may be said that they appear to have achieved one of their primary objectives, i.e., giving the participants a greater sense of confidence regarding the teaching of disadvantaged children even though they may not have substantially affected other fundamental attitudes concerning these children.

The fact that 84% of the participants feel readier to teach disadvantaged children as a result of their Institute experience is impressive. On the other hand, it is clear from all our sources of data that there is room for much improvement over the way the Institutes were conducted during the past summer. Considering the fact that it was the very first time the Institutes were run and that the whole project was set up within a six week period at the end of the school year, those involved in the undertaking can justly be proud of their accomplishments. In fact, many of the weaknesses to be discussed below can be attributed wholly, or in large measure, to the pressures of this time schedule.

For the sake of clarity, this presentation will be organized around six topics within which all the major aspects of the Institute may be discussed. These are : program, selection of participants, selection of staff, selection of guest speakers, organization and time schedule, and facilities and equipment. In the course of discussing each topic, recommendations will be made which flow from both the questionnaire data and the first-hand observations made by CUE personnel.

a. Program

A fundamental source of difficulty at the summer Institutes seemed to arise out of a somewhat different emphasis of program objectives as viewed by the staff and by the participants. Both groups acknowledged the importance of, and interaction between, understanding the sociological and psychological dynamics of the disadvantaged child, and translating these understandings

into specific classroom techniques and methods. Our data indicate, however, that the staff tended to perceive the former as the primary objective of the Institutes, while the participants were more interested in the latter. It is hard to tell whether given more time for pre-planning, the staff would have more nearly satisfied the needs of the participants, or whether the staff position represents a basic position that the "Why?" is more important than the "How?."* But the average teacher at the Institutes, although interested in the "Why?" was even more interested in obtaining information of immediate practical value in coping with her class of disadvantaged children.

Perhaps one of the most incisive comments on this issue came from the math-science instructor who said the following concerning program content:

"I would stress the same program content. However, I would give greater emphasis to specific teaching techniques than to philosophy about the disadvantaged. Philosophy should grow organically from a teacher's successful experiences in the classroom. Attitudes can only be reconstructed (if necessary) in such a context. Without the day-to-day ability to teach in the classroom, a teacher will develop negative attitudes and philosophy."

This orientation towards the practical permeates the reactions of the participants to all aspects of the program, and is an underlying determinant of many of their recommendations for changes.

Thus, on the basis of the various sources of data, the following recommendations concerning programming may be made:

(1) Set up several classes of disadvantaged children (or make formal arrangements with existing programs) at a nearby school to provide an increased opportunity for participants to observe master teachers at work with these children.

(2) Provide greater opportunities for participants to practice new curriculum, organization and techniques discussed at the Institute either with classes of disadvantaged children or within the Institute classes themselves.

*In this connection, it is of interest to note that staff members' strongest recommendation is for increasing the amount of specific classroom techniques taught at the Institutes.

(3) Provide ample opportunities for small group discussion of the demonstration and practice lessons after they take place in order to derive most benefit out of them.

(4) Limit the subject courses such as English, math, etc. to the above types of activities and relegate extended discussions of the characteristics of the disadvantaged child to a separate course.

(5) To the extent it is possible, involve each group of participants in the planning of the specific course content. This, of course, would necessitate a certain flexibility in curriculum.

The selection of participants for the Institute

Although the level of involvement of participants was generally quite good, one of the most disconcerting and disruptive forces at work at the Summer Institutes was the presence of participants who were minimally, or not at all, concerned with the objectives of the program and attended solely for the stipend. While it is difficult to make estimates of an individual's motivations some procedure should be set up to screen out the unqualified or uninterested participant, either before or after he reaches the Institute. With a group of participants all of whom are intensely involved in the purposes of the Institute, it is easy to imagine a several-fold increase in the quantity and quality of its accomplishments. If a principle to guide the selection of participants may be summed up in a single phrase, it might be that participation in the Institutes should be made a sign of professional recognition and not a privilege to be enjoyed by all. Thus, the following recommendations are made concerning the selection of participants:

(6) Strictly limit participation to those who are currently teaching disadvantaged children or who are already scheduled to do so in the following fall.

(7) Set up a system of screening participants through questionnaires sent to two members of the applicant's home school. If in two independent

judgements the applicant is considered to be unsuitable for the Institute, he should not be admitted.

