The major goal of the "Learning Tutors Offer Instructional Assistance" project was to effect positive academic, social, and attitudinal changes in the participant. The participants included high school tutors and elementary school tutees who met and worked together on a daily basis. The activities for the tutorial sessions were decided upon cooperatively by the tutor and the tutee's teacher. The sessions took place at "Tutor Stations" which were located in the hallways of the elementary school, in quiet corners of some classrooms, or in unused rooms. To implement the program a preschool training program was conducted to permit the involved staff to develop the tutoring program. Tutoring kits were completed that contained instructional materials and progress charts. Tutors were then trained by the elementary teachers. The tutors were evaluated on the basis of interviews with their parents, their teachers, the tutee's teacher, and the tutors themselves. The experience may have helped to maintain the tutor's academic growth and did enhance their desirable personal qualities. Evaluation of the tutees was conducted by interviews with their parents, their teachers, their peers, and the tutees themselves. The tutees made very satisfactory progress with regard to their personal development and academic performance.

(RC)
End-of-Year Report of
SWITZERLAND COUNTY SCHOOL CORPORATION:
LEARNING TUTORS OFFER INSTRUCTIONAL ASSISTANCE

PROGRAM DESCRIPTION AND EVALUATION

Submitted by:

Dr. Edward M. Wolpert
Ball State University
Program Consultant

and

Dr. Thomas S. Schroeder
Ball State University
Evaluation Consultant

June 30, 1975
PROJECT DESCRIPTION

This report is a summary of the project "Learning Tutors Offer Instructional Assistance" through its second year of implementation. This project is partially funded through Title III, ESEA. It is anticipated that the project will be continued for a third year.

At the outset of this project no specific existing tutoring program had been selected for implementation. The staff of the Switzerland County School Corporation administrative unit and the Jefferson-Craig Elementary School had to develop the program that would be used. Consultant assistance for program development and evaluation was requested from Ball State University. During the first year of the project Dr. Kenneth Carlson served as program consultant and Dr. Edward M. Welpert served as evaluation consultant. At the close of the first year Dr. Carlson left the State of Indiana and the second year had Dr. Welpert serve as program consultant and Dr. Thomas S. Schroeder serve as evaluation consultant.

Project Description

The major goal of this project is to effect positive academic, social and attitudinal changes in the participants. The participants included tutors who are students at Switzerland County High School and tutees who are pupils from Jefferson-Craig Elementary School. (The two schools are in close proximity to each other being separated by an open field which is about 250 yards long.) The goal is to be accomplished by setting up a program where a tutor and a tutee meet and work together on a daily basis. The activities for the tutorial sessions are decided upon cooperatively by the tutor and the tutee's teacher.
Tutors are recruited and selected by the guidance counselor at the high school. The major criterion for the selection of the tutor is whether in the guidance counselor's judgment the tutorial program would be helpful to the total development of that student. Tutees are selected by each elementary school teacher in grades 2-6 on the basis of being underachievers in reading and likely to profit from a tutorial experience. Following the selection of the tutors and tutees assignments are made on the basis of when the tutor has a Study Hall and therefore is available for tutoring and when the tutee's teacher wants the tutorial session to take place.

Tutors meet with tutees at the designated times on a daily basis. The activities deal mostly with the development of reading skills but sometimes other language skills and mathematics find themselves in these tutorial sessions. Tutors who feel capable and are willing sometimes take on additional tutees and provide small (2-3) group instruction although the major thrust of the program is a one-to-one teaching format.

The tutorial sessions take place at "Tutor Stations" which are located in the hallways of the elementary school and in quiet corners of some classrooms or in unused rooms. Tutors are required to sign in and sign out at the secretary's desk when arriving and leaving the building. The secretary maintains all records and bookkeeping associated with the program.

The principal of the elementary school is the Project Director and is responsible for providing leadership to the project and for monitoring its day to day operations.

**Project Implementation - First Year**

A pre-school training program was conducted by Dr. Carlson. The administrative staff and the teachers from Jefferson-Craig Elementary School attended this workshop. This workshop permitted the involved staff to develop the tutoring program to be implemented during the 1973-74 school year.
One session of the workshop was devoted to a review of ten successful tutoring projects in United States schools. The programs reviewed were:

1. Youth Tutor Youth
2. Mobilization for Youth
3. Learning Through Teaching
4. The Cherry Creek Schools Tutoring Project
5. The Soto Street School Project
6. The Pocoima School Project
7. Each One Teach One
8. Ontario-Montclair Schools Tutoring Project
9. Programmed Tutorial Reading Project
10. Pupil Tutor Pupil

These ten projects were selected because all of them focused on objectives similar to the objectives proposed for the Switzerland County project. From the projects the project staff selected implementation procedures and record forms that were the framework for the tutoring program at Jefferson-Craig school.

