A tutoring program developed for first grade inner city children, employing student teachers as tutors, is evaluated in this report. Tutoring had no discernible effect on performance of the Illinois Test of Psycholinguistic Ability. However, tutored children were placed in the highest reading group, and were rated as having completed the first grade reading series more often than control students, by the regular classroom teacher. Tutors saw their children as becoming more responsive over time. Classroom teachers rated the tutored children as more competent in the classroom, more confident, and as viewing the classroom as more benevolent. The student teachers, in contrast to controls in the group from which the student teachers were selected, maintained favorable attitudes toward teaching in the inner city, and they claimed to have benefited in practice teaching from their tutoring experience. However, relatively few actually took teaching positions in inner city schools after completing their training. Tables giving test results are included.
Abstract

A tutoring program for first grade inner city children, employing student teachers as tutors, was developed and evaluated. Tutoring had no discernible effects on performance on the Illinois Test of Psycholinguistic Ability. However, tutored children were placed in the highest reading group, and were rated as having completed the first grade reading series more often than controls, by the regular classroom teacher. Tutors saw their children as becoming more responsive over time. Classroom teachers rated the tutored children as more competent in the classroom, more confident and as viewing the classroom as more benevolent.

In contrast to controls, student teachers maintained favorable attitudes toward teaching in the inner city, and they claimed to have benefitted in practice teaching from their tutoring experience. However, relatively few actually took teaching positions in inner city schools after completing their training.
Thus far, the war on poverty, with its emphasis on the inner city population, has stimulated but a few, small programs in teacher education institutions to prepare teachers to work in inner city schools (Haubrich, 1963; Knapp, 1965; Kornberg, 1963; Rivlin, 1965; U.S. Department of Health, 1964).

This dearth of specialized teacher training programs at the level of the teacher training institution reflects an important lack in the total antipoverty program. The sequence of failure - discouragement - drop-out - social liability begins in the earliest elementary school grades, and grows as a child progresses through school (Passow, 1963). New programs are needed but no program in the schools can hope to be fully successful unless it reaches a receptive, prepared classroom teacher. Authorities (Sexton, 1961) are also in agreement that inner city schools are often experienced as difficult and undesirable working situations by young teachers who are inclined to leave such situations as soon as they can qualify for "better" schools. Others such as Clark (1965), on little evidence, go so far as to say it is the attitude of the inner city teacher
which is responsible for the poor academic showing of children in the inner city school. Current research and the opinion of authorities (Passow, 1963; Rivlin, 1965) agree the classroom teacher is the heart of any program in the schools.

Because of the need to train people to work specifically in the inner city, and because of the need to provide attention on a preventive basis to individual children, the Yale Psycho-Educational Clinic, (Sarason et al, 1966) in cooperation with Southern Connecticut State College, conducted a special project in an inner city school. The model is one in which the junior year student is assigned to a first grade classroom for a full year. Each student in turn takes the usual nine week full time practice teaching period in that room, but that nine week practice teaching period is supplemented by a year long supervised experience in tutoring an individual child, and by additional observation in the school and neighborhood.

The supervision is provided by an experienced and successful classroom teacher and is supplemented by a monthly seminar. In this seminar the students working in each of the classrooms have an opportunity to discuss their experiences openly and fully. A consulting psychologist and the supervising teacher, use the seminar to focus on issues relating to interpersonal relationships, the family, the neighborhood, problems in urban education, relations with community agencies and with community action programs.

The program is designed to render a distinct service to children. Individual help received early in a child's school career conceivably could make an important difference to that child's educational future. For some children, that amount of additional individual time
may very well mean the difference between educational success and educational failure. The design of the program tests a preventive model in which the emphasis is on gaining skills which can avert failure.

The Student Teachers.

Twenty-five students were selected from among the junior class, upon the basis of interest in the area, background in sociology, psychology or other social sciences, and sufficiently good academic standing so that the students could safely give the additional time from their regular studies. The students were invited to participate, after personal interviews with faculty supervisors. Recruiting students for the program by invitation helped to give the program additional status in the eyes of the students and added to their motivation to participate.