(8) The requirements for work at the Institutes should be made very clear to all participants before they enroll. If, in the opinion of the instructors at the Institute the participant is not meeting those requirements, he should not be allowed to continue.

(9) Non-elementary school teachers should be permitted to enroll only in their areas of specialty.

(10) First priority should be given to new and inexperienced teachers, and older teachers who feel the need for a fresh look at methods and curriculum.

(11) If possible, Yeshiva teachers, who face special problems with a different type of non-English speaking disadvantaged child, should be separated into their own groups.

Selection of staff

The staffing of a project such as the Summer Institutes involves some difficult and delicate problems.* Unlike a college classroom where an instructor might be able to "get by", this is not likely to happen in a classroom of professionals at the summer Institutes. As we stressed earlier, most of the teacher-participants at the institutes came to them in the expectation of learning something of immediate value. If the staff members were not able to provide this, it was at once evident to them.

While there is little question regarding the dedication and spirit of the overwhelming majority of the staff members at this year's Institutes, from the questionnaires and observations there is reason to believe that a number fell short of the high standards one would expect of a teacher of teachers.

Undoubtedly the time schedule precluded both a more careful staff selec-

*As for example, having a teacher as a head instructor with a principal as an assistant instructor.

tion process and the opportunity for those selected to plan their work more thoroughly. Under the circumstances, it is remarkable how very effectively the great majority of staff members carried out their assignments.

However, in view of the complexity of the problems involved in educating the disadvantaged, the dedication and enthusiasm of a staff member must be considered a necessary condition but clearly it is not a sufficient one. The standard for the Institute staff must be nothing less than the most creative, experienced, and effective teachers of the disadvantaged that can be found in New York City, and if necessary, even outside it. A staff member must be able to demonstrate, through his own classroom behavior, a thorough familiarity with methods of teaching the disadvantaged in his own subject area and the ability to communicate excitingly, a flexibility regarding his own pedagogical biases and a sensitivity to the personal interactions of the group.

The participant who comes to the Institute fired with a thirst to learn new ways to reach the disadvantaged and gets a rehash of old lesson plans may be psychologically worse off than if he had not come at all. The goal at the Institutes must be to minimize or eliminate completely the possibility of this happening.

It is suggested, therefore, that no other considerations besides excellence as a master teacher of the disadvantaged be allowed to enter into the staff selection process.* To this end a careful, long-range and thoroughly objective screening process should be instituted.

*For example, 37% of that year's instructional staff were assistant principals. While one would normally expect A.P.'s. to be better qualified than most teachers, they did seem to be present on the staff very disproportionately to their numbers in the teacher population.

The following recommendations for staff selection procedures are therefore suggested:

(12) Staff members should have extensive experience teaching disadvantaged children and should be currently teaching the disadvantaged, or have done so in the not-too-distant past.

(13) Staff members should be assigned to teach only in their areas of specialty and to participants of the same grade level experience as their own.*

(14) Experts in each of the subdivisions of the courses should be present on each center staff (e.g. "reading skills" specialist a "related language arts" specialist, and a "non-English" specialist should be present in each English team.) In addition, a specialist in the full range of A-V equipment should be on the staff of each center.

(15) The screening process to find the best teachers of the disadvantaged should be set up early in the school year so that summer vacation plans will not have been fixed by the time final staff appointments are made.

(16) The applications of all potential staff members should be screened by an impartial committee. Interviews should be held with the best applicants and, if time allows, observations should be made of their classroom performance.

(17) Staff selection should be completed early enough in the school year to allow ample opportunity for pre-planning of curriculum and organization.

(18) Every effort should be made to provide for a racially integrated staff at each center, particularly in courses such as Urban Studies or Social Science.

d. Selection of Guest Speakers

Guest speakers can, in effect, be considered extensions of the Institute staff, the main difference being that they can provide a level of expertise in a given area which the resident staff cannot. This expertise may be the product of academic research or it may arise out of long years of personal

*52% of the staff of the 1966 Summer Institutes were from junior high schools or high schools while approximately 70% of the participants were elementary school teachers.

experience with a problem. (Some of the most effective guest speakers this summer were neighborhood people who came to discuss their lives in the ghetto.)