When agreement was reached as to the best way to implement the tutoring program, the teachers began to build the tutoring kits that the high school students would use. These tutoring kits contained the instructional materials to be used, a tutor folder, a tutee skill needs sheet, a tutor lesson plan sheet, a reading progress card, a Dolch word list, a cumulative word list, and a tutor log.

The instructional materials consisted of supplementary reading skill materials that could be programmed for individualization. These materials include word analysis activities, comprehension exercises, vocabulary and word study activities, a personal word card file, and high interest-low difficulty children's literature books.

The tutor folder was a pocket-type folder designed to hold the daily tutoring materials, the tutee skill needs sheet, the tutor lesson plan, the reading progress card, the cumulative word list, and the tutor log.

The teachers completed the tutee skill needs sheet which served as a basis for tutoring and was a focal point from which the teacher guided the tutor as
to what was to be taught. Once the program was outlined and the tutoring kits were developed the tutors were assembled for an orientation session and training in the use of the tutor kit.

The Jefferson-Craig teachers trained the tutors assigned to them. They showed each tutor how the instructional materials were to be used, how to follow the lesson plan, and how to keep the tutor log. They also showed the tutors the layout of the tutoring stations at Jefferson-Craig Elementary School. After the teacher in-service and the tutor training sessions were completed, the project program was begun.

Each Jefferson-Craig teacher provided the guidance and planning for the tutor assigned to him or her. At two week intervals they completed a brief report on teacher tasks. Every six weeks these teacher task reports were gathered by the Project Director. Dr. Carlson and the Project Director also conducted regular in-service sessions throughout the year of the project. These sessions consisted of individual conferences, small group seminars, and total staff meetings. During the course of the year periodic changes were made in the project implementation procedures. However, these changes were minor in nature and the project program was implemented basically the way it was designed at the pre-project workshop.

The teaching staff at Jefferson-Craig Elementary School remained stable throughout the year. Several tutor changes were made. As tutees showed progress, new tutees replaced them.

The results of the project's evaluation at the close of the first year showed that the program had been successful in meeting most of its goals. Weaknesses in procedure and administration were noted and suggestions for the improvement of the program were offered.
Project Implementation - Second Year

Dr. Wolpert met with the Jefferson-Craig teachers in September. At this meeting, after acquaintances were renewed the previous year's efforts and accomplishments were reviewed and commented on. Successes and failures were noted and solutions to existing and anticipated problems were discussed. Later in the meeting the tutors joined the group. They were introduced and assigned to the teachers under whose supervision they would be working. The tutorial sessions began shortly thereafter.

Since most of the teachers had experienced the tutorial program the year before (as had some of the tutors) group meetings were rarely needed during the year. Rather, the Program Consultant acted as a "trouble-shooter" in rooting out problem areas and attempting to effect solutions.

Some changes which were initiated and fulfilled (partially or fully) are as follows:

1. The teacher task reports which had been submitted to the Project Director every two weeks were to be submitted every four to six weeks.

2. Time was to be provided during which the teacher and the tutor would meet and exchange ideas dealing with matters of mutual concern.

3. The resources of the new Remedial Reading Teacher were to be utilized. Such resources would include diagnostic capabilities, materials, and methods. The Remedial Reading Teacher was asked to do a diagnosis of the reading problems of each of the tutees and to relate these findings along with suggestions for suitable methods and materials to the teacher. Then, the teacher in turn would assist the tutor in developing activities consonant with the diagnosis.

An evaluation of the program's effects follows in the next section of this report.
PROJECT EVALUATION

Evaluation procedures employed in the project's second year were very similar to those used during the first year. Attempts were made to secure a wide range of information concerning personal characteristics and achievement phenomena which might be influenced by the program.

As in the previous year, project evaluation was made difficult due to the rather high rate of turnover among both tutors and tutees. This resulted, in many cases, in missing or incomplete data. The summaries which follow represent judgments of possible program effects based on available data.

