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Survey of literature on cross-age tutoring programs with emphasis on benefits to the tutor for the purpose of developing a plan for implementation

Ramona R. Bennett

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A SURVEY OF LITERATURE ON CROSS-AGE TUTORING PROGRAMS WITH EMPHASIS ON BENEFITS TO THE TUTOR FOR THE PURPOSE OF DEVELOPING A PLAN FOR IMPLEMENTATION

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by
Ramona R. Bennett

A RESEARCH PAPER
SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN EDUCATION (READING SPECIALIST) AT THE CARDINAL STRITCH COLLEGE Milwaukee, Wisconsin 1973
This research paper has been approved for the Graduate Committee of the Cardinal Stritch College by

[Signature]
(Advisor)

Date January 1973
ACKNOWLEDGMENTS

This paper is dedicated to my students, whose need made the research necessary; and to my sisters, Mrs. Catherine Jaroch and Frances M. Ryan, whose generous help made it possible.
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CHAPTER I

THE PROBLEM

Introduction

The practice of tutoring is not new. Some parents and older brothers and sisters have always assisted children with their homework. Friends study together at each other's houses and in study halls when permitted to do so. Teachers arrange for children to work together in small groups or ask one child to help another with his work. Frank Laubach's world-wide campaign against illiteracy has as its slogan "Each one teach one."

Most of these arrangements are informal, temporary, and outside of the regular school structure. During the last decade, however, school-sponsored tutoring programs have sprung up all over the country. Some are the results of university research; some are organized by Anti-Poverty agencies of the federal government; others are locally designed.

Nation-wide, the programs are characterized by great variety in philosophy, goals, content, and organization. What do they have in common? According to Herbert Thelen, "... educators (almost to a man) feel that
tutoring works. (I can think of no other innovation which has been so consistently perceived as successful. . .).

Statement of the Problem

The chief purpose of this study is to survey the literature on cross-age tutoring programs which emphasize the benefit to the tutor of the helping experience. A secondary purpose is to select from the readings ideas and procedures which can be applied to the remedial reading classes at Marina High School, San Leandro, California.

Scope and Limitations

This paper is limited to a survey of the tutoring programs which have been developed since 1964 for the purpose of benefiting the tutor or for the purpose of developing tutor-training techniques. The depth of the paper is limited by the fact that, although considerable work has been done in the area of cross-age tutoring, the data are not generally obtainable. Available materials consist primarily of reports in general education magazines, speeches describing programs of tutoring, and summaries of evaluation by sponsoring agencies. It is, therefore, not possible in most cases to determine or evaluate the statistical treatment given to scores obtained in the experiments.

Significance of the Problem

During the fall term of the 1971-72 school year, the writer accepted as a tutor a volunteer from a near-by community college. The experience was not a very successful one, due primarily to the fact that the tutor was not given a sufficiently clear idea of what he was to do. In the spring semester, two high school students tutored in the writer's remedial reading classes with better results. However, it was evident that successful use of tutors by the classroom teacher depended upon the latter's clear formulation of goals to be reached and methods to be used. It was the writer's hope that this investigation would result in a plan for a tutoring program which she could implement in her classroom during the 1972-73 school year.

Definition of Terms

A tutor, as used in this paper, refers to a pupil who teaches another in a one-to-one relationship.

The tutee is the pupil who receives the tutoring.

Cross-age tutoring refers to the practice of having older children teach younger ones.

Olders and Youngers are the terms used by the developers of the Cross-Age Helping Program at the University of Michigan to refer to tutors and tutees, respectively.
CHAPTER II

SURVEY OF THE LITERATURE

The Cross-Age Helping Program

A team of social scientists at the University of Michigan led by Ronald Lippitt, and including Peggy Lippitt and Jeffrey Eiseman, began as early as 1963 to study the effects of cross-age tutoring. An early report states that in the school districts of Monroe and Ypsilanti "... both olders and youngers markedly improved their scores on standard reading tests. Also, according to teachers' ratings, both olders and youngers improved on several dimensions of classroom attitudes and behavior."¹

The Cross-Age Helping Program underwent two more years of development, and its basic structure was fully formed by 1965. In that year, a project took place in Detroit in an educational complex consisting of a high school, junior high school, and elementary school situated

on adjoining streets. "Olders," or tutors, met with their "youngers" three times a week for about thirty minutes to conduct drill or assist with special projects. Activities included math, reading, writing, spelling, shop, physical education, exploration of individual interests, and occasional field trips.

Once a week the olders each met with the younger's teacher to report progress and receive instructions for the next week. The olders also met once weekly in a seminar session with a trained leader to learn more about effective ways of teaching and of developing human relations skills. The first ten seminar sessions were structured "in-service training" meetings; the remaining sessions served as a clinic where tutors could get help from the rest of the group or the leader in solving problems they encountered.

In this project the elementary tutors were chosen by their classroom teachers, who selected "better" pupils for the opportunity. (The elementary pupils missed regular classroom work while they were tutoring.) An entire high school psychology class of thirty-six students chose tutoring as its project for the semester. The junior high boys were all enrolled in an elective reading skills class; the junior high girls were all enrolled in a social problems class.

The youngers were chosen by their teachers to be tutored for a variety of reasons: some had poor grades due
to lack of interest, poor work habits, or limited ability; some had good grades but desired enrichment activities; were ahead of the class and getting bored, or simply desired help; a few others were chosen for special reasons, such as a speech defect, extreme shyness, and an exceptional lack of courtesy.