Students were introduced to the program and to their master teachers in late May, at a formal tea and given a brief, selected reading list on problems and practices in urban education. During the first week of school, the following September and preceding the opening of school, the students were invited to help set up the rooms and witness the opening days. During the first month of school, the students come in once a week in order to observe in the classroom. By the first week in October, the children to be tutored were selected by the classroom supervising teacher and the psychological consultant. As many home visits as possible were made during the month of November. Tutoring, one hour a week, was continued through the school year.
The children to be tutored were selected by the classroom supervising teacher and the consulting psychologist by October 1. The children were selected on the basis of the teacher's opinion that the child presented a potential learning problem. Her opinion was based upon the first month's experience, and upon previous school records. Reading readiness tests which are available were consulted, but were not weighted heavily. In general, the teacher tried to select children who seem to have learning potential which can be brought out by the amount of tutoring time available.

It can be pointed out parenthetically that one could with almost as much logic select children at random. Available statistics (Sexton, 1961; Passow, 1963; John, 1964) suggest that about two out of three inner city children by second grade will tend to fall a year below norms for children in schools in economically better off neighborhoods. The differential increases through the elementary school years.

Day by day supervision of the student's work was carried out by the classroom supervising teacher who was available to suggest approaches and discuss problems with the students as necessary. Supervision is supplemented by having the student prepare a lesson plan and evaluation for each session, and by keeping a diary of her experiences. The College faculty supervisor kept track of the student's experiences by making periodic checks of these documents, and was available to the students for additional conferences as necessary.

Student teachers met with their children once a week, for approximately an hour, although the time was modified as necessary in individual cases. The students worked with the children around their reading, but a friendly relationship conducive to free con-
The Problem of Controls

Controls were necessarily selected from the same classroom as the tutored children, posing distinct problems. A control sample could not be established until the end of the school year. Because residential mobility (Levine, Wesolowski & Corbett, 1966; Levine, 1966) will claim 25 per cent or more of the children in the course of a school year, the final controls were established only by matching tutored and non-tutored children at the end of the year.

At least two kinds of control populations are required. First, a Normal Progress group must be designated, to act as a check on the accuracy of the teacher's judgment that the tutored children indeed would have had difficulty in coping with the first grade work.

An untutored control group, similar in every respect to the tutored group is required to determine whether or not tutoring had any significant impact upon the child's progress in first grade. To obtain such a group, teachers were asked to compile two lists from their classrooms. One was to be composed of children from whom they expected normal progress. The second list was to be composed of twice as many children who could use tutoring as there were tutors available. It was our original plan to assign children to tutors randomly from this list. However, certain considerations did not permit us to carry through this design fully. Several of the teachers, reacting in typically humanitarian fashion, without sufficient concern for scientific asepsis, insisted that certain of their children receive tutoring help, the needs of research design notwithstanding. The pool of children available as controls then is likely to include those who seem more capable, or more adaptable than those who finally were accepted for tutoring.
By and large, teachers tended to assign control children for tutoring whenever a tutored child moved from the school. The pool of untutored controls was thus reduced considerably by the end of the year. In addition, we discovered that student teachers would sometimes spend extra time in the classroom, or would occasionally take other children out for tutoring when their child was absent. In at least one instance, a tutor's boy friend accompanied her to the school, and on several occasions worked with one of the control children. Moreover, the presence of the student teachers week in and week out changes the situation to an unknown degree. When the students came to observe, or to meet with their own children, they frequently had contact with other children in the same classroom. Around holidays, the students would help with parties and provide gifts for all. It would be pointless and impossible to try and minimize this kind of affectionate relationship, but it is necessary to indicate that the controls were not pure controls. What we are describing is a function of the natural situation, and indicates the difficulty in trying to establish laboratory pure controls in field studies.

