This report evaluates the teacher training and tutorial program in reading in New York City. The program was designed to offer after-school instruction in 13 elementary schools and 4 junior high schools. Three hundred ninety elementary school students and 120 junior high students in grades two through nine participated in the program. Tutorial classes met once or twice a week for a total of two hours with the exception of one junior high school where students met in the morning before the start of regular classes. The program was administered by teachers, paraprofessionals, and high school students who provided individual tutoring for two or three students. The major objective of the evaluation was to determine if, as a result of participation in the program, there was significant improvement in reading comprehension skills. All students were given alternate forms of the Stanford Diagnostic Test on a pre- and post-test basis. The report concluded that the tutorial program in reading was successful in the fourth, sixth, and seventh grades. There was growth in the second, third, fifth, eighth, and ninth grades but these grades did not show significant gains.

(Author/JP)
Teacher Training and Tutorial Program In Reading

Evaluation Period
School year 1975-1976

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THE PROGRAM

The teacher training and tutorial program in reading is designed to offer after-school reading instruction to Elementary School and Junior High School students in District 17, 18, 22, and 23. The program is presently in operation in 13 Elementary Schools and 4 Junior High Schools. The program started in September 1975 and ended in June 1976. In most of the schools, the classes meet for a total of two hours of instruction once or twice per week, after the school day has ended. In one Junior High School, the program meets two days per week, in the morning before the start of regular classes. In the Elementary Schools, there is a teacher in charge, a paraprofessional plus up to 15 student aides, who offer instruction. The student aides are high school students, usually junior and seniors, who are students in four Community High Schools. Each student aide provides individual tutoring in reading for 2 or 3 Elementary School students. There are approximately 160 student aides in the program and they service approximately 390 Elementary School students.

In the four Junior High Schools, there is one teacher in charge and one paraprofessional for each school. There are approximately 120 Junior High School students served.

Each child in the program has been given parental permission to participate in the program. The parents are
continually apprised of their children's progress and the parents are given facts about the program and are invited to meetings, concerning the program.

CHAPTER II

EVALUATION PROCEDURES

To determine if, as a result of participation in the program, there is a statistically significant improvement in all reading skills, including vocabulary, comprehension and phonics of the students in the program.

Subjects:

All participants in the program.

Methods and Procedures:

All participants in the program were given the appropriate level and the alternate forms of the Stanford Diagnostic Test, on a pre-test and a post-test basis.

Data Analysis:

Data was analysed for statistical significance at the .05 level, between the post-test scores on comprehension and the anticipated post-test scores of the Stanford Diagnostic Test.

Time Schedule:

The pre-test was administered during the first week.
of November 1975 and the post-test during the first week of April 1976.

In addition, the evaluator visited each of the seventeen schools, interviewed the teacher in charge, the para professionals and in some cases, the school principal. The after school classes were also observed in operation.

CHAPTER III

EVALUATION OBJECTIVE # 1

Evaluation Objective # 1, to determine if, as a result of participation in the program, there is a statistically significant improvement in the comprehension skills of the students in the program.

FINDINGS

Table I presents the mean and standard deviation of the comprehension scores for grades 2-9 for the post-test score, the pre-test score and the anticipated post-test score.

Inspection of Table I, shows that in grades 3, 4, 5, 6 and 9, the predicted post-test mean is larger than the observed post-test mean. The predicted post-test mean assumed that children's growth in achievement is linear. Inspection of the raw data shows that this assumption does not hold for many of the children in this program. For example, in the third grade, a small portion of the children
**TABLE I**

Summary of Pre, Predicted Post and Observed Post Program Reading Grade Equivalents, by Grade

<table>
<thead>
<tr>
<th>Grade</th>
<th>Pre Test Mean</th>
<th>Pre Test S.D.</th>
<th>Predicted Post Test Mean</th>
<th>Predicted Post Test S.D.</th>
<th>Observed Post Test Mean</th>
<th>Observed Post Test S.D.</th>
<th>Pre Test/Obs. Post t</th>
<th>Predicted/Obs. Post t</th>
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<tbody>
<tr>
<td>2</td>
<td>2.0</td>
<td>1.5</td>
<td>1.8</td>
<td>2.1</td>
<td>2.0</td>
<td>0.50</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2.2</td>
<td>2.93</td>
<td>3.96</td>
<td>2.56</td>
<td>2.56</td>
<td>0.57</td>
<td>2.95**</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4.0</td>
<td>2.79</td>
<td>3.07</td>
<td>0.79</td>
<td>3.41</td>
<td>0.51</td>
<td>1.77</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>4.2</td>
<td>3.25</td>
<td>3.41</td>
<td>0.56</td>
<td>3.41</td>
<td>0.51</td>
<td>3.12**</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>3.4</td>
<td>3.96</td>
<td>4.32</td>
<td>4.30</td>
<td>4.32</td>
<td>0.84</td>
<td>3.64**</td>
<td>2.44**</td>
</tr>
<tr>
<td>7</td>
<td>2.1</td>
<td>3.25</td>
<td>4.28</td>
<td>4.75</td>
<td>4.75</td>
<td>1.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>2.2</td>
<td>3.5</td>
<td>3.70</td>
<td>4.40</td>
<td>4.40</td>
<td>1.57</td>
<td>0.40</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL 180**