The program was evaluated at the end of the first semester on the basis of questionnaires filled out by receiving teachers and olders and half-hour interviews with each of the five tutor-trainers. Teachers reported twenty-five types of behavioral and attitudinal changes in the youngers.\[2\]

At the end of the second semester, olders were asked to check changes they had noticed in the youngers on a checklist made up from teacher comments at the end of the first semester. Olders were also asked to check changes which they believed to have taken place in themselves, such as "Understanding others better," "Being more considerate of others," "Being more patient," "Getting along with others," "Feeling more useful," and "Greater self-confidence." "Seventeen out of the twenty-four (71%) felt they had changed their attitudes toward at least one of these referents, eight changed in their attitudes toward two or more."\[3\]

\[2\]Ibid., pp. 1-2.
\[3\]Ibid., p. 3.
The basic University of Michigan model of cross-age teaching continued to be refined as it spread. The program inaugurated in 1969 in the Ontario-Montclair (Calif.) School District began with three weeks of orientation for the olders and provided for extensive collection of data for an evaluation of the second year. Staff goals for improvement were met in almost every area tested. Experimental groups, both youngers and olders, exceeded their controls at the 1% level in reading. Both age groups showed gains in self-concept as rated by their teachers on the McDaniel Inferred Scales and as they rated themselves on the Reported Self-Concept Scale. Both showed increased acceptance by their peers on Sociometric ratings. Both experimental groups exceeded the control groups in improvement of discipline according to teacher ratings at the 1% level of confidence, although neither reached the staff goal. Reduction of absences was significant for the youngers, but non-attendance for the olders was greater than that for the controls.4

"It should be noted that both the younger and older students in the program has a lower mean I.Q. and Grade placement scores when entering the program than did the control group of students selected."5

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5 Ibid., p. 2.
The project report concludes:

THE CROSS-AGE TEACHING PROGRAM has shown many positive actions: Underachievers have been motivated to learn and have met success; Olders have reinforced and improved their academic learning by teaching others; Students have become intimately involved in the learning process improving both their own self concept and their image with their peers; Students have had the opportunity to experience a positive relationship with school, and have participated in learning through cooperation.  

The Homework Helper Program

At about the same time that the Lippitts were becoming aware of the social benefits to be gained from tutoring, the anti-poverty agency, Mobilization for Youth, Inc., established the Homework Helper Program in the Lower East Side of New York. A random selection of 155 tutors was made from 227 eligible applicants who responded to recruitment publicity in the schools, newspapers, and on the radio. The remaining eligible applicants were used as controls and promised jobs for the next year providing they participated in the post-testing. Tenth and eleventh grade tutors met tutees in eleven tutoring centers, each supervised by a credentialed teacher. Tutors spent two hours a week in in-service training and tutored for six hours. They were paid $11.00 per week.

Cloward describes the research design for the 1963-64 school year as a "classical experiment" in regard to both tutors and tutees. Careful accounting is made of attrition

6Ibid., p. 3.

in samples down to the detail of "Treatment confounded" for two controls who were accidentally hired as replacement tutors. The data were subjected to extensive analysis to determine possible effects of familiarity with the tests used for post-testing; the effect of matching tutor and pupil by sex and/or ethnic origin; the validity of the test instruments with Negro and Puerto Rican pupils; to determine the difference between treatment for two hours and four hours a week, access to school remediation programs, etc.

The findings in regard to pupils indicated that reading improvement was determined by the length of treatment, and that no other factor was significant. Three hypotheses concerning the effect of treatment on attitudes and the relationship between attitudes and reading improvement were rejected; the author suggests that the negative findings "may be due to the insensitivity of our research schedule." 8

Tutors showed a mean growth of 3.4 years on the Iowa Silent Reading Test, with 1.7 years the net which could be attributed to the treatment. Several factors such as grade, sex, national origin were analysed. "In all these analyses, treatment differences were significant beyond the .001 level of probability." 9 That is, there is only one chance

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8 Ibid., p. 19.
9 Ibid., p. 22.
in a thousand that the subjects would have shown such gains if they had not been involved in the tutoring program.

No matter how the data were analyzed, no statistical difference was found in grade averages for the tutors between the preceding school year and the one during which they were involved in the experiment. Cloward speculates that the benefit of the increased reading skill might result in better grades in the years following the experiment.

The concluding paragraph of this study states:

Clearly, the major impact of the tutorial experience was on the tutors themselves. This finding has implications both for education and for youth employment. Tutorial programs not only can provide youth in a low income area with gainful employment but can serve to upgrade their academic skills as well. Indeed, the high reading gains made by tutors, many of whom were reading far below grade level at the beginning of the study, raise the intriguing question of whether high school dropouts might be successfully employed as tutors, not just to help under-achieving elementary pupils, but to improve their own academic skills. Attempts to remedy the dropouts' educational deficiencies by placing them in pre-employment training programs have not been notably successful. Having experienced failure and humiliation in the classroom and being alienated from school, these youngsters tend to rebel against learning situations in which they are cast in the role of a student. Assigning tutorial roles to such adolescents might help to make learning enjoyable and profitable for them.10

Youth Tutoring Youth Program

The "implications for education and youth employment" noted by Cloward were occurring to another group of people almost simultaneously. In 1964 the Department of Labor

10Ibid., p. 24.
established the Neighborhood Youth Corps (NYC) to provide jobs for disadvantaged youth for the purposes of providing them with the opportunity to earn money, enabling them to learn job skills, and motivating them to stay in school. (School enrollment was a requirement for obtaining and keeping an NYC job.) Although the NYC program met with some success, it was less than anticipated. For one thing, high school counselors often failed to appreciate the real purpose of the NYC jobs and referred "good kids" who were not potential drop-outs. In addition, the requirement that NYC jobs go to pupils old enough to get working papers (sixteen) meant that negative attitudes were already firmly established, perhaps too strongly to be reversed. The jobs in the schools were frequently of a custodial nature, partly because such tasks obviously need doing so they came very easily to mind to the school administrators asked to provide employment for needy youth. In addition, as the youth were paid from federal funds, some administrators were suspected of being more interested in seizing the opportunity to reduce their operating costs than in implementing the philosophy of the NYC. Of course even the most menial job gives some useful training in such traits as promptness, following directions, and responsibility; nevertheless the NYC administrators searched for a way to make the program more effective, particularly by finding job categories which would more directly involve the student in learning.
In an inspired move, the founders of the National Commission on Resources for Youth "got it all together". They were aware, first of all, of Frank Reissman's conclusive demonstrations in the 1950's that relatively uneducated persons can perform tasks commonly thought to require professional training. Indeed, the "indigenous" worker, one who came from the same background and shared some of the same traits, was found in certain circumstances to be more effective than the professional in working with the poor because of his ability to understand the problems and to establish a climate of confidence.