Initially, we began with 31 children assigned to the Tutoring group, 20 to the Control group and 25 to the Normal Progress group. There were also 31 tutors, 25 juniors, and six seniors who continued on a volunteer basis for a second year.

The Children

All of the children came from a single inner city school. This school is located in an area scheduled for redevelopment.
The rate of transiency in the neighborhood is high. As other areas have been redeveloped, people moving into this neighborhood have tended to be poorer and more disorganized. The rate of families on welfare is very high; estimates indicate that sixty per cent of the children in the school come from families on welfare.

Ages were determined from school records as of the time of initial testing. The children were, on the average, three and a half months into the school year when testing began. At the time of initial testing, the Tutored group averaged 6 years, 9 months; the Control group, 6 years, 7 months; and the Normal Progress group 6 years, 6 months.

The difference between groups is not large, but it tends to reflect the fact that a somewhat larger proportion of those children who had been selected for tutoring had already repeated a previous grade. One third of the 31 children initially designated for tutoring had repeated one previous grade, while five per cent of the Controls and 20 per cent of the Normals had also repeated a grade. It is of interest to note that children who repeat, very often continue to be seen as needing additional help by their teachers. Developmental theorists who argue that grade repetition alone will solve school problems are challenged by such data which suggest that teachers do not necessarily see older children as more competent in their classroom. If anything, the reverse may be true, (Levine & Graziano, in press).

There were no differences in the proportion of boys and girls assigned to the Tutored, the Control and the Normal Groups.
Whites represented less than 20 per cent of the total sample. However, two thirds of all of the white children were assigned to the Normal group with the consequence that 30.8 per cent of the Normal group were white children. In other words, whites were represented in about twice their proportions in the Normal group, and about half their proportion in the Tutored and Control group.

The excess of whites in the Normal group does not represent any prejudice on the part of those selecting the children. An analysis of the test data showed that while the few white children in this sample tended to fall below the norms on the ITPA, in general their performance was markedly superior to that of the Negro children. Although 17 per cent of the total sample was white, not a single child who had repeated a grade was white. We can only infer that in so far as school relevant skills are concerned, white children appear more competent than Negro children in the same classroom. The finding is not startling, of course. It is in keeping with a large body of literature which suggests that Negro children, as a group fare poorly in schools, as schools are presently constituted.

For purposes of this study, it is well to note that white children initially appeared more frequently in the normal control sample. That white children did better on the ITPA, and had been left back less often, is evidence that the Normal Control Sample was indeed more competent appearing in the classroom. The Illinois Test of Psycholinguistic Appitude (ITPA) (McCarthy and Kirk, 1961) was selected because it was our expectation that the tutoring experience
would promote language development. We felt changes in the test scores might reflect growth related to the tutoring experience. We were aware that the ITPI was standardized on a mid-western, predominantly middle class, white sample, but felt that it might be of some help in this study.

The test was administered to all children by an examiner who was not a professional psychologist. The examiner was a 26-year-old Negro male who had had no previous experience with psychological testing, and who was serving as a non-professional research assistant for this project. The project director trained the assistant to administer the test. We were satisfied the examiner performed capably in this role. It is our belief, on the basis of this experience, that non-professionals can be trained to administer individual psychological tests. Such individuals can gain and maintain the necessary rapport, and can be taught to use the test in a standardized fashion.

A total of 76 first grade children from three different rooms in one school were administered the ITPI within the first four months of the school year. Each raw test score was translated into a standard score for the child's age at the time of testing, based on the test's norms. Of the 76 first grade children who were tested, only three had a score which exceeded the median score of the normative group. The children in this sample, both white and Negro, were clearly very far behind the white middle class sample on which the ITPI was standardized.