Because guest speakers occupy a special role, the participants expect more from them, and perhaps judge them even more critically because of it. And it is not surprising to find that those who speak on topics concerning new curriculum and classroom techniques are highly appreciated.

The majority of guest speakers on the program during this past summer were generally well received by the participants, and a little less so by the staff. However, there apparently were some glaring exceptions to fairly high level performance of this majority, and in several instances the speakers left their audiences with a bitter feeling resulting from a non-constructive assault on the teaching profession.

Another problem regarding speakers is that often participants would have to listen to discussions of topics on a completely different grade level or course area and would feel this was a waste of time for them.

Finally, it was apparent that the scheduling of speakers presented some difficulties and that much time and effort was wasted trying to find available speakers for each session. This was probably due both to the lack of time available for pre-planning and the busy schedules of many of the speakers.

The recommendations in this area follow, quite obviously, from the above discussion:

(19) Speakers who would be available to all centers should be carefully screened by a special committee which would be functioning well before the opening of the Institutes so that schedules could be set up well in advance.

(20) A speaker in a specific course area and grade level should have an audience composed of suitable participants.

(21) Speakers should represent diverse points of view and background. (The use of local community speakers can demonstrate the kind of thing that might be done with classes of disadvantaged children.)

e. Organization and Time Schedule

The major difficulty in the areas of organization and scheduling stemmed from three main sources: (a) the inadequate amount of time allotted to cover the course content, (b) the overlapping which occurred when each course considered some of the same background material on the learning process of the disadvantaged child, and (c) where and how participants use their afternoon hours.

The problem of inadequate time has to take into account three other considerations. The first is that a whole morning was usually taken up at the opening of each session for the filling out of various forms and the orientation given to new participants. The second is that the large lecture classes often made it difficult to cover ground that was of salient interest to all participants. And the third is that the speakers and trips, valuable as they might be, cut sharply into the time available for the morning discussions.

While there must be adequate time to cover essential topics, it is felt that a relatively short course session creates a certain atmosphere of intensity of work where "every minute counts." This mood itself may be a very valuable source of motivation that could become dissipated if the sessions were overly extended. With the above considerations in mind, the following recommendations are made concerning the organization and time schedule of the Institutes:

(22) Each of the courses should meet for not more than three weeks.

(23) Establish Urban Studies as a prerequisite to all other courses and, if possible, offer it as an in-service course during the Spring. In Urban Studies should be considered all issues regarding a better understanding of the disadvantaged child, including the topic of class discipline.

(24) The fundamental organizational unit of the Institutes should be the small group workshops, divided into two or three grade levels, depending on the subject matter. The larger groups should meet only for special guest lectures or for occasional over-views of the curriculum of several grade levels to give the participant a broader perspective.

(25) Devote every morning of each course to intensive small group workshops and demonstrations on techniques, curriculum, methods, etc. Instructors with sub-specialties would rotate to each of the groups for one or more days at a time.

(26) Devote the afternoons to guest speakers, presentations of publishers' representatives, films, local trips, etc.

(27) Separate math and science into two separate courses.

(28) Limit the entire period of the Institutes to six weeks so that the staff and those participants enrolled in all six weeks can have a "breather" both before and after the sessions.

(29) Gear the total number of participants who may enroll in each subject at each center to the demands for the course instead of establishing a fixed number of courses in a given subject at each center.

(30) Limit the small groups to not more than 12 to 15 participants so that frequent active participation by every member of the group will be possible.

(31) Daily assignments should be eliminated, but the participants should be responsible for presenting at least two demonstration lessons each during the two week course.

f. Facilities and Equipment

It will be recalled from the body of this report that the problems in this area are clear-cut, and were traceable mainly to the shortage of planning time. Furthermore, their remedies are so obvious that no extended discussion is required. Hence, at the risk of stating the obvious, they may be listed as follows:

(32) Arrangements must be made with the Institutes' host schools to make all necessary A-V equipment, office equipment, etc., available to the Institute staff. Expendable materials should be provided by the Institute.

(33) Library facilities at the centers must be enlarged and overnight use of books allowed. Assignments should be made, if possible, to have participants use nearby university libraries.

(34) Centers should be located in or near disadvantaged areas so that participants will more readily be able to get to various summer programs run in these areas, and so that contacts with the community will be made easier.