EVALUATION OF TUTORS

Expected beneficial effects of the tutorial program for the tutors included the development of positive personal-social characteristics and the development of improved academic performance. The various observations carried out in these two areas are summarized below. Due to mid-year graduations and other factors, only five tutors were available for both pre- and post-test measurement.

Personal Development:

1. Perceptions of Tutors' Parents. Five parents of tutors in the program were contacted by telephone at the conclusion of the school year. All indicated that their youngsters had enjoyed their work as tutors. "She thought it was tremendous!" said one.

The parents indicated that their sons and daughters talked extensively of their tutoring experiences at home and were eager to share difficulties
and successes with other family members. All of the parents were able to cite positive changes which the tutoring experience had brought about in their children. Three parents had noted a definite improvement in attitude toward school, and all were pleased with the "appreciation for others" which the tutoring experience had seemed to develop in their children. Also cited as a positive result of being in the program was the increased reliability of the tutors in their home setting.

2. Perceptions of the Tutors' Teachers. High school teachers who had the tutors in their classes were asked to complete a self-concept rating instrument adapted for use in this project.* Each tutor was rated by two different high school teachers early in October, 1974 and again in mid-June, 1975. Results for the five tutors who were in the program all year indicated that positive progress toward an improved self-concept occurred in four of the five cases. The results were not, however, statistically significant.

High school teachers also completed a rating instrument** indicating their perception of the tutors' interest in reading. Again, each tutor was rated by two of his high school teachers in the fall and again at the end of the year. Increases were evident for all tutors rated. The average rating at the beginning of the year was 65.80 and the end of year average was 84.80. The difference between these average ratings is significant beyond the .05 level, indicating that the odds for this difference occurring by chance are less than .5 in 100. The tutors' teachers perceived that the tutors were becoming more interested in reading as the year progressed.

3. Perceptions of the Tutees' Teachers. The teachers of the children with whom the tutors worked were asked to complete a rating scale on tutor effectiveness. Items on the scale dealt with matters such as promptness,

---


initiative, and other attitudes and skills thought to be important to good tutoring. Considering all the tutors together, the difference between their average effectiveness rating at the beginning of the year and their average rating at the end of the year was not statistically significant.

However, analysis of the teachers' responses indicated that in all but one case the tutors were seen as improving during the school year. That is, they were becoming more effective in their interpersonal and teaching skills.

5. Perceptions of the Tutors Themselves. The tutors' own perceptions were solicited through the use of a reading interest survey and through personal interviews with each tutor.

The reading interest survey was the same form given the tutors' high school teachers (see above). Whereas the teachers saw the tutors as becoming more interested in reading, the responses of the tutors themselves were exactly opposite. The average rating of interest in reading at the end of the year was lower than the average rating at the beginning of the year, and the difference was statistically significant beyond the .05 level. No explanation for the difference between the tutors' own perceptions and those of their teachers is apparent, and the relationship of the tutors' apparent lessening of personal interest in reading to their effectiveness in the tutoring is unknown.

Personal interviews were conducted with the tutors near the beginning of the school year and again at the conclusion of the year. A summary of these interview responses and their implications for program development follows:

a. Reasons for the tutors' initial involvement in the program were varied. In addition to recommendations from the high school guidance counselor, several indicated that the program was recommended to them by other students who had been involved during the previous year. Many indicated that they simply liked the idea of being able to help someone. Two tutors became
involved because they thought the experience might assist them in possible career plans for teaching. Only one indicated that money was the prime consideration in joining the program.

b. The tutors also showed a wide variety of expectations for themselves in relation to the program. Several indicated that they expected to gain personal satisfaction from being in a helping role. Many other personal benefits were anticipated by them, such as the learning of patience, understanding, self-confidence, and social skills in relation to their own peers and teachers. Three of the tutors indicated that they expected to better their own reading skills as a result of the experience. Year-end interviews indicated that these expectations were largely fulfilled. Nearly all tutors identified areas of personal growth which had taken place in themselves, with the learning of patience being mentioned repeatedly. In addition, there were strong indications that the experience had led to many new insights on their part. For example, there was evident a new appreciation of children's personal needs and of individual differences among people, as well as an increased appreciation of the teacher's job.