There were some significant differences between the initial test performance of those children selected for the Tutoring, the Control
and the Normal Progress groups. Average ITA standard scores for
the three groups respectively were .70, 1.03 and 1.51. (In this
instance a standard score of 3.00 would represent the norm.) The
Normal progress group was clearly superior to the other two groups,
indicating that the teachers had selected children on the basis
of classroom behavior, who also performed differently on the in-
dependent test. The test results tend to validate the teacher's
judgments that the children selected for tutoring did need help,
compared to those selected as Normal Progress controls. The fact
that the Control group did slightly better than the Tutoring group
on the ITA probably reflects the non-random assignment to groups.
The teachers' concerns about some of the children they wanted
tutored were apparently well founded. When we finally evaluated
the results of tutoring, tutored and control samples were selected
so that the mean pre-test ITA scores were the same. This initial
difference was not permitted to affect the evaluation of the effect
of tutoring.

The Devereux Elementary School Behavior Rating Scale (DESE)

Because the teachers were familiar with scales and gave grades
for citizenship, effort, etc., we felt it would be possible to ad-
minister the DESB with little preparation. This judgment proved
to be an error. There were marked teacher differences in the use
of the DESB scales, differences which obscure other considerations.
The overall means on the 12 factors of the DESB for the three teachers
combined followed the values for the standardization sample quite
closely. However, there were large consistent differences in the
way in which the three teachers used the scales. We are inclined
to attribute the differences to teachers rather than to differences
in children because as far as we know, the school does not practice homogenous grouping. There was only one significant difference between teachers (classes) on one subtest of the ITPA.

All differences between Tutored, Control and Normal Progress groups on the DESB are obscured by the teacher differences in ratings. However, we noted there were four of 12 factors on which the three groups were significantly different. The Normal progress group was rated as significantly more Creative than the other two groups, as having a greater Need for Closeness to the Teacher, and as having greater need for recognition for Achievement. The Normal Progress group was also rated as having greater Comprehension than the Control group, but not more than the Tutored group. That there are differences between groups is not surprising. In a sense, the differences merely offer another way for the teachers to express their judgments about the children who were assigned to tutoring and to control groups. In general, the Normal Progress group is judged as being more outgoing and more competent in the classroom situation than the other two groups.

The Relationship between the DESB and the ITPA

An extensive correlational analysis was completed in an attempt to find relationships between classroom behavior as measured by the DESB and test performance. In general, the correlations were non-significant or so low as to be relatively meaningless. In the present sample, it seems that performance in isolation with a single supportive examiner elicits different behavior patterns than does the classroom situation. In fact, we are able to show a number of cases in which the teacher reported the child was disruptive, impatient, difficult
to control, and inattentive, but the tutor never observes the same
degree of difficult behavior in the one to one situation away from
the classroom. The failure of the correlational analysis to reveal
important relationships between test behavior and classroom situation
is so small because the test situation is so different from the class-
room situation.

The results of tutoring

According to data obtained from the Tutoring Session Report
Form filled out by the tutors after each session, forty children were
seen for at least one tutoring session. There was a median of ten
sessions per child in the course of the year. In the end, we were
left with 17 children who had had a minimum of ten tutoring sessions
in the course of the school year, and who had also been tested at
the beginning of the school year. In other words, less than half the
number of children available for tutoring had a sufficiently pro-
longed experience to include the child in an evaluative study.

We feel that our experience is not atypical, but should serve
to call attention to the practical problems in operating a tutoring
program with volunteer help. Between losses due to residential
mobility, and losses due to changes in the life circumstances or the
attitudes of the volunteers, a very large sample is needed to assess
the effects of tutoring. The problem is not only confined to tutoring
with volunteers. In psychotherapy research, because of the large
attrition rate, experienced researchers estimate that one can ex-
pect to end with half the number of patients with which one begins.
Tuckman and Lavelle (1959) have shown that the overall attrition rate
at child guidance clinics is around 57 per cent of all cases seen in intake.
The final sample to be evaluated consisted of 17 children who had ten or more tutoring sessions, and for whom we had both pre and post test data. The control sample consisted of 17 children taken from both the Control group and the Normal Progress sample in equal numbers. Again, these were children who had spent the entire year in the same classroom, and we had both pre and post test data for most of them. It was eventually necessary to use a combined sample in order to obtain enough cases matched in enough particulars to constitute a reasonable base for comparison. Since we have already shown that the teachers tended to pick out children who would do better in the classroom, the control group is unusually stringent in this study. To mitigate some of the differences controls were chosen to match the tutored group for initial ITTPA score, for age, for sex, and for race. There were 8 boys in each group. Two white children were included in the Control sample, and three white children were in the Tutored sample. The median age in months for the Tutored sample initially was 79, with a range of 74 to 93. The median age in months for the Control sample was 78 with a range of 72 to 94.