In addition, the National Commission on Resources for Youth staff knew of the research results obtained by the social scientists at the University of Michigan and the success of the Homework Helper Program in New York. They brought this knowledge to bear on the need of the Neighborhood Youth Corps for more inspiring jobs. The result was the development of the program which became known as Youth Tutoring Youth (YTY).

Having decided that tutoring was an ideal job for underachievers, the National Commission on Resources for Youth instituted pilot programs in Philadelphia and Newark in the summer of 1967 employing fourteen and fifteen year olds in the hope that the meaningful job of tutoring would excite them about learning. The philosophy of the project is stated in the final report:
The concept of older children tutoring younger children is based on the simple realizations that:

---people learn when they teach,
---people create when their creations are needed and appreciated,
---people work better when their goals are visible, and
---people gain in self-respect when they are proud of their work.

Two hundred tutors were employed at $1.25 an hour for twenty-two hours of work each week (sixteen hours of tutoring and six in in-service training). In addition, each tutor was expected to work on his own reading problems for six hours a week, for which he was not paid, thus emphasizing that learning is of intrinsic benefit. Only seven tutors left the summer program and their reasons were sound: illness, moving, and the offer of better jobs.

The Philadelphia after-school program was unavoidably delayed until May of 1968, but in the summer of that year seventy-four tutors worked with 223 tutees. At that point, the "pilot" phase was considered to be completed and the National Commission for Resources on Youth turned its efforts to expansion. During 1968 training materials were produced, including manuals for administrators, supervisors, and tutors, plus two films—one for tutor-training and one for general information. Expansion techniques included workshops

\[11\text{National Commission on Resources for Youth, Inc.,}\
\text{"Youth Tutoring Youth. Final Report" (Bethesda, Md.:}\
\text{NCR/ERIC ED 034 246, 1970), p. 167.} \]
to train administrators and supervisors. In 1968, Youth Tutoring Youth was introduced in fifteen more cities and the program began its phenomenal spread. By 1970 the Department of Labor required that at least twenty percent of Neighborhood Youth Corps jobs be devoted to tutoring. Additional support was added when the U. S. Office of Education selected the YTY program as one of the ways to implement its "Right to Read" effort. By May of 1972, more than one thousand YTY centers were operating in 450 cities in all fifty states.

Three of the four stated objectives of the pilot program are difficult to measure:

1. to promote better work habits and ways to handle responsibility,
2. to improve attitudes toward learning and school,
3. to foster a more positive self-image,
4. to increase skills in reading and writing.  

The report emphasizes, "NCRY feels that the content of tutoring should not be a systematic and rigorous campaign to raise reading scores. Emphasis is placed on the affective bases for learning." 

A conference was held in the summer of 1969 to begin developing suitable instruments for evaluating progress.

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12 Ibid., p. 40.
13 Ibid., p. 41.
toward the goals of the program. At this writing, however, "Final Report on Demonstration Project Proposal to Develop a Monitoring Assessment System for Youth Tutoring Youth Evaluation and Development Model In-School NYC Program," the report of the conference, is in draft form. Publication is expected by the end of 1972. 14

That a continued effort is being made to improve the assessment of the YTY programs is indicated by the abstracts of evaluation summaries prepared for the National Commission on Resources for Youth by other agencies. A 1970-71 report was prepared by the Social Psychology Laboratory of the University of Chicago on 480 NYC workers in Chicago and Washington, D.C., 60% of whom were employed as tutors. Statistical data are not given in the abstract, but the areas tested are of interest. In addition to improving significantly in attendance, tutors also "exhibited significant improvement in their use of correct English grammatical conventions on writing samples elicited by the sentence stubs..." 15 Measurements were also taken of

14 Marcia Murphy, National Commission on Resources for Youth staff, telephone conversation with the writer, July 5, 1972.

self-esteem (all students increased) and "feeling of efficacy" (no gain for subjects or controls).

New Careers, Inc. prepared on contract an evaluation of the progress of the tutees in Washington, D.C. and Chicago. A variety of tests, checklists, and rating scales were apparently used, for the overall findings reported gains in reading interest scores, reading skills, scholastic self-perception, maturity, "as measured by picture drawing analysis," and the childrens' own perceptions of their classroom role. No gains were reported in the area of expressive speech, overall conceptual development scores, mathematics and science interest, or reading achievement scores.16

A different approach to assessment was taken in the Los Angeles County "One-to-One" tutorial project, initially sponsored in 1967 by the Office of Economic Opportunity, but linking with the Neighborhood Youth Corps in its second summer. Expected increases in mean reading grade placement scores on a standardized reading test were set at six months for tutors and three months for tutees in the six week summer session. Attitudinal changes were to be measured objectively: the goals for the tutors were that 95% of the tutors would complete the following school year and that there would be a 50% reduction in absenteeism from the previous school year.

Tutors in this project met three selection criteria:
1) reading scores on standardized reading tests two years
or more below actual grade placement, 2) either actual
dropouts of high school age or potential dropouts as
indicated by failing grades, absenteeism, or stated intent,
and 3) family income level meeting the criteria for eligi-
bility for NYC job.

Five to seven tutors and one teacher-supervisor
operated the tutoring centers in conjunction with the regu-
lar summer school program in sixteen school districts. The
tutors were assigned to one fourth, fifth, or sixth grade
student for each two-hour class.

