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ABSTRACT

Since its inception in 1963, the Homework Helper Program, funded under Title I of the 1965 Elementary Secondary Act, has provided an effective vehicle for the challenging of traditional theory in regard to the tutoring of educationally retarded children. It began on the assumption that children in slum area schools could benefit from tutorial assistance administered by other students from similar demographic and socioeconomic backgrounds. As initially realized in the 1962-63 school year, the program consisted of tenth, eleventh, and twelfth grade students who were to serve as tutors to pupils in the fourth, fifth, and sixth grades who were working below grade level. During the following years the program was extended horizontally in order to include subjects aside from reading, and vertically to include junior high school students as well as senior high school students. At the high school level, centers were established at both academic and vocational high schools. In 1970-71 there were 48 high schools in the program; and approximately 800 college and high school students provided tutorial assistance to over 6000 high school students. The operation of the Homework Helper centers is the responsibility of a Master Teacher who sees to it that every student who requests individual help is able to get it either from a qualified tutor or from the teacher himself. (Author/JM)

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Final Report
HIGH SCHOOL HOMEWORK HELPER PROGRAM
Summer 1972

BOARD OF EDUCATION OF THE
CITY OF NEW YORK

An evaluation of a New York City school district educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed under contract with the Board of Education of the City of New York for the 1971-72 school year.

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Summer High School Homework Helper Program

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INTRODUCTION

I. Background of the High School Homework Helper Program

A. Winter Program

Since its inception in 1963 the Homework Helper Program has provided an effective vehicle for the challenging of traditional theory in regard to the tutoring of educationally retarded children. It began on the assumption that children in slum area schools could benefit from tutorial assistance administered by other students from similar demographic and socio-economic backgrounds. The assumption was that the student tutors would provide a basis for empathy which otherwise might not be realized in the normal classroom environment. It was also assumed that the tutor's lack of educational training would be compensated for in the psychological benefits realized by the educationally retarded child in having a member of his own socio-economic group as tutor.

The ideas for this program were first developed during the 1962-63 school year under the direction of both the New York City Board of Education and Mobilization for Youth, Inc. As initially realized the program consisted of 10th, 11th and 12th grade students who were to serve as tutors to pupils in the 4th, 5th and 6th grades who were working below grade level. In 1963, the program serviced 300 tutees with 110 tutors operating out of nine Homework Helper Centers. During the following years the program was extended horizontally in order to include other subjects (history, math, foreign languages, etc.) aside from reading. The program also extended vertically with its inclusion of junior high school students as well as senior high school students, the latter being fully introduced to the program in 1969-70. At the high school level, centers were established at both academic and vocational high schools. College students living or attending schools in the neighborhoods were also recruited at this time as tutors, though the main group of tutors was still predominantly high school students. In 1970-71 there were 48 high schools in the program. This past year showed an increase of up to 53 schools with a projected total of 60 for the 1972-73 year. During the 1970-71 school year approximately 800 college and high school students provided tutorial assistance to over 6,000 high school students.

The operation of the Homework Helper centers is the responsibility of a Master Teacher who sees to it that every student who requests individual help is able to get it either from a qualified tutor or from the teacher himself. Aside from the Master Teacher, there is usually one adult paraprofessional as well as a corps of 15-20 college and high school students working at

each center during the regular school year. Each of these students is required to attend an orientation program before assuming tutorial duties and monthly tutor training activities are also encouraged. The pay scale of these tutors ranges from \$1.60 to \$4.00 per hour depending upon their academic standing and their amount of time in the program. During the 1971-72 school year the attendance of participating tutors was approximately 95% while the attendance of participating students was approximately 85%.

B. Summer Program

In 1964 the Homework Helper Program was extended to summer schools. The high school summer program was directed at those students who had failed in one or more subjects and was also to provide tutorial assistance in English as a second language to those students whose academic deficiencies were directly related to their lack of reading ability in English.

As in the regular program tutors were recruited on the basis of their academic achievement and their ability to tutor in specialized subject areas. Students from nearby colleges were also brought in as tutors. Many of these tutors had participated in the program during the regular school year.

A Master Teacher was in charge of the program at each center at which the Homework Helper Program was operating.

In last summer's program there were between 18-21 tutors in each of the 19 operating centers. Other facilities such as a cultural center, and a Queens community facility were also available in the program.

In general the main goals of the summer projects reflect the entire philosophy of the Homework Helper Program. By meeting with indigenous tutors who are successful products of the schools or neighborhoods of the students, it is hoped that these students will be able to develop their own initiatives and go on to improve their skills. Since these students are often well-motivated, as reflected in the fact that they choose to attend the centers, it is expected that Summer Homework Helper Programs will be successful in building academic confidence and initiatives.

The summer program has also provided jobs for high school and college students at a time when the job market is very tight in regard to the hiring of young people. In some cases the money earned by a student as a summer tutor has been helpful in allowing him to remain in school.

II. Related Studies

Past evaluations of the Homework Helper Program have generally shared a consensus that the project significantly improved the educational attainments of the children involved, whether they be tutors or tutees. It was even suggested by the U.S. Department of Education's report on the program (1) that Homework Helper Centers could and should be considered by other communities as a model and utilized according to their own particular resources and requirements.