Summary and Conclusions

On the basis of the data collected in the course of this study it is the writer's opinion that the Summer Institutes for Teachers of the Disadvantaged has the potential for becoming one of the most significant of all current efforts to more effectively reach children of the inner city schools.

The basis for such optimism stems from both observations of the accomplishments of the initial program this past summer and from a projection of what could be accomplished under less pressured circumstances.

Assuming for the moment that the conditions under which the program might operate could approach the ideal, it is hard to imagine a more propitious set of elements in a learning situation. On the one side are the participant teachers who have been finding their work with disadvantaged children less than rewarding, and consequently are very strongly motivated to find new tools to cope with their problem. On the other side are the highly skilled master teachers who have long been employing successful methods and understandings in their work with these children. If these elements are brought together within a tightly-knit, well-organized, intensive series of daily discussions, demonstrations, opportunities for practice, etc. and the participants in the program are relieved of any financial burden arising out of attendance at the program, it should produce a most meaningful result.

In view of the incredibly short period available for planning, the 1966 Summer Institutes appears to have made a most impressive beginning toward the goal of better preparing teachers of the disadvantaged for their jobs. Although some underlying attitudes toward teaching disadvantaged children do not seem to have been affected by the Institute experience, it was found that the vast majority of participants now do feel more prepared to teach this type of child. In itself, this must be considered an extremely important accomplishment. Moreover, the spirit and enthusiasm typifying the majority of both staff and participants in this initial program amply demonstrates the extent to which the Institutes were filling a fundamental need. But having said this, it must also be recognized that the accomplishments of this past summer, impressive as they are, are just a beginning.

On the basis of responses to the questionnaires, and our own observations of the program, some suggestions have been offered in the preceding section as to how future Institutes might move toward the "ideal" set of circumstances noted earlier. These suggestions will not be repeated here, but it is considered worthwhile to reemphasize the importance of the screening procedures for both staff and participants, since the value of the Institutes clearly hinges on these two factors more than anything else. With a carefully screened staff of master teachers and a group of participants whose primary motive is to increase their capabilities as teachers of the disadvantaged, there is little question that the Summer Institutes could become one of the most important operational centers in the city for the training of new teachers and the upgrading of skills of experienced ones. Given the dedication and competence of those responsible for the first institute program, and given sufficient pre-planning time, it is difficult to imagine that the Summer Institutes will not fulfill their promise.

APPENDIX

LIST OF TABLES

TABLE A1

TWO-WAY ANALYSIS OF VARIANCE TABLES FOR EXPERIMENTAL TREATMENT BY CENTER (ORIGINAL FACTOR MEANS AS CRITERION VARIABLE).

	SS	df	Variance estimate	F
Factor I				
Exptl. Treatment	375.55	1	375.55	17.11**
Center	612.75	9	68.08	3.10*
Interaction	408.82	9	45.42	2.07*
Within	20626.80	940	21.94	
Total	22077.93	959	23.02	
Factor II				
Exptl. Treatment	138.28	1	138.28	21.66**
Center	138.35	9	15.37	2.41*
Interaction	210.60	9	23.40	3.66*
Within	6001.72	940	6.38	
Total	6457.58	959	6.73	
Factor III				
Exptl. Treatment	73.30	1	73.30	.46
Center	8.13	9	.90	.57
Interaction	19.25	9	2.14	1.36
Within	1484.04	940	1.58	
Total	1511.48	959	1.58	
Factor IV				
Exptl. Treatment	.08	1	.08	.02
Center	64.94	9	7.22	2.04
Interaction	45.25	9	5.03	1.42
Within	3319.94	940	3.53	
Total	3422.86	959	3.57	

* Significant at .05 level
** Significant at .01 level

TABLE A2

TWO-WAY ANALYSIS OF VARIANCE TABLES FOR EXPERIMENTAL TREATMENT BY COURSE (ORIGINAL FACTOR MEANS AS CRITERION VARIABLE).