The reading gains reported for the tutors in the
summers of 1967 and 1968 were 8.0 months and 8.5 months
respectively. In the same sessions the tutees are reported
to have gained 4.6 months and 4.8 months on the Nelson-Denny
Reading Test.

The evaluation did not follow the original plan for
several reasons:

Funds were not provided to conduct a follow-up study of
tutors. District procedures for collecting such data
were neither uniform nor thorough and did not allow
for the highly mobile character of the target popula-
tion. Nevertheless, such data as are available make
it apparent that the tutor is more apt to attend school
regularly, to obtain passing grades, and eventually to
complete high school than are the students with similar
problems who do not have the tutoring experience.17

17J. W. Landrum and M. D. Martin, "When Students Teach
Miscellaneous Programs

Tutoring programs exist in great variety. The ones previously described in this paper are sponsored by a large agency. Many other programs have arisen in response to local needs and were developed without outside help or funds.

Portland, Oregon has developed an elementary school tutoring program called Student Team Action, in which entire classes from the middle grades work on a one-to-one basis with primary students. Older students keep records of the work undertaken and progress made by the younger children. Their comments and anecdotal records show real insight into the behavior and learning problems of their tutees. Parents, teachers, and students engaged in the program report favorable impressions.18

An unusual approach has been developed at the Joel E. Gerris High School in Spokane, Washington. The tutors are high school pupils enrolled in Tutorial Reading Class. The class is an elective open to all students, but under-achievers and "problem" students are actively recruited for it and constitute about half of the class. For several weeks the class members study about the learning process. They also read children's books and book reviews of children's books. Through their reading and class

discussion, the tutors become fairly knowledgeable about the qualities of a good book for children. Then they write original stories for their tutees in an elementary school in a nearby depressed area. Later on the tutees suggest subjects for stories. The younger children are motivated to read and thrive on the individual attention and the high school pupils have the benefit of doing critical reading for a purpose and writing for a genuine audience. ¹⁹

In another instance, a sixth grade teacher or remedial reading teacher developed a tutoring program as an inspiration. She used the opportunity to tutor as a reward (students had to complete their own remedial exercises and do their assigned reading each week before they could leave the classroom to tutor), as instruction (remedial pupils made phonics cards, etc. for their tutees), and as a means of building self-esteem (the remedial pupils were the only ones in the building engaged in tutoring). ²⁰

The staff of the Holy Childhood School in Jamaica Plain, New York, developed their tutoring plan out of desperation. The school is associated with a childrens' home and includes more than the ordinary number of pupils with


behavior problems. Some of the upper grade students were almost unbearably disruptive in class, and the teachers were willing to try almost anything, even the "crazy idea" of using problem students as tutors in grades one to four. The older students tutored in the subject in which they were weakest, usually reading or math, on a flexible schedule ranging from forty-five minutes daily to once a week for that length of time.

One of the benefits observed was the positive identification of the tutor with the teacher's role. The teacher became a friendly resource person to whom the tutor could turn for help with his own teaching problems. In the past, teachers had been seen as parents: "people who humiliated, frustrated, and failed them." 21

An unexpected benefit was observed when some children were seen to respond better to tutors than to their regular teachers. Children who were thought not to know their letters, numbers, or sounds would demonstrate to tutors that they did have the desired knowledge, even though they refused immediately afterward to perform for the teacher. The author explains:

Another aspect of the child's distrust of the teacher derives from the role of the pupil as a passive recipient.

of what the adult has to give. In the past, for abused and neglected children, this has meant being victims of the unpredictable whims of immature, depriving and sometimes brutal adults. Many 'learning problems' stem not from disruptions of the learning process, but from negative attitudes and emotions which prevent the learning process from ever getting under way.22

Geiser also reports on another unexpected benefit to the tutor. An extremely disruptive, over-age, eighth grade boy who read at the fourth grade level was very serious and quiet while tutoring in the corner of the fourth grade room and conscientious about not disturbing the other children in the class. After he became a tutor, "James' behavior improved very little in his other classes, but teacher attitudes toward him changed when they saw that under different conditions he could act in a constructive manner."23

Herbert Thelen described "The Wilson Student Assistant Program" which includes tutoring in its activities, along with both large and small group presentations and the more traditional ways to utilize student assistants (clerical work, operating audio-visual equipment, etc.). An extra period was added to the school day so that college-bound students as well as those taking lighter schedules could have the opportunity to be of service. Thelen quotes the principal, William D. Proppe, on the origin of the project:

22 Ibid., p. 19.
23 Ibid., p. 20.
Our program developed out of a series of nagging concerns that young people of today were growing increasingly self-centered and materialistic, that the trend seemed to be for young people to become spectators rather than participants in the education process, that faculties and students needed to work closer together in a common goal of education, and that students seldom have the opportunity to be of service to someone else.24

Thelen continues:

An extensive questionnaire was used to evaluate the program. The results were generally very positive. . . . The overwhelming majority of the students reported that they had been helpful to the supervising teacher, that they had worked fairly hard, that they had really prepared the lessons they would teach, that they helped at least one other student make progress during the year, that the majority of the class they had taught viewed them with respect.25

McWhorter and Levy report on a program especially designed to raise the reading level of high school graduates from a poverty area to enable them to enter New York State College at Buffalo. Tutors were chosen on the basis of scores on an Informal Reading Inventory. The forty-one tutors the first semester of the program are reported to have gained 2.4 years in instructional level; the reported gain for thirty-eight tutors the second semester was 1.1. The authors recommend more closely controlled research in this area.26


25Ibid., p. 233.