In a more detailed report by R. D. Cloward ("Studies in Tutoring") (2) it was found by testing that pupils in experimental groups who had received four hours of tutoring per week were shown to have made significant gains in reading achievement compared with pupils in a control group, but students who had received only two hours of tutoring per week did not show significant gains over the controls. Another finding in the Cloward report was that tutors in the program also showed considerable gains in reading achievements as compared to the controls. This latter fact was a surprise to the evaluators and suggested to them that the program had even more far-reaching effects than had been originally supposed.

The results of the Cloward article also suggest that high school tutors will be very effective with under-achieving children because in a normal classroom environment the teachers tend to neglect Educationally retarded children in terms of spending excessive amounts of class time with them, and that in a 1-1 tutoring situation (with emphasis on basic skills) the under-achieving student will have a greater opportunity to express his problems and work on his particular weaknesses.

Within the program structure itself past interviews (3) with the project coordinator, teachers in charge of summer schools and subject teachers who utilized tutors' services, indicated that the Summer High School Homework Helper Program was a useful and integral part of the summer high school.

It is clear from past evaluations that the Homework Helper Program is making advances not only in the problems of helping the educationally retarded, but also in the more social areas of youth employment, developing significant inter-personal relationships, and providing job motivation for tutors who might be encouraged by their experience to make teaching their life's work.

Since it has been shown, particularly by Cloward (2), that the tutor especially benefits from the program, there is no reason not to widen the group boundaries from which the tutors are selected. As was suggested in a previous evaluation (4), it might be possible to hire high school drop-outs to work with younger children in order to build in them the confidence exhibited by the tutors who have worked

in the program, as well as giving them a different perspective from which they might be encouraged to finish their schooling.

A comprehensive description of the program may be found in a case study by Deering (5). Also, two additional evaluations (6,7) of the whole program are available, but they are of a more descriptive nature.

BIBLIOGRAPHY

- (1) U.S. Office of Education, Division of Compensatory Education
Homework Helper Program, N.Y.C. Washington D. C. :
U. S. Office of Education, 1969.
- (2) Cloward, Robert D., "Studies in Tutoring". Journal of
Experimental Education, Vol. 36, No. 1, 1967, pp.14-25.
- (3) Human Affairs Research Center. "An Evaluation of the 1971
Summer Homework Helper Program"....for the Bd. of Education
#910675 (see Appendix)
- (4) Teaching and Learning Research Corporation. "Homework
Helper Program 1969-70" Final Report Function #923631
- (5) Deering, A. R., "The Development of the Mobilization for Youth
Homework Helper Program: A Case Study". Dissertation Abstracts, 1967
- (6) Ashby, Claire and Donald Lynch, "An Evaluation of ESEA Title I
Program "Homework Helpers" District 14"
N.Y. Fordham University, 1969
- (7) Baratta, Anthony: "An Evaluation of the District Nine Homework
Helper Program, Title I Project."
N.Y. Fordham University, 1969

PROGRAM DESCRIPTION

I. Sites

The current 1972 Summer High School Homework Helper Program was to have been operational in the following 19 centers: George Washington, Washington Irving, Theodore Roosevelt, James Monroe, Taft, Abraham Lincoln, Brooklyn Tech. Erasmus Hall, New Utrecht, Thomas Jefferson, Evander Childs, Jamaica, John Dewey, New Dorp, Richmond Hill, Thomas Jefferson Annex, William Cullen Bryant, Flushing, and Benjamin Franklin.

II. Staffing

The project, as in the past, was to be a tutorial program employing high school and college students as tutors for educationally retarded summer high school students. Tutorial sessions were to be conducted from 8:30 A.M. to 1:00 P.M. (3 periods per day) under the supervision of regularly licensed Board of Education teachers. Tutors were to participate in an orientation program as well as in two training sessions during the course of the program. As in the past, the centers were to service those students who had failed one or more subjects and were also to focus upon the problems of those students who were having difficulty because of their lack of proficiency in English as a second language. The program also planned to provide employment for as many students as possible as well as engender an interest in teaching in those students who served as tutors.

According to the project proposal a Project Coordinator was to be responsible for directing, organizing, administering and supervising the entire program. Three General Assistants were to work directly under him and to divide the 19 participating schools among themselves for processing, applications and supervising.

Each center was to be directly supervised by one Master Teacher who would schedule tutoring sessions, handle administration, payroll and inventories. He would work directly with tutors and be responsible for seeing that they work effectively.

One Teacher Aide was to be assigned to assist with administrative details, materials, to work with individual students and make home contacts under the direction of the auxiliary trainers.

Ninety-five Educational Assistants (Associates) - five per center - were to be assigned to work as tutors. They were to be college students. Two-hundred and nine Student Aides, 11 per center were to be assigned to work as tutors. They were to be high school students.

The criteria for the selection of tutors who were still in high school was that they live in the area of the center, read no more than two years below grade level, have a satisfactory school record as evidenced by a recommendation from a school official, have an ability to tutor in a specific subject area, and have no behavioral or emotional problems. Applicants under 18 had to have parental consent.

The only criteria suggested for college students was that they attend a college within a reasonable distance from a Homework Helper Center.

Four Auxilliary Trainers were to be assigned to work with each General Assistant and the Coordinator in order to help train tutors, work with parents and visit homes.