**Significant at .01 level**
tested, had test scores on the post-testing, which were lower than the pre-test scores. The effect of these childrens' lowered reading achievement was to lower the mean observed post-test score. Since the anticipated post-test score was based on the assumption of linear growth, this score showed a uniform increase. In those cases, where the observed post-test mean was smaller than the predicted post-test mean, a correlated t test was performed between the observed post-test mean and the pre-test mean.

In grade 7, there was significant growth between the observed post-test mean and the predicted post-test mean. $p < .01$. In grades 4 and 6, there was significant growth between the pre-test mean scores and the post-test mean scores. $p < .01$. In grades 2 and 8, the mean scores show growth. However, the sample size is too small for tests of statistical significance.

There were a number of limitations in the original study design, which also have to be taken into account, in interpreting the results. First, the vocabulary scores could not be used because the Stanford Diagnostic Test, does not have grade equivalent norms, for the vocabulary subtest. Secondly, some of the children who were pre-tested, in November 1975, were no longer in the classes and available for testing in April 1976. In the second grade, the level I of the Stanford Diagnostic Reading Test, was too difficult for most of the second graders. Therefore, they could not
be adequately evaluated with this instrument. These limita-
tions limited the sample size within our population. Never-
theless, the statistically significant results do indicate
that the program is educationally useful for a large number
of children.

**EVALUATION OBJECTIVE #2**

Evaluation Objective #2, to determine the extent
to which the program as actually carried out, coincided with
the program's proposal.

In the evaluation report, the evaluator must make a
statement concerning any discrepancies between the program's
proposal and the actual implementation of the program.

Observations were also conducted at 13 Elementary
Schools and the 4 Junior High Schools, during the period from
February 1, 1976, through April 12, 1976. Many of the teachers
were quite effective and dedicated. A large number of the
children also seemed to be highly motivated for learning.
The tutors were also highly motivated and dedicated. Many
of the tutors, however, had very little knowledge of phonics.
Such knowledge would help them in their work. The materials
used in the classes were varied, adequate and generally
abundant. The physical plant was adequate. In some cases,
communication between the home and the school, seemed to be
lagging and could be improved. For example, post cards could
be sent home when children were absent. There was no discrepancy
between the program proposal and the actual implementation of the program.

Recommendations from 1974-75 Evaluation

The Evaluation for 1974-75, made 5 recommendations:

1. The program should be recycled. Implemented.

2. Plans to carry out all administrative procedures for tutors, at one time; in one place, should be implemented. Implemented.

3. Because the interest of teachers, tutors, and pupils seem to wane, once Spring testing has been concluded, consideration was to have been given to holding more frequent sessions during part of the school year, over a certain period of time. Implemented.

4. Because the teachers are trained and the tutors are not, it would seem to be more effective if the teachers moved from group to group, and the tutors reviewed what the teachers did. The educational assistants could provide more help during the "settling down" period, and return to their paper work, while the teachers, pupils and tutors are at work. Implemented.

5. Future evaluators might want to study the effect that participation has on tutors, e.g. does their GPA or self-esteem improve. Not implemented because this is not part of the official N.Y.C. Board of Education study design.

CHAPTER IV

SUMMARY OF MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Observation of the program in all 13 Elementary
Schools and 4 Junior High Schools, showed that the program was educationally meaningful to a large number of children. A review of test scores, showed that large numbers of children made significant gains in their reading achievement. In the seventh grade, there was a statistically significant increase $p < .01$, between the observed post-test comprehension score and the predicted post-test comprehension. In the fourth and sixth grade, the post-test score, showed a statistically significant gain $p < .01$, over the pre-test score.

Conclusions

The 1975-1976 tutoring program in reading, was found to be successful in the 7th grade and the 4th and 6th grade. There was growth in the 2nd, 3rd, 5th, 8th and 9th grades but it was not statistically significant.

Recommendations

1. Recycle and expand the present program.
2. Future testing should use a test such as the Metropolitan Achievement Test, which has a wide range of difficulty and can more easily accommodate a range from the second to the ninth grade.
3. A handbook for the tutors should be developed to present the tutors with some instruction in phonics, as well as a general orientation to the program.
4. Greater efforts should be made in fostering home-school communication in the children being served in the program, by having post cards sent home when children are absent from the program.
5. Those teachers who are new to the program, should be allowed to visit those teachers, who are more experienced and effective in the program.

6. Those tutors who are new to the program should be allowed to visit those tutors, who are more experienced and effective in the program.