J. V. Ramirez attempted to investigate whether the problem-solving ability developed during the tutoring process would carry over to other situations. He tested the experimental (tutoring) and control groups on an Unstructured Task test in which the pupils were given a model of a classroom with poorly arranged furniture. He kept tallies of the numbers of problems sensed by the pupils, the number of problems they were able to define, the number of solutions generated, and the number of consequences foreseen. The performance of the tutors exceeded that of the non-tutors in the test, but the evidence was not statistically significant.27

Tutor Training Procedures

A point stressed by many investigators is that the training of tutors is an essential ingredient of a successful program. Frager and Stern undertook a study to determine whether one method of training tutors would be more beneficial than another to both tutors and tutees. Forty-eight sixth grade pupils described as "high" and "low" achievers on the Stanford Achievement Test were randomly assigned to three counselors who conducted five training sessions with one group in a "traditional instructional

procedure in which the tutorial process was described, suggestions for working with the younger children presented, and questions on specific problems answered. The second group of tutors were taught a systematic procedure for setting goals, analyzing tasks, and choosing methods. They were also taught the learning theory concerning the importance of rewards, the effect of punishment, and the value of immediate feedback.

The kindergarten children who were tutored by either method exceeded the kindergarten controls at the .001 level of confidence as measured by the criterion test which accompanied the learning materials (McNeil ABC Learning Activities). Thus, both methods of tutoring were effective with the tutees.

The low-achieving tutors were reported to show significant changes in attitudes and self-esteem.

Speaking to the International Reading Association Convention in Anaheim about a cross-grade tutoring program which had been in effect for six years, Herbert Rosner emphasized the directions to the tutors. Fifth and sixth graders selected because they were two or more years retarded in reading were engaged in tutoring three days a week for ten weeks. The other two days were devoted to

orientation and enrichment for the tutors. Tutors elected a chairman, co-chairman and secretary for their activities. They were instructed in the use of materials contained in a learning kit for their second and third grade tutees.

The tutoring program emphasized a multi-sensory approach and was structured to provide variety for both tutors and tutees. The sessions were divided into four ten minute segments:

1) Oral reading from basal text by tutee, followed by comprehension questions given by tutor.

2) Auditory practice and phonics drill.

3) Vocabulary practice, emphasizing the kinesthetic, manipulative approach. (The kit contained a lap chalkboard which tutors used very imaginatively, and materials which the smaller child could handle and talk about.)

4) Story time. The tutor read aloud to the younger child from the book of the latter's choice. 29

The reading teacher in this project conducted the orientation, set goals, was present at the tutoring sessions, and kept a master chart of skills up to date for each child.

Rosner reported the typical gains of one session. The second and third graders averaged four months growth in ten weeks as measured by the Stanford Reading Test and five months growth as measured by the Gates McGinitie Vocabulary and Comprehension Tests. The fifth and sixth grade

tutors improved an average of 1.5 years on the Comprehensive Test of Basic Skills, Reading Section, and an average of one year on the Gates McGinitie Vocabulary and Comprehension Tests. 30

The Tutorial Community Project developed by Systems Development Corporation, Santa Monica, California, was headed by Dr. Grant Harrison, who saw the need for an effective way of training tutors. He worried that new programs might fail for lack of systematic training techniques or be less effective than necessary.

One problem in conducting a tutoring program is that although the necessity for frequent praise may have been explained to the tutors, they tend to supply praise less often than desired. The classroom teacher is otherwise occupied during the tutoring session and is not in a position to make sure that praise is being properly bestowed. Harrison's solution was to provide the tutors with such thorough and specific training prior to the tutoring experience that the desired behavior would be well established.

A period of trial and error finally resulted in a list of ten specific behaviors for the tutors to demonstrate while tutoring first graders in math:

30 Ibid., p. 18.
1) Establish rapport with the child.
   a. Make at least two comments not related to the lesson.
   b. Praise or compliment the child for something.

2) Explain the objective of the lesson.

3) Teach the child how to verify his answers.
   (Before first question is begun)

4) Have the child read the problem aloud.

5) Have the child make a written response before receiving any feedback.

6) Have the child check his answer before receiving any feedback.

7) Praise the child each time when he arrives at the correct answer.

8) Reward the child with a star or sticker for each correct answer.

9) Avoid punishing behavior of any kind when child is wrong. Help him determine that the answer is wrong and to get it right.

10) Have child do designated questions independently. 31

In four pre-service training sessions, the tutors were introduced to the objectives, which were explained and demonstrated. Tutors were given homework sheets to study and quizzed the next session. (What do you do if . . . ? What do you say when . . . ?) Role-playing sessions gave each potential tutor the opportunity to play the part of

31 Grant Harrison, "Training Students to Tutor," Bethesda, Md.: NCR/ERIC. ED 056 924 (March, 1972), pp. 22-23.
the tutor and the part of the pupil. "Pupils" in the role-
playing sessions were given cue cards telling them correct
and incorrect responses to make so that the tutor would
have the opportunity to deal with a variety of situations
and demonstrate his mastery of the recommended responses.

A tutor-rating scale was devised and refined so that
two independent observers would give a tutor the same
rating. An experiment was then conducted in which trained
and untrained tutors were given randomly selected tutees
and the same amount of time to tutor. The eight tutees taught
by trained tutors were able to solve every problem on the
post-test. Of the eight control tutees, only two could
solve any of the problems. Thus, Dr. Harrison concluded
that the tutor training system was effective and recommended
that a similar system be developed for each type of instruc-
tion a school chose to include in a cross-grade tutoring
program.32

Fred C. Niedermeyer and Patricia Ellis of the South-
west Regional Laboratory for Educational Research and Develop-
ment list the specified behaviors for upper grade pupils
used to tutor in a kindergarten reading program:

1) Tutor engages pupil in non-instructional, friendly
   conversation.

2) Tutor always lets the pupil know when he is right.

32Ibid., p. 6.
3) Tutor praises the pupil.

4) When the pupil's responses are not correct, tutor tells or shows the pupil the correct responses.

5) After displaying Behavior 4, tutor elicits correct response from pupil.

6) If tutor gets no responses to his initial question or direction, he repeats it using different words.

7) Tutor avoids trying to elicit correct response.