III. Materials

Each center was to be allowed to spend \$100 on classroom materials and \$100 for textbooks. The types of materials and textbooks were not specified. \$200 was allotted each center for the daily provision of snacks.

IV. Student Population

The summer program was to serve approximately 2850 secondary school pupils who were reading below grade level when last tested by the school. Priority was to be given to those students with the lowest reading scores. Other students were to be those who had failed in one or more subjects or those who were specifically recommended to the program by teachers or guidance personnel. Those students with a history of mental retardation, emotional disturbance, or serious behavioral problems were not to be considered for the project.

Although the tutors were compensated monetarily for their participation, it can be said that they were also served by the project. It was hoped that each high school and college student in the tutoring program would benefit by either increasing his own skills or at least by gaining valuable experience.

V. Curriculum

The tutorial activities were to have included help with homework, development of independent work habits and study skills, and specialized tutoring in subject matter areas such as foreign languages, algebra, social studies and English. Throughout the program there was also to have been an emphasis on developing "rapport" between tutors and tutees with the understanding that this would help the students adjust more fully to the academic and larger social environments.

No specific curriculum area was stressed in the proposal.

VI. Special

The program was late in starting due to temporary cancellation and subsequent late funding. Two of the 3 days lost at the beginning of the program were "made up" later, but several staff members found other jobs in the interim and general staff morale was somewhat damaged as a result.

EVALUATION PROCEDURES

and

POPULATION SAMPLESI. On-Site Visits

Because the project was late in starting and required time in which to become fully implemented, on-site visits were made during the last four weeks of the six week program. Members of the evaluation team visited 18 of the 19 funded centers during the four week period (the William Cullen Bryant center was not visited) and during these visits, the General Administrators, Master Teachers, and selected tutors and students were interviewed. General classroom and specific student-tutor sessions were observed at each of the 18 centers.

A. Interviews

Standard interview forms were devised by the evaluators to obtain information and opinions about the project from Master-Teachers, students and tutors (see Appendices A1 and A2). Seventeen Master Teachers (one was absent at the time his center was visited) were asked to state their objectives for the project, to describe, critically analyze and make recommendations for the project and to furnish statistics on student enrollment, attendance, materials and staff hiring. (The results of these interviews and the observations, questionnaires and anecdotes described in the following sections, will be discussed in Chapter 3 under the appropriate headings). Eighteen students and tutors at 16 centers were selected at random by members of the evaluation team and were interviewed to determine their academic status and amount of time in the program and to gain insight into their experiences in and opinions about the program.

B. Observations

A standard evaluation form was devised by the evaluators to measure on a graded scale the attitude, rapport and quality of oral communication shown by both students and tutors (See Appendix B). The tutors were observed to be either teaching, supervising, disciplining, supporting, (giving non-academic-emotionally oriented help), socializing or doing clerical work, and materials seen during specific observations were listed and described. Attitude was rated on two 5 point scales of: from bored to enthusiastic and, from unpleasant to very cheerful. In the latter category it was felt that a rating of 4 would often be the highest realistic score in a tutoring situation where "teaching" animation is not typically stressed.

Aside from observing 40 specific student-tutor sessions, school facilities at each site were noted and the physical layout of the project was described. Special factors contributing to or detracting from the educational significance of the project were investigated and described.

II. Quantitative Data

The project director and general assistants worked cooperatively with the evaluation team to develop a daily anecdotal form and cover sheet which would indicate most accurately the students' activities in the program and their increase or decrease in ability to work effectively and independently over the six week period (See Appendix C). The evaluators revised a questionnaire to determine the attitudes of tutors and students toward school and themselves and to determine how effective they find the project.

A. Daily Anecdotal

The daily anecdotal form was used to determine the extent to which the following objectives were met:

- 1) To improve skills and abilities so that participants, whose passing rate in respective subject areas has been approximately 20% during the regular school year, will have their passing rate raised to 50% of subjects taken in summer school.
- 2) To improve study skills, work habits and the preparation of homework assignments to the extent that students will show approximately 20% improvement in these areas based on the judgment of subject and Master teacher on a rating scale to be devised by the evaluative agency with the program director.

Tutors were directed by their Master Teachers to fill in a daily anecdotal sheet for each student with whom they worked. (See Appendix C.2) These anecdotal forms enumerated the subjects and activities covered and materials used. They were also to have identified specific problems and related action taken. They rated on a 5-point scale (from Unsatisfactory to Outstanding) the students: 1) strength in basic skills, 2) utilization of study skills, 3) ability to work independently and 4) attitude toward the task. These forms were to be completed during the conference period at the end of each day. Master Teachers were to keep files on each regularly attending student, and the tutor was to add a new anecdotal form to the file each day the student participated. A student who attended the program five days per week, therefore, would have five progress reports at the end of the week, and thirty at the end of the program. A student attending only once each week would have only six anecdotal by the end of the program.

One cover sheet was added to each student's file to indicate his overall progress during the summer. His final failing grade (from the regular school year) in each subject was to be recorded, as well as his final grade in summer school for each subject. The number of times he came to the center, and the number of hours he spent there were also noted.

B. Questionnaires

Questionnaires were distributed to all students and tutors in the project on a pre-post basis during the second and fifth weeks of the program's operation (See Appendix C-1) This questionnaire was designed by the evaluators to determine the extent to which the third program objective was being met:

- 3) To determine if program participation has improved attitudes toward school and school related activities of the tutors and tutees to the extent that the participants will show an improvement approximately of 20% on a structured attitude scale that will be administered to tutors and tutees on a pre-post basis.