Table 1 shows the effects of tutoring upon ITTPA raw scores. Similar effects or lack of them, were obtained for standard scores as well, and there was little indication of any systematic pattern of differences in subtest scores. In general, the table shows that tutoring had little or no effect upon ITTPA scores. Almost all children tended to improve over the five months or so between tests.
At the end of the year, and without having previous knowledge they were to provide the data, teachers were asked to designate which of their children were in their top, middle and low reading groups, and which of the children had completed which level in the reading series, $1^2$, $1^1$, or Primer-pre primer. The results are presented in the following tables.

Insert Table 2 about here

While of borderline statistical significance, the data strongly suggest that a higher proportion of the Tutored children are seen as reading better, and a lower proportion are in the very poorest groups. We will recall that there were initially many more children who had repeated a grade previously in the Tutored group. The effect we are seeing may well be a function of the larger number of repeaters who are simply doing better. Table 2B shows the same findings even when we omit all children who have previously repeated a grade.

The numbers are too small to permit valid statistical analysis, but in general, we see that the children who were tutored, less often end in the low reading groups, and some end in the highest reading group. The finding holds even when we remove repeaters. First grade teachers state that in general, children who repeat, tend to do very well initially, but they fade as the year goes on and other children catch up with them. Since the results suggest the children who were tutored did not fade, this evidence suggests an effect of tutoring in promoting competence in the classroom.
The next table (Table 3) shows the proportion of children in the two groups who completed different levels in the reading series. The judgment is usually based upon the ease with which the child is able to read aloud, and to demonstrate his comprehension of the material in response to questions.

While the findings are not statistically significant, once again we see the tutoring group has, in the judgment of the classroom teacher, achieved more. A greater percentage completed the reading series for the first grade. Table 3B shows the same outcome, even though we have again removed from consideration all those children who had previously repeated a grade.

We might note that the classroom teacher reviews reading group and book placement decisions regularly, and the evaluation is based upon observation of performance day in and day out. It is not a function of a momentary decision.

We are also interested in the effects of the tutoring program on social and emotional behaviors. Each of the tutors completed a tutoring session report which included thirteen scales to measure aspects of the ongoing relationship. The results from these session reports indicated that students rarely had difficulty with the children. Of more than 450 tutoring sessions, difficulties of any consequence in the sessions are reported no more than 8 or ten times. It is perfectly clear that the students were able to establish and to maintain good working relationships with their children.
We were interested in how the relationship developed over time. To assess this issue, for each child for whom there were a minimum of 10 sessions available, we compared the average rating on each of the thirteen variables for the first five sessions with those for the last five sessions. In two thirds of the instances or more, the relationship was seen as steadily improving over time. Children were seen as friendlier, more talkative, more responsive, and generally more open as the sessions progressed. Discipline problems, which were surprisingly few to begin with, were seen as improving over time, while the learning sessions were also seen as steadily improving. Two thirds of the children were seen as having steadily improving concentration, and as being less resistant to the work of the session. The tutors' ratings of their own enjoyment of the sessions essentially showed no change. They generally reported enjoying the sessions greatly, but with time the enthusiasm and newness wore off, and some of the students were slightly less positive about the sessions than earlier.