	SS	Factor I df	Variance estimate	F
Exptl. Treatment	136.19	1	136.19	6.08*
Course	530.47	4	132.62	5.92**
Interaction	161.56	4	40.39	1.80
Within	21275.75	950	22.40	
Total	22077.93	959	23.02	
		Factor II		
Exptl. Treatment	48.27	1	48.27	7.57**
Course	279.67	4	69.92	10.97**
Interaction	77.12	4	19.28	3.02*
Within	6055.61	950	6.37	
Total	6457.58	959	6.73	
		Factor III		
Exptl. Treatment	.98	1	.98	.63
Course	6.30	4	1.57	1.01
Interaction	15.88	4	3.97	2.54*
Within	1482.40	950	1.56	
Total	1511.48	959	1.58	
		Factor IV		
Exptl. Treatment	.25	1	.25	.07
Course	11.41	4	2.85	.80
Interaction	12.60	4	3.15	.88
Within	3387.91	950	3.57	
Total	3422.86	959	3.57	

*Significant at .05 level
** " " .01 "

TABLE A3

TWO-WAY ANALYSIS OF VARIANCE TABLES FOR EXPERIMENTAL TREATMENT BY PUBLIC OR NON-PUBLIC SCHOOL TEACHER (ORIGINAL FACTOR MEANS AS CRITERION VARIABLE).

	SS	df	Variance estimate	F
		Factor I		
Exptl. Treatment	65.86	1	65.86	3.13
Type of school	147.16	2	73.58	3.50*
Interaction	24.40	2	12.20	.58
Within	20080.35	954	21.05	
Total	22077.93	959	23.02	
		Factor II		
Exptl. Treatment	53.99	1	53.99	8.92**
Type of school	47.31	2	23.65	3.91*
Interaction	26.64	2	13.32	2.20
Within	5770.78	954	6.05	
Total	5897.58	959	6.73	
		Factor III		
Exptl. Treatment	.47	1	.47	.30
Type of school	6.12	2	3.06	1.96
Interaction	1.41	2	.70	.45
Within	1484.44	954	1.56	
Total	1511.48	959	1.58	
		Factor IV		
Exptl. Treatment	.00	1	.00	.00
Type of school	.81	2	.40	.11
Interaction	.44	2	.22	.06
Within	3413.79	954	3.58	
Total	3422.86	959	3.57	

*Significant at .05 level
** " " .01 "

TABLE A4

TWO-WAY ANALYSIS OF VARIANCE TABLES FOR EXPERIMENTAL TREATMENT BY GRADE LEVEL (ORIGINAL FACTOR MEANS AS CRITERION VARIABLE).

	SS	Factor I df	Variance estimate	F
Exptl. Treatment	157.40	1	157.40	6.95**
Grade level	162.69	3	54.23	2.40
Interaction	12.80	3	4.27	.19
Within	21547.72	952	22.63	
Total	22077.93	959	23.02	
		Factor II		
Exptl. Treatment	105.96	1	105.96	16.21**
Grade level	15.59	3	5.20	.80
Interaction	21.23	3	7.08	1.08
Within	6223.08	952	6.54	
Total	6457.58	959	6.73	
		Factor III		
Exptl. Treatment	.30	1	.30	.19
Grade level	6.21	3	2.07	1.32
Interaction	.32	3	.11	.07
Within	1496.35	952	1.57	
Total	1511.48	959	1.58	
		Factor IV		
Exptl. Treatment	10.45	1	10.45	2.92
Grade level	3.21	3	1.07	.30
Interaction	9.06	3	3.02	.84
Within	3408.03	952	3.58	
Total	3422.86	959	3.57	

**Significant at .01 level

TABLE A5

TWO-WAY ANALYSIS OF VARIANCE TABLES FOR
EXPERIMENTAL TREATMENT BY YEARS TEACHING EXPERIENCE
(ORIGINAL FACTOR MEANS AS CRITERION VARIABLE).

	SS	df	Variance estimate	F
Factor I				
Exptl. Treatment	135.81	1	135.81	6.10**
Yrs. teaching exp.	284.75	5	56.95	2.56*
Interaction	76.47	5	15.29	.69
Within	21105.99	948	22.26	
Total	22077.93	959	23.02	
Factor II				
Exptl. Treatment	72.74	1	72.74	11.58**
Yrs. teaching exp.	127.68	5	25.51	4.06*
Interaction	39.96	5	8.00	1.27
Within	5955.84	948	6.28	
Total	6457.58	959	6.73	
Factor III				
Exptl. Treatment	.45	1	.45	.29
Yrs. teaching exp.	8.93	5	1.79	1.15
Interaction	6.01	5	1.20	.77
Within	1471.92	948	1.55	
Total	1511.48	959	1.58	
Factor IV				
Exptl. Treatment	.82	1	.82	.23
Yrs. teaching exp.	10.29	5	2.06	.57
Interaction	11.84	5	2.37	.66
Within	3403.96	948	3.59	
Total	3422.86	959	3.57	

*Significant at .05 level
** " " .01 "

TABLE A6

TWO-WAY ANALYSIS OF VARIANCE TABLE FOR
EXPERIMENTAL TREATMENT BY YEARS TEACHING DISADVANTAGED CHILDREN
(ORIGINAL FACTOR MEANS AS CRITERION VARIABLE).