Each tutor and student was asked how far he or she would like to go on in school, how far he really expected to go, how high his grades would be if he "really tried", and how important passing grades were to him. He was also asked to evaluate the project as either extremely helpful, very helpful, helpful, or of no real help.

C. Samples

1) Students

2,015 students participated in the summer Homework Helper Program and each student could accumulate 25 anecdotal reports (in addition to the cover sheet and questionnaire information). It was projected that for a population of this size, a 25% sample would be appropriate for evaluation purposes.

Limitations: Because it seemed apparent that students attending the centers 3 times or less could not be considered to benefit noticeably from tutorial assistance, or undergo attitudinal changes, these students' records were not used in the evaluation. Such use would only distort findings on program effectiveness. A total of 853 students from all centers fell into this category.

Adjustments: The reduced sample of 1162 students who attended centers four or more times was analyzed for any proportional emphasis on either sex or center attended. Students were found to be 48.8% (567) male and 51.2% (595) female. Since neither sex was proportionally emphasized, there was no need to adjust the sample for this factor. The proportion of students attending each center was noted. No more than 10% of the total population was found to originate at any particular center. The population was distributed among the 19 centers in the following manner:

TABLE I

PERCENTAGE DISTRIBUTION OF POPULATION SAMPLE AT19 CENTERS N=1162

Students in Sample	Number of Centers
2%	2
3%	2
4%	3
5%	5
6%	4
8%	1
10%	2
Total	19

This distribution, which was derived from the number of students at each center who attended tutorial sessions 4 or more times, was not found to be disproportionate enough to require sample adjustment.

The final student sample was, therefore, 25% of the limited sample (1162) or 290 students.

In specific instances, the student sample was further reduced due to: 1) lack of response to a particular item on the part of the student, 2) lack of both a pre and post response, or 3) failure of a particular school to send either a set of student questionnaires or anecdotes. The specific sample will be noted on each table as N.

2) Tutors

Three centers did not provide information or questionnaire results on tutors. The number of tutors working at the other 16 centers was 268 or an average of 16.6 per center.

Tutors were to fill out questionnaires on attitudes toward the program and toward education. Since many centers hired tutors predominantly on the basis of previous work experience (only 25% of the tutors employed were "new") in the program, it was not expected that those tutors would experience any significant change in attitude over one particular six week period. For this reason, two samples were used and compared: 1) the tutors who had worked in the program previously and 2) the "new tutor" population (68) at the sixteen reporting centers. It was projected that the new tutors would show a more significant level of attitudinal change than would the "old" tutors.

The tutor sample was further reduced in specific instances when tutors failed to respond to specific items or did not respond to both the pre and post choices on a given item.

FINDINGSI. Program FunctioningA. Sites

The program was operational at all 19 proposed sites except that the center originally planned for Benjamin Franklin was utilized as a second center at Flushing High School.

The Master Teacher and General Assistant responsible for each center decided on a physical plan based on the particular facilities available, and on personal educational judgements. The project operated most often in two regular classrooms and less often in one large classroom, cafeteria or library. In four schools, three or more classrooms were used.

TABLE II
FREQUENCY AND PERCENTAGE DISTRIBUTION OF FACILITIES

USED AT CENTERS N=18

<u>Facilities Used</u>	<u>Number of Centers</u>	<u>%</u>
1 classroom	3	18.
1 cafeteria	1	6.
1 library	1	6.
2 classrooms	7	41.
3 classrooms	2	11.5
5 classrooms	2	11.5
All classrooms*	1	6.

* At Evander Child tutors work in the regular classrooms every period in a "Remediation in Reading and Math Skills" program.

All centers were observed to be clean and orderly, although one student interviewed said that he preferred not to work in the cafeteria. Physical attractiveness did not seem to be essential to the program because of the intimate nature of the tutor-student relationship in this case, and there were few attempts seen in the direction of decoration. The divided Marine Biology Lab at John Dewey and the library at Washington Irving were observed to make particularly appropriate, comfortable and attractive centers.

Posters advertising the program were seen in abundance at all 18 sites visited.

B. Staffing

1) Staff Roles and Criteria for Selection

Project Coordinator: Dr. Albert Deering has been the project coordinator since the program's inception and was instrumental in its initiation and development. He supervises the entire project and works closely with the three General Assistants in program planning. Dr. Deering calls supervisory meetings at the project office at 141 Livingston Street, and keeps personnel informed about all issues relevant to the project. He appears to be deeply committed to the program, feeling it has a real educational significance, and will be directly involved in any future planning related to Homework Helpers.

General Assistants: The three General Assistants who divided responsibility for the 19 centers among themselves (5, 6 and 7 respectively) visit their schools on a daily basis. There they discuss project activities with the Master Teachers in charge and determine what materials or supplies, if any, should be acquired for the center. During on-site visits, they were observed to have friendly relations with school personnel and they appeared to be eager to help with any problems which might arise at the center. They were usually observed to be taking texts or Regent Review books to or from a center. It was obvious that they knew personally the Master Teachers, Aides and Tutors, as well as some of the students. One general assistant was noted to have a very fine rapport with many students and tutors. The program seemed to benefit considerably from the experience and management capabilities of these administrators.