From the point of view of the tutors then, as they saw the children in individual sessions, the children generally became more and more responsive. Our own subjective impressions of the eagerness with which the children looked forward to their sessions with their tutors, and of the loving relationship that developed between many of the children and their tutors, bears out the tutors' ratings. It is clear that in one to one relationships, children become more open, friendlier and seem to concentrate better on their school work. We have also presented evidence that there may be some increased academic performance as a consequence of the tutoring ex-
Is there any evidence of behavioral change in the classroom as a consequence of tutoring?

Teachers completed the Devereux Elementary School Behavior Scales (DESB) (Spivack and Swift, 1966) at the beginning of the year and again at the end of the year. The DESB consists of 57 items which fall into 12 factors. The items refer to readily observable classroom behaviors of a rather specific kind. The teachers had little difficulty in rating the items, although we have already indicated there were marked teacher differences in the use of the scales. Because of the marked teacher differences, we used difference scores for each individual child as the measure of change. The simple difference score introduces a crude control for teacher differences in ratings.

The findings are presented in Table 4. A minus sign for the number indicates a change in the direction of lower factor scores. A positive number indicates an increase in factor score. Since we expected the tutoring experience to result in improvement, one tail tests were deemed appropriate.

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Insert Table 4 about here
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The U tests are based upon differences between the combined Control and Normal Samples (C+N) (N=16) and the Tutored Group (N=13). The reduced N, is due to the fact that DESB ratings were not available or complete on all subjects.

From the view point of the teacher in the classroom, compared to the C+N group, Tutored children appear to become more competent academically, they appear to have more confidence in themselves, and they appear to see the classroom as a more benevolent place.
Overactive, attention seeking behavior is not strongly influenced by the tutoring experience.

The fact that the items on which the teachers report change seem consistent, and the fact that change is not reported in all areas is important to note. One of the important weaknesses of this study is the fact that the classroom teacher was involved, and knew which children were being tutored. The teachers' judgments might well have been influenced by that knowledge. The teachers state they were not influenced, and the fact that the changes were rather particular, (emphasizing classroom competence, greater self-confidence, and a view of the classroom as more benevolent) is important evidence supporting their judgment. There is no indication that teachers were simply responding to "goodness," in a general sense, and rating children as better in everything simply because they were tutored.

The teachers' judgment about classroom behavior made on the rating scale is complemented by their judgment in placing more tutored children in the top reading groups, and in their indication that fewer tutored children were reading only at the primer level or below. Similarly, the tutors' judgments that the children became more open, and friendlier with time, and that the quality of the learning sessions improved with time is evidence in support of the view that the children did in fact do better.

The Effect on the Student Teachers

For purposes of this study, a scale measuring attitudes toward teaching in inner city schools was developed. The scale, called Opinions about Inner City Schools, consists of 34 statements de-
scribing feelings about the children, parents, neighborhood, and working conditions. The respondent indicates the degree of his agreement with the items on a six point scale. Items are written in such a way that the agreement with the socially favorable view sometimes requires the respondent to agree with an item and sometimes requires him to disagree with it.

The attitude scale was administered to the group of student teachers at the beginning of the year, and then to most of them again at the end of the year. Those not retested included the few who dropped out of the project, several who failed to put their names on the retested scale so they could not be matched with their previous forms, and several whose schedules were such that we never obtained retests from them. As a control group, we examined one seminar class at SCSC which consisted of thirty-three students. However, by the time we eliminated males, older students, and the few questionnaires which were incomplete, we were left with only 13 usable forms. By the time we noted the problem, it was late in the year and more satisfactory controls were not obtained. We also found it very difficult to contact the control subjects for retest data at the end of the year. Fewer than half of the eligible subjects responded to our requests that they fill in the forms.

Given these difficulties, our controls for student attitude changes are quite inadequate. None the less, we feel it is worthwhile mentioning these data, along with the impressions the master teachers had about student performance.