	SS	Factor I df	Variance estimate	F
Exptl. Treatment	51.24	1	51.24	2.26
Yrs. teaching d.c.	297.44	5	59.49	2.63*
Interaction	34.58	5	6.92	.31
Within	21469.30	948	22.65	
Total	22077.93	959	23.02	
		Factor II		
Exptl. Treatment	93.07	1	93.07	14.35**
Yrs. teaching d.c.	342.25	5	68.45	10.55**
Interaction	56.57	5	11.31	1.74
Within	6148.57	948	6.49	
Total	6457.58	959	6.73	
		Factor III		
Exptl. Treatment	1.16	1	1.16	.74
Yrs. teaching d.c.	3.03	5	.61	.36
Interaction	5.61	5	1.12	.71
Within	1499.43	948	1.58	
Total	1511.48	959	1.58	
		Factor IV		
Exptl. Treatment	6.73	1	6.73	1.88
Yrs. teaching d.c.	8.12	5	1.62	.45
Interaction	14.16	5	2.83	.79
Within	3397.14	948	3.58	
Total	3422.86	959	3.57	

*Significant at .05 level
** " " .01 "

Table A7

Factor I Score Means of Experimental and Control Groups by Course Taken

	Experimental			Control		
Course	N	Mean	S.D.	N	Mean	S.D.
English	139	5.87	4.76	61	4.98	5.22
History & Social Studies	143	5.44	5.02	64	4.31	4.82
Urban Studies	159	5.59	4.17	86	5.28	4.53
Math & Science	139	6.57	4.42	101	4.12	4.68

Factor II Score Means of Experimental and Control Groups by Course Taken

	Experimental			Control		
Course	N	Mean	S.D.	N	Mean	S.D.
English	139	4.24	2.51	61	3.93	2.38
History & Social Studies	143	4.13	2.48	64	3.61	2.60
Urban Studies	159	4.72	2.41	86	3.65	2.51
Math & Science	139	4.17	2.07	101	2.88	2.90

Table 40

Factor I Score Means of Experimental and Control Groups by Public or Non-Public School Teacher

Type of School	Experimental			Control		
	N	Mean	S.D.	N	Mean	S.D.
Public	472	6.41	4.32	254	5.32	4.50
Non-Public	133	3.19	5.23	89	2.32	4.98

Factor II Score Means of Experimental and Control Groups by Public or Non-Public School Teacher

Type of School	Experimental			Control		
	N	Mean	S.D.	N	Mean	S.D.
Public	472	4.57	2.20	254	3.88	2.49
Non-Public	133	2.89	2.95	89	2.03	2.70

Table A9

Factor I Score Means of Experimental and Control Groups by Grade Level

	Experimental			Control		
Grade Level	N	Mean	S.D.	N	Mean	S.D.
1 - 6	372	5.37	4.96	198	4.36	4.97
7 - 9	198	5.64	4.39	116	4.55	4.49

Factor II Score Means of Experimental and Control Groups by Grade Level

	Experimental			Control		
Grade Level	N	Mean	S.D.	N	Mean	S.D.
1 - 6	372	3.98	2.59	198	3.22	2.73
7 - 9	198	4.47	2.35	116	3.65	2.68

Table A10

Factor I Score Means of Experimental and Control Groups by Years Teaching Experience

Years Teaching Experience	Experimental			Control		
	N	Mean	S.D.	N	Mean	S.D.
0 - 2	152	5.75	4.27	79	4.52	5.20
3 - 5	173	5.61	4.74	92	4.97	4.17
6 - 9	135	5.55	4.98	72	5.42	4.39
10 - 20	121	6.45	4.69	74	4.37	4.90
Over 20	29	3.33	5.27	27	1.03	4.88