Master Teachers: The General Assistants ask principals at each center to recommend Master Teachers for the project from the list of applications received. From the two or three names recommended, a Master Teacher is chosen on the basis of ability and interest in the project. All the Master Teachers observed (17) showed enthusiasm about the project and felt it was "successful". Many of them were quite actively involved with the tutors and students, but the typical role was a supervisory one. Master Teachers usually sat at the teacher's desk in the main classroom, with the Teacher Aide nearby, and made tutor assignments. The degree of their activity was dependent on the degree of activity in the center. At some centers, only one

large classroom was in use, and the program operated with relative calm. At another center, five classrooms might be in use, and there would be a more lively atmosphere. Most of the Master Teachers (approximately 83%) seemed to be able to relate well to their students and tutors and to have a real appreciation of their cultural backgrounds.

Teacher Aides: The Master Teachers all indicated that their Aides already had "some" experience (41%) or "extensive" experience (59%) and received no special training during the summer session. The Teacher Aides all appeared to be interested and competent personnel. Two were observed working with students. Others worked with payroll and were in obvious command of the statistical information asked for regarding student enrollment and attendance. They were observed to be on friendly terms with their Master Teachers and to take an interest in the tutors and students.

Auxiliary Trainers: No Auxiliary Trainers were observed by Evaluation Staff members. However, Master Teachers, Teacher Aides and General Assistants spoke very highly of these women. They are considered to have very high qualifications, to have taught extensively, and to be close to and familiar with the community. Two Master Teachers indicated that an Auxiliary Trainer had not yet visited their school, but this was only during the second week of the program. The other fifteen Master Teachers reported that a trainer had been to the school once or twice and had made observations, discussed the project, talked to the Aide, and offered suggestions. One Trainer is reportedly very involved with student scholarships and helps students and tutors to be made aware of and apply for those scholarships available to them.

Tutors: The Summer Homework Helper Program employed an average of 16.7 tutors at each of the 19 centers. Five college students were to have been allocated to each center. There were, in fact, an average of five college tutors per center (2.5% with 30 to 45 credits; 2.5% with more than 45 credits) but they were allocated on the basis of need. Several centers needed tutors for predominantly advanced academic subjects. Several centers concentrated on remedial work. One center had 10 college students and 6 high school students employed as tutors but this situation was unique. Based on a sample of 17 schools the most frequent number of college students (tutors) found at a center was five. The most frequent number of high school students at a center was 4 (average 6) and the most frequent number of high school graduates was 5 (average 5).

TABLE III
AVERAGE NUMBER OF TUTORS AT EACH CENTER
 N=17 SCHOOLS

Tutors	Avg. No. per center
high school students	6
high school graduates	5
30-45 college credits	2.5
Over 45 credits	2.5

These tutor classifications are based on payroll differentiations. A High-School student with no experience receives \$1.60 per hour. With one year experience he receives \$1.75 per hour. A high school graduate receives \$2.00 per hour--with no experience. The next salary scale is \$3.25 per hour for a college student with at least 30 credits. A college student with more than 45 credits receives \$4.00 per hour.

Six Master Teachers and 2 General Assistants commented that the starting salary for high school students is quite low (The weekly salary of the high school student working the 4½ day is \$45.00 while the college student gets \$90.00.) and that this was not really fair because all tutors had similar work loads and responsibilities.

Most of the centers employed 16 tutors (10 centers). Four centers employed 17 tutors, and three centers employed 14, 15, and 18 respectively. Several tutors took other jobs when they were told that the summer program had not been approved. (Several Master Teachers commented that they had received some uncomplimentary letters from parents of tutors at the time). At least one of the tutors had left the program because of illness, and vacancies of this kind which occurred after the program got started were not filled, due to the short duration of the project.

Master Teachers were asked to list their main criteria for selecting tutors. They indicated that their primary criteria were: academic success, previous experience in the project, and recommendations by other Master Teachers or General Assistants. They gave an average of two criteria each.

TABLE IIIa

CRITERIA FOR THE SELECTION OF TUTORS

N=17 MASTER TEACHERS

Criteria	No. of Responses	%
academic success	7	20.5
recommendations	7	20.5
previous experience	6	17.5
rapport, personality	5	14.5
financial need	3	9.
knowledge of French or Spanish	3	9.
math background	2	6.
bookkeeping background	1	3.
	34	100.0

Since there is probably some overlapping in the ideas behind the responses "recommendations" and "previous experience", it can be generalized that previous work experience in the center (and resultant teacher recommendations) constituted the most important criteria in the hiring of tutors. This is further supported by the fact that 75% of the tutors hired had worked in the program before.

2. Staff Objectives: Master Teachers indicated during interviews that their main objectives were distributed in the following areas: development of the one-to-one, personal student-tutor relationship; development of good study habits and work skills; improvement of students' attitudes towards school; stress on remedial reading; stress on math; and development of an English as a Second Language program (ESL). At least four of the seventeen Master Teachers interviewed emphasized objectives in these areas. Those Master Teachers who indicated that they stressed either math, remedial reading, or ESL, indicated they did so because of student requests and not because of personal preference. Other objectives mentioned by one, two, or three teachers included stressing Spanish, French, science or remedial math, promoting self direction, improving grades to the passing level, and motivating students to return to the program in September or the following June.