When compared with the controls, the student teachers who worked in this project generally had more favorable attitudes toward
teaching in the inner city, to a highly significant degree. Since one of the goals of the study was to attempt to attract students into teaching in inner city schools, we examined their responses to the following item: "I would prefer working in an inner city to a suburban school if I had my choice." There was no difference between the attitudes expressed initially and those expressed at the end of the year. Most of the tutors started out with favorable attitudes and at the end of the year continued to have favorable attitudes. The significance of this stability of attitude is found in comparison with the scores shown by the 13 control subjects on this same item.

When we examined the protocols given by the thirteen control subjects, we discovered that eight of them had already had a practice teaching period in an inner city school at the time the attitude scale was filled out. Five had not yet gone out practice teaching. Table 5 shows the difference in attitude toward teaching in the inner city school between those who had already had practice teaching and those who had not yet gone out.

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Insert Table 5 about here

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There is a very strong implication in these data that the usual practice teaching experience takes students who are favorably inclined, even ideistically inclined, toward teaching in the inner city, and turns them off. While these data are relatively inadequate as controls, they strongly suggest that the experience in the tutoring project helped the tutors to maintain favorable attitudes they had originally.
Evaluating from the Student Teacher's Viewpoint

At the end of the year, students were asked to write an evaluation of the project from their viewpoint, anonymously. Fifteen of the students turned in such evaluations.

Almost all of these evaluations mention the benefits to be derived from work with their children. The students report a variety of satisfactions which they obtained from the experience. Many mention that their own professional development was enhanced by the experience. Many indicate that their own anxiety in entering the student teacher role was reduced by their participation in the project. The relationship with the master teacher, the project personnel, and other students seemed important to the student teachers. There were surprisingly few complaints about the experience. Many of those who complained indicated they wished they had been able to have more time with their children, or a more intimate contact with the project and other staff members. It is our impression that the reports were generally positive, both in so far as the experience concerned the work with the children, and the practice teaching period, bearing out our previous experience in a pilot project (Levine, Dunn, and Donlan, 1965).

Two of the seniors have accepted positions in the New Haven schools, and one other accepted a position in an inner city school in another city. Several who had taken suburban jobs have now applied for positions in the city. Their applications are in keeping with statements they made that they would prefer a year of experience in order to be better prepared to cope with urban school problems.
Two others applied for the city schools, but their parents refused to permit them to work in the city, particularly after the disturbances in the high schools. Another factor of importance is that most do their senior year practice teaching in suburban schools where they are readily recruited into a familiar system. We might have gotten more students to accept positions in city schools had we had them during their senior year. The short term effects in recruiting were disappointing when evaluated in terms of numbers.
References


Footnotes

1 This project was supported by a grant from Community Progress, Incorporated, New Haven, Connecticut. The work was completed while the senior author was a member of the Psycho-Educational Clinic of Yale University. We are indebted to S. B. Sarason and our colleagues there for assistance in developing and completing this project.

Mitchell Soovidoff, then Executive Director of CPI, and Frank Corbett, formerly of CPI, and now Assistant Professor of Social Welfare, SUNY at Buffalo encouraged us to develop this project and aided in obtaining support.

John Wesolowski, Principal of Scranton Street School was helpful with difficult administrative problems.

Mr. Robert Smith, currently with ABCD in Bridgeport served ably as the non-professional research assistant and as a clinical aid on the project.

We also are appreciative of the service rendered by our student teachers through the course of this project.
Table 1
Effect of Tutoring on ITPA Raw Scores

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<th>Tutored Group (N=17)</th>
<th>Control + Normal (N=17)</th>
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<td></td>
<td>Pre</td>
<td>Post</td>
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<tr>
<td>Median ITPA</td>
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<td>130</td>
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<tr>
<td>Range</td>
<td>84-139</td>
<td>90-147</td>
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### Table 2

**A. Assignment to Reading Groups**

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<th>Top</th>
<th>Middle</th>
<th>Low</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<td>6</td>
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<tr>
<td></td>
<td>(29.4%)</td>
<td>(35.3%)</td>
<td>(35.3%)</td>
</tr>
<tr>
<td>Control</td>
<td>0</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>(53%)</td>
<td></td>
<td>(47%)</td>
</tr>
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</table>

\[
X^2 = 3.38
\]

\[
df = 2
\]

\[
P = .08, \text{ one tail test}
\]