Factor II Score Means of Experimental and Control Groups by Years Teaching Experience

Years Teaching Experience	Experimental			Control		
	N	Mean	S.D.	N	Mean	S.D.
0 - 2	152	4.21	2.23	79	3.19	2.67
3 - 5	173	4.39	2.31	92	3.95	2.27
6 - 9	135	4.45	2.67	72	4.01	2.42
10 - 20	121	4.01	2.75	74	3.26	2.79
Over 20	29	2.70	2.96	27	.70	2.78

Table All

Factor I Score Means of Experimental and Control Groups by Years Teaching Disadvantaged

Years Teaching Experience	Experimental			Control		
	N	Mean	S.D.	N	Mean	S.D.
0 - 2	217	5.53	4.60	136	4.04	4.79
3 - 5	197	5.61	4.83	90	5.02	4.59
6 - 9	102	6.42	4.58	60	4.78	4.65
10 - 20	73	6.15	5.01	42	5.04	5.10
Over 20	6	3.18	3.20	5	1.94	4.90

Factor II Score Means of Experimental and Control Groups by Years Teaching Disadvantaged

Years Teaching Experience	Experimental			Control		
	N	Mean	S.D.	N	Mean	S.D.
0 - 2	217	4.11	2.39	136	3.32	2.64
3 - 5	197	4.38	2.44	90	3.78	2.47
6 - 9	102	4.34	2.67	60	3.52	2.69
10 - 20	73	4.15	2.50	42	3.18	2.74
Over 20	6	2.32	2.34	5	-1.04	2.44

Table A12

Two-way analysis of variance tables for experimental treatment by Center (adjusted factor means as criterion variable)

	SS	df	Variance estimate	F	
FACTOR I					
Exptl. treatment	42.54	1	42.54	2.12	
Center	608.61	9	67.62	3.38	**
Interaction	299.23	9	33.24	1.66	
within	18794.56	940	19.99		
Total:	19825.24	959	20.67		
FACTOR II					
Exptl. treatment	3.82	1	3.82	.66	
Center	123.29	9	13.70	2.37	*
Interaction	163.16	9	18.13	3.13	**
Within	5427.17	940	5.77		
Total	5681.63	959	5.92		
FACTOR III					
Exptl. treatment	.011	1	.011	.00	
Center	8.25	9	.92	.59	
Interaction	16.68	9	1.85	1.20	
Within	1451.48	940	1.54		
Total:	1474.71	959	1.54		
FACTOR IV					
Exptl. treatment	1.17	1	1.17	.33	
Center	64.81	9	7.20	2.06	
Interaction	41.72	9	4.64	1.32	
Within	3290.89	940	3.50		
Total:	3390.28	959	3.54		

*Significant at .05 level
** " " .01 "

Two-way analysis of variance tables for experimental treatment by course (adjusted factor means as criterion variable)

FACTOR I

	SS	df	Variance estimate	F
Exptl. treatment	28.61	1	28.61	1.41
Course	3.24	3	1.08	.05
Interaction	100.97	3	33.66	1.66
Within	17877.41	884	20.22	
Total:	18029.61	891	20.24	

FACTOR II

Exptl. treatment	9.10	1	9.10	1.59
Course	2.48	3	.83	.14
Interaction	33.17	3	11.06	1.93
Within	5071.22	884	5.74	
Total:	5119.25	891	5.75	

FACTOR III

Exptl. treatment	.01	1	.01	.00
Course	1.57	3	.52	.34
Interaction	21.32	3	7.11	4.64 **
Within	1353.89	884	1.53	
Total	1377.24	891	1.55	

FACTOR IV

Exptl. treatment	.0003	1	.0003	.00
Course	1.19	3	.40	.11
Interaction	10.99	3	3.66	1.14
Within	3121.04	884	3.53	
Total:	3132.52	891	3.52	

**Significant at .01 level

Table A14

Two-way analysis of variance tables for experimental treatment by public or non-public school teacher (adjusted factor mea as criterion varia

FACTOR I

	SS	df	Variance estimate	F
Exptl. treatment	9.85	1	9.85	.48
Type of school	17.78	1	17.78	.87
Interaction	.46	1	.46	.02
Within	19337.78	944	20.48	
Total:	19376.51	947	20.46	