The number of responses given in the major categories are indicated in the Table below. No more than eight Master Teachers indicated any one of these specific objectives.

TABLE IIIb
STATED OBJECTIVES OF MASTER TEACHERS
IN THE HOMEWORK HELPER PROGRAM

N=35

Objectives	No. of Responses	%
student tutor relationship	7	41.
math stress	7	41.
attitudes toward self and school	6	35.
study habits and work skills	5	29.
ESL stress	5	29.
Remedial reading stress	5	29.
	35	100.

No particular objective listed above was mentioned by 50% or more of the Master Teachers. The highest percentage (41%) of teachers indicated that an emphasis on the student-tutor relationship and the teaching of math were their prime objectives.

The project proposal places special emphasis on these objectives: 1) the improvement of skills and abilities to the degree that passing rates are raised from 20% to 50% in summer school; 2) the improvement of study skills and work habits and homework preparation to the degree that a 20% improvement is discernible, and; 3) a 20% improvement in student and tutor attitudes toward school.

Passing rates were mentioned as objectives by only two teachers. Improvement in study skills and habits was cited as an objective by five teachers (29%) but no teachers mentioned improvement in homework preparation as an objective. Improvement in attitudes toward school was mentioned as an objective by 6 (35%) teachers.

All eighteen tutors who were interviewed indicated that math was one of the subjects they taught and for the three tutors who taught only one subject, the subject was math. Among the eighteen students interviewed, 11 (62%) were at the center because they had failed mathematics. Students and tutors who were interviewed, however, indicated (Tutors-74%, Students 83%) that the personal relationship developed between them was their primary objective.

Summary: The Master Teachers interviewed were primarily concerned with the personal and attitudinal aspects of the program for their students, and with the more immediate need of having tutors capable of teaching in the area of mathematics. This was true also of the tutors and students interviewed. Passing grades and homework preparation were not emphasized as objective.

3. Staff Evaluations and Recommendations:

All administrative staff interviewed (including Master Teachers) indicated that they found the program "Very Effective". Of the 18 tutors interviewed, 14 found the program "Very Effective", 3 found the program "Effective", and 1 found the program "Fairly Effective".

The project coordinator, general assistants, and Master Teachers made the following recommendations:

1) The program should be allowed to start on time with mandated changes if two-week advance notice hasn't been given by Albany. Last minute notice of job cancellations lowers tutor morale, causes bad feeling in the community (among parents of tutors especially) and costs the program good workers (tutors and teachers) who find other jobs in the interim.

2) Programs should be funded for two summers at a time. A job commitment could then be made to outstanding tutors and teachers and last minute recruitment would be unnecessary. Duplication of effort in proposal writing and other administrative detail could be avoided with resultant additional supervisory time.

3) More tutors should be hired to fill the growing demand of increasing numbers of students in the program.

4) The pay for high school students working as tutors (\$1.60) should be increased so there is not such a wide gap between high school and college students who do similar types and amount of work. (The college student at the highest scale earns twice as much per week as the high-school student.

The first three recommendations listed seem to be generally agreed upon by all administrative staff members. The fourth

recommendation primarily represents the view of many Master Teachers. Other administrators did not mention this recommendation but neither were they asked their opinions concerning it.

Other recommendations offered by three or more administrative staff members included: paying tutors on time, hiring more college tutors for advanced subjects, ordering more books, supplies and tapes hiring more tutors who are fluent in foreign languages and using tutors in classrooms with the regular teachers.

The eighteen tutors interviewed primarily recommended that:

1) the 1-1 student-tutor relationship not be expanded due to expediency. Tutors recognized that they were not teachers and many expressed great frustration when confronted with more than one student.

2) more tutors be hired so that the 1-1 relationship need not be expanded.

3) hours in the program should be lengthened in order to accomplish more.

Table IIIc gives the frequency of tutor recommendation responses, with each tutor giving an average of 1.3 responses.

TABLE IIIc
FREQUENCY AND PERCENTAGE DISTRIBUTION
OF TUTOR RECOMMENDATION RESPONSES

N=18

Responses	No. of Tutors	%
None	5	22.
More Tutors	7	30.
Stable 1-1 relationship	6	26.
More hours	5	22.

C. Materials

Administrators and tutors interviewed indicated that they primarily used Regents Review Books and basic texts (whatever the student used in class).

During forty classroom observations, the following materials were seen in use with the frequencies listed below.

TABLE IV
FREQUENCY AND PERCENTAGE DISTRIBUTION
OF MATERIALS SEEN IN OBSERVATIONS

N=40

Materials	No. of Times Seen	%
Textbooks	19	47.
Regents Review Books	9	23.
SRA Reading Materials	6	15.
ESL Materials	2	5.
games	2	5.
paperbacks (plays, etc.)	2	5.
	40	100.

As this Table indicates, the work going on at the centers was of a serious nature, with tutor and student typically seen to be engrossed in work from the classroom text, or reviewing for the Regents exam. At three centers, more "free reading" periods and creative teaching techniques were observed to be encouraged, but this depended on the academic emphasis peculiar to each center.