8) Tutor avoids negative verbal behavior, for example, "No, that's wrong."

The Tutorial Program for Kindergarten Reading Instruction was tried out, during the school year, revised during the summer and tried out again in the 1969-70 school year. The data reported are from the first two units (about three weeks each) of the second try-out.

After the original instruction by the teachers of fourteen classes, pupils were tested on four specific outcomes, such as saying specified beginning sounds on a twenty-item test called a Criterion Exercise, with five questions on each of the four outcomes. Pupils who failed to reach 80% on the Criterion Exercise received remedial training from Practice Exercises. Seven of the teachers administered the remedial training without the help of a trained tutor; the other seven used trained pupil tutors to administer

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the Practice Exercises. After the remediation, the Criterion Tests were regiven. Neidermeyer and Ellis report:

In the classes that had no tutors, the mean per cent of pupils reaching 90 per cent on the tests rose from 66 per cent on the initial tests to 69 per cent on the retests, a gain of 3 per cent. In the classes that had tutors, the mean per cent of pupils reaching 90 per cent rose from 62 per cent on the initial tests to 79 per cent on the retests, a gain of 17 per cent, or a difference of 14 per cent in favor of the classes with tutors.34

In "Training and Management of Student Tutors," William Deterline describes four programs already included in this report and relates current thinking and laboratory findings to the training of tutors, pointing out especially that most teachers do not know how to tutor: they are accustomed to lecturing to a number of pupils and if the number is reduced to one pupil, they lecture to him.

He defines tutorial instruction as "interactive instruction." "A tutor does not simply lecture to his tutee." He asks questions, clarifies misunderstandings, confirms correct answers, and provides immediate feedback. If merely directed to teach another pupil, however, most pupils imitate the lecturing method they have observed in the classroom. Therefore, Deterline concludes, "If students are

34Ibid., p. 6.
to be trained to be tutors, the nature of their tutoring procedures need to be sharply limited, defined, and taught.\textsuperscript{35} Deterline's plan for training tutors appears to be modeled after Harrison's, with the specifically mathematical directions adapted for more general use. Deterline adds a novel step in his tutor-training scheme: the tutor must respond to every inquiry of the tutee with a question; he is never to give out any factual information. In this way, the tutee's teacher need have no concern that the tutor, who is himself a remedial pupil, will misinform her pupil or teach him incorrect techniques.

The training of the fourteen and fifteen year-olds in the Youth Tutoring Youth program differs somewhat from the others discussed. "The National Commission on Resources for Youth feels that the content of tutoring should not be a systematic and rigorous campaign to raise reading scores. Emphasis is placed on the affective bases for learning."\textsuperscript{36} Deterline describes the Youth Tutoring Youth "emphasis on providing opportunities for the development of self-esteem and the perception of individual worth and competence."\textsuperscript{37}


\textsuperscript{37}Deterline, \textit{op. cit.}, p. 8.
Reporting on a Title I project in Minnesota to the International Reading Association Convention in Detroit, Harold Dreyer described a program which seemed headed for disaster in its first week, as neither teachers nor tutors were exactly sure what to do. Training sessions were organized by a reading resource teacher and a reading consultant. The classroom teachers were helped to solve the organizational problems connected with the tutoring program; how to have materials and assignments ready for the tutors, how to keep track of pupil progress, etc. The resource teacher undertook the training of the tutors, teaching them how to conduct oral reading, how to make and use flash cards, how to provide practice in auditory discrimination, etc. Rescued by adequate tutor training, the program proved to be a success in terms of reading test scores and teacher observations of improvements in self-concept. 38

Dr. Dreyer concluded:

This kind of a program can provide fabulous results in many areas where teachers seek gains, but it must be organized, directed, supported and coordinated by a well-trained reading resource teacher or someone with the qualifications background and personality that can work well with all the people involved. If all of this is left to the classroom teacher, only a few of them will demonstrate the necessary skill insight, knowledge and drive to make it work well. 39

38 Harold Dreyer, "Utilizing Pupil Tutors to Individualize Primary Reading Instruction" (Paper presented at the convention of the International Reading Association, Detroit, Mich., Spring, 1972), pp. 1-3.

39 Ibid., p. 4.
In an extended discussion he relates the YTY philosophy to that of Dr. William Glasser: very briefly, that a child must have a positive view of himself in order to be successful; that it is in school that a child becomes labeled as a failure through competitive recitation, tests, and grades; that the child comes to accept the school's evaluation of him, and his resultant low self-esteem guarantees continued failure.

To counteract this cycle, Youth Tutoring Youth centers operate in an atmosphere which is serious but very free. Supervisors are important, but their role is that of consultant; they do not indoctrinate the tutors with specific teaching methods. On the contrary, tutors are expected to plan their lessons and create most of the materials they will need. They are given access to art materials and equipment such as cameras and tape recorders and encouraged to make imaginative use of them. They may leave the room and the building to walk around the neighborhood or for field trips which they have planned. They are included in the decision-making of the center and conduct some of the in-service training sessions themselves. The National Commission on Resources for Youth aim is to give the tutors the opportunity to learn for themselves that they are creative, responsible, and capable individuals who have genuine contributions to make to others.
CHAPTER III

PLAN FOR USING TUTORS
AT MARINA HIGH SCHOOL

Introduction

In the fall of 1971, Marina High School introduced tutoring as a credit course. Good students were encouraged to elect this course. There has been no formal orientation and there is no coordinator or supervisor. Tutors are under the direct control of the classroom teacher for whom they tutor. Tutoring is done in the classroom of the high school or a nearby elementary school. Teachers who desire a tutor merely request one. There is no orientation for receiving teachers. Some of the receiving teachers utilize the tutors for clerical work rather than for tutoring.