FACTOR II

Exptl. treatment	4.37	1	4.37	.74
Type of school	6.42	1	6.42	1.09
Interaction	.48	1	.48	.08
Within	5540.33	944	5.87	
Total:	5551.30	947	5.86	

FACTOR III

Exptl. treatment	.06	1	.06	.04
Type of school	1.13	2	.57	.37
Interaction	.80	2	.40	.26
Within	1459.53	944	1.55	
Total:	1463.16	949	1.54	

FACTOR IV

Exptl. treatment	4.48	1	4.48	1.26
Type of school	3.20	2	1.60	.45
Interaction	15.91	2	7.96	2.24
Within	3347.86	944	3.55	
Total:	3359.74	949	3.54	

Table A15

Two-way analysis of variance tables for experimental treatment by grade level taught (adjusted factor means as criterion variable)

FACTOR I

	SS	df	Variance estimate	F
Exptl. treatment	18.04	1	18.04	.87
Grade level	108.92	2	54.46	2.62
Interaction	1.65	2	.83	.04
Within	19613.58	944	20.78	
Total	19706.20	949	20.77	

FACTOR II

Exptl. treatment	17.95	1	17.95	3.02
Grade level	1.92	2	.96	.16
Interaction	19.75	2	9.87	1.66
Within	5609.75	944	5.94	
Total:	5633.06	949	5.94	

FACTOR III

Exptl. treatment	.06	1	.06	.04
Grade level	1.13	2	.57	.37
Interaction	.80	2	.40	.26
Within	1459.53	944	1.55	
Total:	1463.16	949	1.54	

FACTOR IV

Exptl. treatment	4.48	1	4.48	1.26
Grade level	3.20	2	1.60	.45
Interaction	15.91	2	7.96	2.24
Within	3347.86	944	3.55	
Total:	3359.75	949	3.54	

Table A16

Two-way analysis of variance tables for experimental treatment by years of publ c experience (adjusted factor means criterion variable)

FACTOR I

		SS	df	Variance estimate	F
Exptl. treatment		36.43	1	36.43	1.78
Yrs. teaching exp.		344.24	4	86.06	4.20 **
Interaction		115.70	4	28.93	1.41
	Within	19358.14	944	20.51	1.41
	Total:	19688.36	953	20.66	

FACTOR II

Exptl. treatment		15.04	1	15.04	2.59
Yrs. teaching exp.		203.06	4	50.76	8.75 **
Interaction		52.48	4	13.12	2.26
	Within	5474.49	944	5.80	
	Total:	5631.25	953	5.91	

FACTOR III

Exptl. treatment		.02	1	.02	.02
Yrs. teaching exp.		13.90	4	3.48	2.26
Interaction		2.46	4	.62	.40
	Within	1448.56	944	1.53	
	Total:	1470.	953	1.54	

FACTOR IV

exptl. treatment		.01	1	.01	.00
Yrs. teaching exp.		[illegible]	1	[illegible]	[illegible]
[illegible]		[illegible]	1	[illegible]	[illegible]
	Within	[illegible]	[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]	[illegible]	

Two-way analysis of variance tables for experiemental treatment by years of teaching disadvantaged children (adjusted factor means as criterion variable

FACTOR I

	SS	df	Variance estimate	F
Exptl. treatment	17.75	1	17.75	.86
Yrs. teaching d.c.	199.45	4	49.86	2.41*
Interaction	20.55	4	5.14	.25
Within	18984.63	918	20.68	
Total:	19103.32	927	20.61	

FACTOR II

Exptl. treatment	31.24	1	31.24	5.36 *
Yrs. teaching d.c.	242.08	4	60.52	10.38 **
Interaction	91.54	4	22.89	3.93 *
Within	5349.90	918	5.83	
Total:	5458.74	927	5.89	

FACTOR III

Exptl. treatment	.11	1	.11	.71
Yrs. teaching d.c.	.16	4	.04	.27
Interaction	.43	4	.11	.70
Within	141.79	918	.15	
Total:	142.75	927	.15	

FACTOR IV

Exptl. treatment	.26	1	.26	.73
Yrs. teaching d.c.	1.05	4	.26	.74
Interaction	1.10	4	.28	.78
Within	325.26	918	.35	
Total:	327.44	927	.35	

*Significant at .05 level
** " " .01 "