Although each Master Teacher reported that he or she could spend up to \$50 for textbooks and \$50 for instructional supplies, most teachers indicated that they had not found it necessary to do so. It was obvious to those visiting the schools, that real efforts were being made to find needed materials in each center itself, or in the other centers serviced by the program (through the general assistants) before additional monies were expended.

D. Student Population

2,015 students attended the Summer Homework Helper Program. 853 students attended centers only three times or less, and 1,162 came for more regular assistance-four or more times in the course of the six week program. These students were 48.8% (567) male and 51.2% (595) female.

The 1162 students who came to the center on a more regular basis, came an average of 16.7 times, and spent an average of 22.2 hours in the program. The most frequent number of visits cited on daily anecdotes was 16.

The Master Teachers interviewed gave the following criteria for allowing students into the program: recommendations from other teachers, tutors or students; failure in school subjects; parental requests; financial need. The teachers also indicated, however, that they do not turn any students away who need and ask for help. All students are encouraged to come to the centers through posters exhibited throughout the schools and through announcements made and special skits put on at different centers.

Students were interviewed and asked why they had decided to come to the center. Their responses are illustrated in Table V.

TABLE V
FREQUENCY AND PERCENTAGE DISTRIBUTION
OF STUDENT RESPONSES:
"WHY DID YOU COME TO THE CENTER?"

N=18

Responses	No. of Students	%
failed math	11	62.
failed science	2	11.
help in other academic subject	2	11.
help in language	3	16.
Totals	18	100.

Students interviewed typically expressed concern over mathematics and said that it was "hard". Other subjects presenting difficulty were mentioned at random. Although students did not often mention difficulty with the English language as a problem (only one girl said that she was attending the center because she wanted a math tutor who could speak to her in Chinese), tutors and Master Teachers often cited ESL problems.

Students were also asked if they received the help they needed. Ninety-five per-cent replied that they had received all the help they wanted. Five per-cent replied they had only received part of the help needed. All students interviewed said that they were treated very well at the centers, and that the tutors and teachers were very friendly and accepting.

Ninety per-cent of the students asked to make program recommendations could think of no ways to improve the program. Five per-cent suggested that the 1-1 relationship never be extended, and five per-cent suggested that more tutors be employed.

Tutors were asked during interviews to analyse the main problems of the students who come to them for help.

TABLE Va

FREQUENCY AND PERCENTAGE DISTRIBUTION OF TUTOR RESPONSES:"WHAT MAIN KINDS OF PROBLEMS DO YOUR STUDENTS HAVE?"

Problem Stated	No. of Responses	%
Poor attitudes	7	23.
Classroom conditions	7	23.
Lack of Basic Skills	5	17.
Poor study habits	4	13.
Family problems	4	13.
Language difficulties	3	11.

It is interesting to note that many tutors mentioned "laziness" as a major problem (listed above under 'poor attitude'). No tutors interviewed suggested that a student might have a learning problem or that certain subjects might present inherent difficulties. The typical tutor attitude was that if a student didn't learn something, he simply wasn't interested or had "poor attitudes". Classroom conditions which tutors thought made learning difficult for the student included: classes being too large, too little individual help given, "kids allowed to slide", and missing work for any reason. Tutors mentioned that students had to work harder and memorize more. Several tutors expressed frustration because students simply did not memorize essential tables.

E. Curriculum

In the record sheets filled out for each student attending the centers, the tutor noted the subject requested by the student.

TABLE VI.
FREQUENCY AND PERCENTAGE DISTRIBUTION OF SUBJECTS REQUESTED
BY STUDENTS IN HOMEWORK HELPER PROGRAM

N=253

Subject	Number Times Requested	%
Algebra	67.	26.4
Geometry	49	19.3
English	22	8.6
Reading	21	8.3
Spanish	16	6.3
Mathematics	11	4.3
Chemistry	10	3.9
Biology	10	3.9
Trigonometry	10	3.9
Economics	7	2.7

Subject	Number Times Requested	%
Bookkeeping	6	2.3
World History	6	2.3
French	4	1.5
Other	14	6.3
Total:	253	100.0

Subjects in the area of mathematics were the ones most requested by students, and 53.9% of requests were in this area. After this, English, reading and Spanish were most requested. Subjects listed under "other" included American History, geography, stenography, physics, general science, earth science and business arithmetic.

Aside from a general emphasis on math in the curriculum at all centers, each school tended to emphasize a particular type of curriculum depending on the particular needs of the student population. At a few centers, such as Brooklyn Tech., the emphasis was on regular and advanced academic subjects. Some centers like George Washington, Flushing I and Jefferson Annex emphasized the English as a Second Language (ESL) program. Evander Child's center was a completely remedial one in which the tutors worked in the regular summer school classrooms, helping those particularly deficient students designated as needing special attention by the teacher. Students with particularly low reading and math skills were encouraged to attend that center.

Tutors worked in regular classrooms when requested to by a summer school teacher in 5 schools. At Monroe High School, for example, many subjects are taught on multi-levels due to the small number of teachers assigned (i.e. Spanish I and Spanish II might be taught together). Tutors are assigned to help in those classrooms. At the other center where tutors work in the regular classroom, their work is mostly of a remedial nature with students who have poor reading and math skills. At Richmond Hill, students attend a reading period, a remedial math skills period and have 1 free library reading period during which students were observed reading plays and playing educational word games.