c. At the beginning of the year, the tutors were able to establish realistic expectations for the children they were working with. In addition to expecting gains in general reading ability and in specific reading skills, they held as goals of the program improvement in confidence, attitudes, and enjoyment of reading. Year-end interviews indicated that they expectations were also fulfilled to a very large extent. All tutors were able to cite examples of growth which the children had made.
d. All of the tutors indicated that they enjoyed the experience. Reasons for their enjoyment of the program centered mainly on the satisfaction of helping someone else. Whereas three tutors at the beginning of the year mentioned that they liked the program because of the pay involved or because it was "something to do instead of study hall," no tutors mentioned these factors at the end of the year.

e. The tutors were asked what problems they encountered in the program and what improvements they would recommend. The majority indicated that no problems were evident. Some important recommendations were made, however. These included (1) a need for more direct teacher guidance, (2) a need for quieter and more isolated tutoring stations, and (3) a need for more time with the children.

f. All tutors indicated that they were able to recognize definite progress on the part of their tutees. Increased skill in basic word recognition was the most commonly mentioned area of perceived progress. General increases in reading ability and progress in personal-social development for the children were also noted by the tutors.

g. When asked what was the "best" part of tutoring, the tutors overwhelmingly chose personal interaction with the children and seeing the children learn as the most satisfactory elements of the program. The "worst" parts of the tutoring experience were perceived as (1) a lack of direct guidance by the classroom teachers, (2) poor physical arrangements for tutoring (noisy and distracting environment), and (3) difficulties in the management of more than one child while tutoring.
h. All tutors indicated that they would like to do more tutoring if the opportunity presented itself.

i. Three of the tutors indicated that the experience had led them to consider teaching as a career. Others, though they enjoyed tutoring, were not influenced by the tutoring experience in terms of a career decision.

In summary, the results of personal interviews with tutors in the program revealed a consistently positive reaction to the experience. They perceived many positive benefits for them personally in the program. Monetary reward was not a prime consideration. They also appeared to recognize identifiable benefits for the children they tutored. The interviews indicated that the enhancement of interpersonal skills on the part of both tutors and tutees was a definite strength of the program. Finally, some helpful recommendations were made, including improvement in the physical arrangements for the tutoring sessions and increased teacher guidance for the tutors.

Summary and Discussion

A prime objective of the tutoring program has been the development and enhancement of desirable personal qualities in the high school tutors. Information gathered from parents, teachers, and the tutors themselves appears to indicate that this objective is being achieved.

Parents appeared unanimous in their positive perceptions of the program. It appeared that being a tutor led to the enhancement of personal qualities in their children which were clearly identifiable. The tutors' high school teachers also reported apparent improvement in the tutors' self-concept and interest in reading. Elementary school teachers with whom they worked noted improvement in their work habits as the year progressed. The tutors themselves indicated a variety of ways in which the tutoring experience was of significant personal value to them.
Academic Performance

1. Oral Vocabulary. The Peabody Picture Vocabulary Test was administered to the tutors at the beginning of the school year and again at year end. Raw scores on the vocabulary test were thought to provide some index of general vocabulary growth during the year. Scores for both pre-test and post-test measurement were available for five tutors. The average score at year end was 114.40, compared with an average score of 105.20 at the start of the school year. The difference between these average scores was statistically significant at the .05 level. There appeared to have been significant growth in the general vocabulary of the tutors during the year.

2. Reading Vocabulary. The Slosson Oral Reading Test (SORT) was administered to the tutors at the beginning of the school year and again at year end. The test requires the subject to read words from graded word lists and is designed to yield an estimate of the subject's reading level. Scores for both pre-test and post-test measurement were available for five tutors. All five of these tutors showed a gain in reading vocabulary. The average post-test score was 190, compared to an average score of 184 on the pre-test. The difference between these average scores was not statistically significant.

3. General Reading Achievement. All tutors were given the Gates-MacGinitie Reading Test, Survey F. Form I was administered at the beginning of the school year. The test was also given to a sample population of the tutors' high school peers in order to provide a control against which to compare the tutors' scores. Table 1 shows the results of this testing. The figures represent standard score values for a combined average of the vocabulary, comprehension, and speed/accuracy subtests of the Gates-MacGinitie test.
Table 1 shows that the tutors made a gain of -0.60 standard score points compared to a gain of -1.89 for the students in the control group. The difference between these gains was not statistically significant.