The writer had one full-time Teacher Assistant tutoring for credit in the second semester of the 1971 school year and one part-time volunteer who tutored twice a week. Both girls were excellent students and were kind, firm, and patient with their tutees. Both tutors followed directions well and appeared to develop some insight concerning the tutees.
As a result of this investigation, the writer plans to initiate a program for Teacher Assistants using former students from her remedial classes.

**Criteria for Selecting Tutors**

The writer has observed with concern that the poor self-concept of pupils classified as "low" or "remedial" remains deeply embedded even after remediation of the reading problem has been completed. She will attempt to seek out one or two of these students to tutor in each of four remedial classes.

1. One year or more of Remedial Reading.
2. Junior or Senior standing.
3. Willingness to attend seventh period seminars for one-half hour weekly.
4. Fair attendance record.

**Expected Benefits to Tutors**

The chief aim of selecting these pupils for the tutoring experience is to give them an opportunity to develop personal and social attributes which will enrich their adult life.

1. Learn the social skills of putting others at ease, correcting errors tactfully, encouraging others to do their best.
2. Experience the satisfaction of being of genuine help to an adult.
3. Enjoy the prestige of taking a course heretofore reserved for honor students.
4. Develop self-confidence from being picked for a tutor and a model of behavior.

5. Develop accuracy in record-keeping.

6. Develop accuracy in following directions.

7. Reinforce reading skills acquired in remedial reading.

8. Improve written expression from writing reports on tutee.

Orientation of Tutors

The tutors will not need orientation in use of materials or procedures. As "graduates" of the remedial reading class, they are already familiar with them.

The initial orientation session will be limited to an explanation of the tutor's role: his duties and relationship to the teacher and the tutee.

The next several sessions will each center on one aspect of behavior or one learning theory. A brief introduction and explanation will be followed by examples elicited from tutors, finishing the session with specific applications. Approach and avoidance behavior, the effect of modeling, and behavior modification through reinforcement techniques will be discussed and the application of each to the tutees.

Later seminars will provide the tutors with the opportunity to share experiences with an interested audience and to help each other with suggestions.
Duties of Tutors

Tutors will be used initially to help pupils in the remedial classes carry out directions for the work prescribed for them. In a few weeks, tutors will be assigned to specific tutees.

1. Assist pupils in remedial class with directions for use of materials, such as Word Clues, EDL Study Skills Flash-X, and using the speed chart in Better Reading Book.

2. Assist pupils in locating answer keys, correcting lessons, recording scores.

3. Listen to oral work for pupils using Cracking the Code or the Sullivan Programmed Reading.

4. Teach pupils how to play the Dolch and teacher-devised sounding games. Play with them and keep records of pupil's progress.

5. Act as time-keeper for pupils working on speed exercises.

6. Assist freshmen students in learning the use of the library.

7. Sit next to tutee on Friday and serve as a model of behavior during library reading period.

Evaluation of Tutors

The opportunity to develop a helping relationship is viewed by this writer as the most valuable benefit of the tutoring experience for the tutors. Observation, possibly systematic observation on a rating scale, will be employed for evaluation. Interviews with tutors and counselors will also be used.

Reading is not expected to improve substantially, as the tutors have already received remedial treatment.
CHAPTER IV

SUMMARY AND CONCLUSIONS

Summary

Prior to the 1960's, arrangements for tutoring children were primarily made for the benefit of the children getting the help. In the first part of that decade, however, the discovery that the tutoring experience was of more benefit to the tutor than to the tutee was made independently in two different places.

First, at the University of Michigan, a team of social scientists noted the academic benefits to upper-grade children who were tutoring younger children, but the professors found the growth of the social skills of the tutors even more impressive. The team developed, field tested, and revised a system which they called the Cross-Age Helping Program, to give older children the maximum opportunity to develop helping relationships with younger children, to achieve status in a constructive way, to see themselves as useful and productive members of society, and to be appreciated by adults. At the same time the older children were reviewing basic skills and
concepts and improving their own ability to learn. The stress in The Cross-Age Helping Program is on teaching children to learn through cooperation rather than by competition.

Simultaneously, in New York, tenth and eleventh graders who were given tutoring jobs in the Homework Helper Program improved their own reading scores dramatically, although that had not been the original purpose of having them tutor.

Youth Tutoring Youth, sponsored by the National Commission on Resources for Youth, is a program combining the two discoveries reported above. Needy youth are paid from federal funds to tutor younger children. The purpose of the program is to prevent school drop-outs. The method is to pay the students fairly good money while engaging them in activities which will build their self-esteem, kindle their interest in learning, and improve their academic and social skills.

The Cross-Age Helper Program and the Youth Tutoring Youth Program share the philosophy that the chief benefit the tutor can gain from tutoring is the change of his attitudes about himself, adults, younger children, and learning. Reflecting this philosophy, the training in these programs encourages individual initiative, creativity, and cooperation. Although these qualities are very difficult to measure, the sponsors of both programs are energetically
working to devise instruments which will accurately show progress toward these major goals. Reading improvements of tutors and tutees is also measured. Three programs are included in this survey for their tutor-training techniques: the Tutorial Program for Kindergarten Reading Instruction developed by the Southwest Regional Laboratory for Educational Research and Development (Niedermeyer and Ellis). The Tutorial Community Project organized by the Systems Development Corporation (Harrison), and "A Tutorial Model" (Deterline). The emphasis in these programs is in raising the academic scores of the tutees. Reflecting this goal, the training techniques are very specific, one of them down to the point of telling the tutor when to smile and requiring him to memorize a script of what he is to say and when. Evaluation of these programs is made by measuring the amount of learning on the part of the tutee.

The remaining programs reported upon in this survey fall between these two extremes. The successful ones seem to have in common an organization which provides for orientation and supervision of the tutors. This role is sometimes taken by a reading teacher and sometimes by the classroom teacher of the older pupils. A common plan appears to arrange for three days a week of tutoring and two days in other activities: learning more about the teaching process, a seminar for discussing common problems and ways
to solve them, planning lessons and preparing teaching materials. These activities are considered to be valuable in themselves for the tutors.