**B. Assignment to Reading Groups, Omitting all Children who Have Previously Repeated a Grade**

<table>
<thead>
<tr>
<th>Top</th>
<th>Middle</th>
<th>Low</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutored</td>
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<td>6</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>(15%)</td>
<td>(47%)</td>
<td>(38%)</td>
</tr>
<tr>
<td>Control</td>
<td>0</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>(47%)</td>
<td></td>
<td>(53%)</td>
</tr>
</tbody>
</table>

|        | 2      | 13     | 13    | 28    |
Table 3

A. Reading Level Achieved in First Grade Reading Series

<table>
<thead>
<tr>
<th>LEVEL IN READING SERIES</th>
<th>Tutored</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2 Primer or Less</td>
<td>7 (41%)</td>
<td>3 (18%)</td>
</tr>
<tr>
<td>1-1 Primer or Less</td>
<td>7 (41%)</td>
<td>7 (41%)</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>17</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 3.2 \]
\[ df = 2 \]
\[ p = .10, \text{ one tail test} \]

B. Reading Level Achieved in First Grade Reading Series, Omitting All Children Who Had Previously Repeated a Grade

<table>
<thead>
<tr>
<th>LEVEL IN READING SERIES</th>
<th>Tutored</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2 Primer or Less</td>
<td>4 (30.7%)</td>
<td>1 (6.6%)</td>
</tr>
<tr>
<td>1-1 Primer or Less</td>
<td>6 (46.2%)</td>
<td>7 (46.7%)</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>15</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 3.2 \]
\[ df = 2 \]
\[ p = .10, \text{ one tail test} \]
## Table 4

**DESB Changes in the Tutored (T) and Control Plus Normal Samples (C+H)**

<table>
<thead>
<tr>
<th>DESB FACTOR</th>
<th>MEANS DIFFERENCE</th>
<th>U</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PRE AND POST</td>
<td>T</td>
<td>C+H</td>
</tr>
<tr>
<td>1. Classroom Disturbance</td>
<td>1.45 1.25</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>2. Impatience</td>
<td>-1.73 .60</td>
<td>79.0</td>
<td>.10</td>
</tr>
<tr>
<td>3. Disrespect Defiance</td>
<td>-.09 1.12</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>4. External Blame</td>
<td>-1.82 1.50</td>
<td>63.0</td>
<td>.05</td>
</tr>
<tr>
<td>5. Achievement Anxiety</td>
<td>.00 1.31</td>
<td>77.5</td>
<td>.10</td>
</tr>
<tr>
<td>6. External Reliance</td>
<td>-3.55 -.12</td>
<td>71.0</td>
<td>.07</td>
</tr>
<tr>
<td>7. Comprehension</td>
<td>2.18 -.12</td>
<td>66.0</td>
<td>.05</td>
</tr>
<tr>
<td>8. Inattentive Withdrawal</td>
<td>-.64 -.875</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>9. Irrelevant Responsiveness</td>
<td>-1.55 -.50</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>10. Creative Initiative</td>
<td>1.18 -.875</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>11. Need Closeness to Teacher</td>
<td>.73 -1.25</td>
<td>76.5</td>
<td>.10</td>
</tr>
<tr>
<td>12. Need Achievement Recognition</td>
<td>2.73 .825</td>
<td>67.5</td>
<td>.07</td>
</tr>
</tbody>
</table>

U tests are based upon Ns of 13 and 16 in the Tutored and Control plus Normal groups respectively.
Table 5

Difference in Attitude Expressed Toward Desirability of Teaching in Inner City Between Control Ss Tested Before Practice Teaching and After Practice Teaching

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Disagree</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>8</td>
</tr>
</tbody>
</table>

The difference between before and after is significant at p=.05 by Fisher's exact test.