4. Reading Comprehension. The tutors were also pre-tested and post-tested using the cloze test procedure. This test is one in which the subject attempts to correctly determine and write in words which have been deleted from passages of reading material. Several passages of increasing difficulty are employed in the test. The test attempts to determine the extent to which the subject comprehends the passage from the context surrounding the deleted words and uses that information to decide what the deleted word should be. Thus it is also a test of vocabulary and knowledge of language structure. A group of the tutor's high school peers were also tested and served as a control group. The results of the cloze tests are shown in Table 2.

Table 2

<table>
<thead>
<tr>
<th>GROUP</th>
<th>PRE-TEST</th>
<th>POST-TEST</th>
<th>GAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>TUTORS (N=4)</td>
<td>88.25</td>
<td>94.00</td>
<td>5.75</td>
</tr>
<tr>
<td>TUTORS' PEERS (N=15)</td>
<td>74.60</td>
<td>79.47</td>
<td>4.87</td>
</tr>
</tbody>
</table>
Table 2 shows that the average gain of 5.75 points for the tutors was slightly greater than the average gain of 4.87 for their peers in the control group. The difference between these gains was not statistically significant.

Summary and Discussion of Tutor Evaluation

A variety of procedures were employed in an attempt to discern effects which the program may have had on the tutors. Possible effects were classified under two main headings - personal development and academic performance.

In the case of the latter, results tended to show that the tutors as a group showed a generally positive growth pattern during the year. Pre-test and post-test measures of oral vocabulary and reading vocabulary showed a progressive tendency. In two performance measures on which the tutors were compared with a sample group of their peers not in the tutoring program, the gains of the tutors exceeded those of their peers, though the difference in gains were not significant.

Two factors appear relevant to the interpretation of these findings. First, since the tutors were youngsters considered to be some what "high risk" students, it would not be expected that they would generally be high achievers academically. The fact of their strong maintenance of academic performance in relation to their non-tutoring peers may in itself suggest positive effects of the program. Secondly, it should be kept in mind that the objective of the program was not to improve the academic skills of the tutors, but of the tutees. To expect academic growth proportionately greater than that of their peers would be inappropriate. Results certainly indicate that the experience did not hinder their academic performance and may have served to maintain it.

In terms of personal growth, reactions gathered from parents, teachers and the tutors themselves appear to reveal a wide variety of perceived benefits for the program. The development and enhancement of desirable personal qualities
in the tutors is apparent in all reports gathered, and there appears to be almost universal approval of the program as a positive influence on the tutors.
EVALUATION OF TUTORS

Personal Development

1. Perceptions of Parents. An attempt was made to contact parents of tutees by phone at the conclusion of the school year. Three parents were contacted. All indicated that they felt their children had enjoyed the tutoring experience. Two of the parents were able to perceive definite benefits in the program for their children. "I can't begin to say how much he has improved," said one, "He reads much better and faster, and doesn't miss words so much." The children appeared to speak positively of the tutoring program at home. The parents indicated that the personal help was very important to their children. One parent indicated a big difference in the child's report card which he attributed to the tutoring, and another felt that the tutoring had caused his child to enjoy school much more.

Though only a very small sampling of parents' response was possible, it appears that the program was perceived by parents as having a positive effect, both in terms of achievement and attitude, among the tutees.

2. Perceptions of Teachers. The teachers of the tutees in the program were asked to complete two survey instruments intended to yield information concerning possible effects of the tutoring program on the children. These instruments were administered both at the beginning and end of the school year. Results of comparisons for all tutees who were in the program all year are discussed below.

The first instrument was a listing of a wide variety of school activities. For each, the teacher indicated his or her perception of the degree of interest the tutee had in this activity. When these responses were translated into
numerical values, only one one-hundredth of a point separated the beginning-of-year average from the end-of-year average. As perceived by the teachers, the tutees' degree of interest in school-related activities apparently remained the same throughout the year.

A second measure requested from the teachers related to their perceptions of the possible effects of the tutoring program on the self-concept of the tutees. Self-concept rating scales completed by the teachers yielded an average rating score of 2.69 at the end of the year, compared with an average score of 2.38 at the beginning of the year. The gain of +0.31 points was not statistically significant, though a slight improvement in perceived self-concept was indicated.

3. Perceptions of the Tutees' Peers. Sociometric observations were gathered in the tutees' classrooms in order to examine possible effects of the tutoring program on the tutees' social development. Specifically, this measurement sought to determine the esteem in which the tutees were held by their classmates at the beginning and at the end of the year.