Evaluation usually includes reading test scores of both tutors and tutees, augmented by relatively simple questionnaires, check lists, rating scales, interviews, or anecdotal reports in an attempt to identify the kind and degree of progress made in attitudes. The importance of non-academic changes is recognized in varying degrees, but most schools do not have the personnel or funds to attempt sophisticated evaluation.

Conclusions
Younger children definitely appear to profit from tutoring by older children. Measurable academic improvement of the tutees (usually in reading) seems to take place regardless of the age, sex, mental ability, or school adjustment of the tutor. The individual attention given to the tutee by a tutor appears to have beneficial effects on the tutee as a person in addition to the scholastic benefits.

Older children who act as tutors appear to gain even more from the experience than those they help. Low-achieving and "problem" pupils profit more than high-achievers, both in reading gains and in attitude changes. Tutoring seems to be one of the most effective ways yet discovered to improve the reading ability of retarded readers. The willingness to concentrate on elementary drill in order to
help some one else learn appears to be a contributing factor to this result, but the change in status for the tutor when he is accepted by teachers as a co-worker in the educational process may be even more important.

A consistent benefit noted in tutoring programs lies in non-scholastic changes such as "sense of responsibility", "understanding the problems of others", "acceptance by peers", and "interest in learning". Improvements in this area are almost universally remarked upon, even in programs which were set up for some other purpose.

A prime qualification for a successful tutoring program is having a capable person responsible for the orientation and supervision of the tutors. In larger programs, especially those involving children from different buildings, systematic provision must be made for communication between the teachers who send the tutors and the teachers who receive them, as well as opportunities for the tutor to consult with his tutee's teacher.

Participation in a tutoring program requires a change in attitude for teachers. Most of the programs surveyed in this paper appeared to involve volunteer teachers who valued the tutoring experience for their pupils. Unwilling teachers could easily destroy a program by letting the tutor see that they resented his absence from his own classroom in order to tutor, or that they resented his
tutoring help as a threat to their ego, or by treating him as another pupil in the primary classroom.

The philosophy and goals of a tutoring program determine its organization, materials, and methods of training tutors.

It is of interest and concern to this writer that the three tutor-training techniques originating in California consist of rigidly prescribed behavior for the tutors for the purpose of helping primary pupils succeed on "criterion-reference tests," i.e., tests which tell exactly what a pupil can or cannot do (correctly multiply three-digit numbers by two digit numbers, getting at least eight out of ten problems right in a time limit of ten minutes). Criterion-referenced tests yield a result based on the pupil's own performance, in contrast to standardized tests which compare the pupil's performance to that of a large number of other pupils used by the publisher in standardizing the test.

The California State Board of Education has required that, beginning in the school year of 1972-73, teacher evaluation will be based upon evidence of pupil performance. Criterion-referenced tests are the preferred method of demonstrating pupil improvement. Instructional materials and accompanying tests organized in this fashion are eagerly sought by teachers and are rapidly being produced by publishers.
It is with some skepticism, therefore, that this writer notes that: a) of all the studies reviewed in this survey, only the data reported by Niedermeyer and Ellis (associated with the Southwest Regional Laboratory) appears to be deliberately presented in a form which exaggerates the importance of the trained tutors in the experiment, and b) the Southwest Regional Laboratory invites inquiries about the tutoring kit which it offers for sale.

The grave danger that this writer sees is that cross-age tutoring, which has many exciting and imaginative possibilities could easily become reduced to its narrowest application for ulterior motives. The temptation will be very great to adopt an innovation which costs very little, enjoys public popularity and guarantees the teacher's renewal of contract!

If cross-age teaching should be adopted primarily as a method to raise primary reading achievement, the tutees would still benefit from the individual attention and the improved reading skill.

This writer, however, believes that the tutor would be substantially deprived of the potential benefits of tutoring if his work was limited to guiding the younger child through criterion-referenced materials. How could he develop initiative, creativity, or judgment in these circumstances? His friendly relationship with a younger child would be limited to two non-instructional comments per session (plus smiles at specified intervals). He would
be deprived of the opportunity to consult with the child's teacher as a co-worker (just do the next exercise checked on the list). He would not have the advantage of discussing his tutoring problems with the supervisor or his fellow tutors, thus learning to use adults and peers as resources. He would infer that the "right" way to teach is the one provided by the school authorities and that any contribution of his own would be "wrong". He would again be cast in the role of "student", with his success measured solely in terms of his accuracy in following directions.

This writer is of the opinion that it would be a substantial and unnecessary sacrifice of the potential benefit of tutoring to limit the experience to rigidly prescribed behavior on the part of the tutor. It would seem more desirable to allow one day a week, or time at the end of each unit for the tutor to relate to his tutee in a more personal and creative way. Another possibility would be to rotate the tutor's duties so that he helped in the criterion-referenced reading or math program for a period of time and then switched to helping in art or creative writing, etc.. Older children need to develop the qualities encouraged by a more flexible system of tutoring.

Recommendations for Further Study

Further study particularly needs to be done on the effect of tutor-training and the type of tutoring plan in
relation to the tutor's growth. Studies of effects of tutor-training to date are largely centered on making the tutor's work with the tutee more efficient. Frager and Stern apparently found no difference in benefits to the tutor between two systems of training: they did not report the findings even though this was one of the stated purposes of the experiment.

Whether or not intellectual skills developed in tutoring carry over to other areas would be an interesting study. The Ramirez investigation was the only one noticed in this survey, and it suffered from weaknesses in design or unavoidable constraints (non-random sampling, small numbers, unequal treatment time).

The effect of tutoring in changing teachers' attitudes toward the tutor, as observed by Geiser, also deserves further study.

The studies being done at Michigan and by the National Commission on Resources for Youth to develop accurate tests of attitudinal changes merit close attention.
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