All of the students in the tutees classrooms were asked to respond to the following three questions:

1. "You are planning to give a party at home. Which classmates would you invite?"
2. "You may choose the classmate to sit next to you in class. Whom would you choose?"
3. "Your teacher says that you may get help with some of your schoolwork. Which classmate would you choose to assist you?"

First, second, and third choices were requested for each question. For purposes of analysis, for each situation 3, 2, or 1 points were designed to a child for each time his name was selected by one of his classmates as first, second, or third choice, respectively.
The results of the analysis of points received by the tutees are shown in Table 3.

**TABLE 3**

**AVERAGE NUMBER OF POINTS RECEIVED BY TUTEES (N=19)**

**AND AVERAGE GAIN ON THREE SOCIONETRIC RATINGS**

<table>
<thead>
<tr>
<th></th>
<th>AVERAGE POINTS</th>
<th>AVERAGE GAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>October</td>
<td>June</td>
</tr>
<tr>
<td>Question 1</td>
<td>3.11</td>
<td>4.33</td>
</tr>
<tr>
<td>Question 2</td>
<td>3.11</td>
<td>4.11</td>
</tr>
<tr>
<td>Question 3</td>
<td>2.22</td>
<td>2.39</td>
</tr>
<tr>
<td>Combined Average</td>
<td>2.80</td>
<td>3.71</td>
</tr>
</tbody>
</table>

Table 3 shows that the esteem or popularity of the tutees as seen by their classmates increased during the school year.

4. **Perceptions of the Tutees Themselves.** The tutees were asked to complete surveys indicating their interest in various school activities similar to those survey discussed above with regard to teachers' perceptions. A comparison of responses in October and June revealed a slight drop (−.3 points) in average scores on this rating instrument. The difference between the average ratings for October and June was not significant and appeared to confirm the teachers' observations that little change in interest in school activities occurred among the tutees during the year.

Personal interviews were conducted with a total of fifteen tutees who had been in the program. A summary of these interview results follows:
a. All fifteen of the children indicated that they enjoyed the tutoring experience. Reasons for enjoyment of the tutoring sessions included that it was fun, that they liked the tutor, that they enjoyed the variety of activities during the tutoring sessions, and two of the children indicated that they liked tutoring because it caused a noticeable improvement in their work.

b. A wide variety of activities were given as the "most liked" by the children. Working at the chalkboard, reading stories and discussing them, receiving help with "hard words" and with school work and assignments were among the favorite activities.

c. When asked what was "least liked" about the tutoring sessions, ten of the fifteen children could think of nothing that they disliked. Two children indicated some dislike for certain personal traits of the tutors. Reading material that was "too hard," reading out loud, and "doing written work" were mentioned as least liked by one child.

d. The children were asked to identify things they had learned in the tutoring. Responses included the learning of new words, learning to pronounce words better, learning to use periods, etc. in reading, learning to identify syllables, and learning to use a glossary. Four children said they definitely had learned to read better. "I can tell I'm better," said one. Another indicated that he was sure he had improved so much that he would not need further tutoring. Three children could not identify specifically something they had learned from the tutoring.
All fifteen of the children indicated that they would like to be tutored again. Most indicated that the reason they would like further tutoring was that it was "fun." Two said they liked it because they got out of class.

The results of these interviews indicate that, from the tutee's point of view, the tutoring program was perceived quite positively. Most of the children were able to identify specific tutoring activities which they felt were helpful, and many identified specific skills or abilities which had been developed as a result of the tutoring. Their attitudes toward the experience was good, and they saw more tutoring as desirable.

Academic Performance

1. Oral Vocabulary. The Peabody Picture Vocabulary Test was administered to the tutees at the beginning of the school year and again at year end. Raw scores on this vocabulary test were thought to provide some index of general vocabulary growth during the year. Scores for both pre-test and post-test measurement were available for eight tutees. The average score at year end was 72.71, compared with an average score of 67.43 at the beginning of the school year, indicating an average gain of 5.28 raw score points. The difference between pre- and post-test averages was not statistically significant.

2. Reading Vocabulary. The Slosson Oral Reading Test (SORT) was administered to the tutees in October and again in June. Scores for both pre-test and post-test measurements were available for thirteen tutees. The average post-test score was 72.85, compared with an average pre-test score of 59.08. The difference between these average scores (+13.77) was statistically significant at the .05 level, indicating that it was unlikely that such a difference could have occurred by chance. The tutees appeared to have improved significantly in their ability to read isolated words correctly.
3. General Reading Achievement. All tutees were given the Gates-MacGinitie Reading Test at the beginning and end of the school year. The test was also given to the tutees' classmates in order to provide a control group against which to compare the tutees' performance. Both standard school averages and grade equivalent averages were computed for both groups. Table 4 shows the average standard scores achieved on the Gates-MacGinitie tests.

**TABLE 4**

MEANS STANDARD SCORES ON PRE-TEST AND POST-TEST AND GAIN SCORES FOR TUTEES AND THEIR CLASSMATES

<table>
<thead>
<tr>
<th>GROUP</th>
<th>PRE-TEST</th>
<th>POST-TEST</th>
<th>GAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutees (n=17)</td>
<td>39.23</td>
<td>42.53</td>
<td>+3.30</td>
</tr>
<tr>
<td>Tutees' Classmates (n=95)</td>
<td>45.52</td>
<td>47.15</td>
<td>+1.63</td>
</tr>
</tbody>
</table>

Table 4 shows that the average gain in standard score for the tutees exceeded that of their classmates. The difference between the average gain for the two groups, however, was not statistically significant.

Results in terms of grade equivalent scores achieved on the Gates-MacGinitie test for the tutees and their classmates are shown in Table 5.

**TABLE 5**

MEAN GRADE EQUIVALENT SCORES ON PRE-TEST AND POST-TEST AND GAIN SCORES FOR TUTEES AND THEIR CLASSMATES

<table>
<thead>
<tr>
<th>GROUP</th>
<th>PRE-TEST</th>
<th>POST-TEST</th>
<th>GAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutees (n=17)</td>
<td>2.85</td>
<td>3.62</td>
<td>+.77</td>
</tr>
<tr>
<td>Tutees' Classmates (n=95)</td>
<td>3.88</td>
<td>4.54</td>
<td>+.66</td>
</tr>
</tbody>
</table>
The difference between average gains in grade equivalent scores for the two groups was not statistically significant.

Inspection of Tables 4 and 5 reveals that the tutees as a group showed greater gains in general reading achievement than their classmates, though the differences were not significant. It is also apparent that the tutees as a group generally were lower achievers than their classmates. In this light, their pattern of great relative growth during the year is noteworthy.

4. Reading Comprehension. The tutees and their classmates were pre-tested and post-tested using the cloze test procedure (described under tutor evaluation above). The results of the analysis of cloze test scores are described in Table 6.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>PRE-TEST</th>
<th>POST-TEST</th>
<th>GAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutees (n=16)</td>
<td>35.44</td>
<td>50.44</td>
<td>+15.00</td>
</tr>
<tr>
<td>Tutees' Classmates (n=94)</td>
<td>53.30</td>
<td>66.67</td>
<td>+13.37</td>
</tr>
</tbody>
</table>

Table 6 shows that the average gain of 15.00 points for the tutees slightly exceeded the average gain of 13.37 for their classmates in the control group. The difference between these gains was not statistically significant. Again, as was the case with the results of the Gates-MacGinitie Reading Test the low achieving tutees surpassed the yearly growth rate of the higher achieving peers.
Summary and Discussion of Tutee Evaluation

Several types of information were gathered on the tutees in order to gain insights on possible effects of the program on their personal development and academic performance.

With regard to personal development indications are that the tutees appeared to make very satisfactory progress during the year. Although there was no apparent increase in their general interest in school activities, they were perceived by their teachers as gaining slightly in self-concept and also improved in the regard with which they were held by their classmates. These are definitely developmental strengths which participation in the program would be expected to promote.

Perceptions of parents and of the tutees themselves were quite positive. Many specific instances of positive benefits of the program were cited. Tutoring definitely was perceived as a satisfying experience, and as such might be expected to promote better attitudes toward school and toward one's self as a student.

In terms of academic performance, the results of measures taken showed improvement in all areas. An increase in oral vocabulary was indicated, and a significant increase in the ability to read isolated vocabulary words was found. In cases where tutee performance was compared with the performance of their school classmates, the tutees consistently made greater gains, though they were performing at a lower achievement level. This speaks well of the tutees' academic development during the year, and may represent a direct influence of the program on them.

Considering all data gathered, it appears obvious that the tutees fared as well or better than their classmates during the year. Considering the personal benefits recognized, the program appears to have been a successful and helpful experience for them.