The Jefferson Annex center has set up enrichment sessions when tutors come into the program who can give superior instruction in art or music.

F. Program Activities

1. Scheduling: On-site visits to 18 of the 19 centers showed the program to be structurally similar at all sites, but each center was observed to exhibit its own unique atmosphere and educational emphasis. Each center operated from 8:30 A.M. - 1:00 P.M. and followed the regular three period schedule of the summer school. A half-hour conference period was held at the end of each day so that the tutors could fill out daily anecdotal reports on their students and discuss procedures and problems with the Master Teachers. Different subjects and approaches were emphasized at each center, however (as outlined in the previous section), depending upon the needs of the majority of students at that particular center. Some centers operated on a primarily advanced academic level, some on a strictly remedial level, and the majority, on a more typical high school academic level.

According to the program administrators, tutors participated in a tutor orientation session on June 23 to acquaint them with procedures, and to emphasize and discuss the quality of the relationships they would be establishing with the students. Tutors were encouraged to help advertise the program creatively, and at a few schools (e.g. Taft High School) tutors described 'skits' they had put on in classrooms to encourage student participation in the program. Several centers planned parent workshops and printed attractive programs for the occasion. (See Appendix E-1)

Orange juice or fruit drinks and cookies were available at all centers. In most cases, and especially where only one classroom was in use, the snacks were set up in one particular area so that students could refresh themselves at appropriate times. At a few centers using more classrooms, the refreshments were taken to classes each period by the tutors. At Taft High School the snacks arrangement was particularly well handled. A kitchen on the same floor as the center was used by tutors to prepare an attractive service cart. Then two tutors wheeled the cart to each classroom and distributed snacks in a very friendly and informal manner which seemed to add a great deal of "warmth" to the activities. This was accomplished with a maximum of efficiency, and the pleasant effect created seemed well worth the expenditure of time and effort.

2. Classroom Observation

Tutors: The learning atmosphere of the centers was noted by all observers to be a serious one.

Tutor activities, rated on a standard scale (See Appendix B) showed the following frequency distribution.

TABLE VII

FREQUENCY AND PERCENTAGE DISTRIBUTION OF TUTOR ACTIVITIES

N=40

Activity	No. of times Observed	%
teaching	30	75.
supervising	4	10.
supporting	4	10.
socializing	4	5.
disciplining	0	0.
clerical work	0	0.
Total	40	100.

In the great majority of observations made, the tutors were seriously involved in explaining subject matters to students. In 10% of cases, the tutor supervised or was waiting while the student completed an assigned task. In another 20% of tutoring situations observed, the tutors were giving some kind of moral support or non-academic advice to the students, and in one case, (5%), the student and tutor were relaxing for the moment, discussing non-academic social matters. No cases of disciplining or clerical work were observed.

Tutor attitudes were rated on two 5-point scales to determine the degree of interest, as well as the degree of pleasantness or "warth" they exhibited in tutoring situations. Table VIIa combines the results of these two scales.

TABLE VIIa

PERCENTAGE DISTRIBUTION OF TUTOR RATINGS ON 5-POINT ATTITUDE SCALE:

N=40

Negative Attitude	% of Tutors Rated					Positive Attitude
	1	2	3	4	5	

Totally Uninterested	0	% of Tutors Rated				Totally Interested
		0	0	15%	85%	
Unpleasant	0	0	60%	35%	5%	Very Cheerful

As the above Table shows, 85% of the tutors received the highest or "totally interested" rating, and 15% of the tutors were very interested. No tutors were observed to be uninterested. Only 5% of the tutors were rated as "very cheerful" and 60% were "pleasant". The latter ratings reflected the serious nature of the student-tutor relationship where animated cheerfulness was not often called for, and a pleasant attitude was the expected norm. No negative attitudes were observed on the part of the tutors.

Seventy per-cent of the tutors observed were rated as having excellent rapport with their students. Ten per-cent had very good rapport, fifteen per-cent had average rapport. Those tutors who were rated as having "average" rapport generally gave some indication that they were somewhat more interested in the subject matter being taught than in the student.

Twenty per-cent of the tutors observed communicated in a totally clear and comprehensible manner. Sixty per-cent spoke very clearly and twenty per-cent were rated as having average communication skills. No tutors were observed to be deficient in language skills, or difficult to understand.

Students: The distribution of student activities seen during classroom observations is illustrated in the following Table.

TABLE VIIb

FREQUENCY AND PERCENTAGE DISTRIBUTION OF STUDENT ACTIVITIES OBSERVED

N=40

Activity	No. of Times Observed	%
academic subject	34	85.
work, study skills	0	0.
homework	4	10.
educational games	2	5.
Total	40	100.

The academic subjects observed in session were most often (71%) mathematics. Other subjects showed no special prominence. No sessions concentrating on work-study skills were observed, although Master Teachers mentioned work being done in that area, especially at centers concentrating on remedial work.

Student attitudes were rated as follows:

TABLE VIIc

PERCENTAGE DISTRIBUTION OF STUDENT RATINGS ON 5-POINT ATTITUDE SCALE

N=40

Negative Attitude	% of Students Rated					Positive Attitude
	1	2	3	4	5	
Bored	0.	0.	85.	15.	0	Enthusiastic
Unpleasant	0.	5.	90.	5.	0.	Very Cheerful

Students were rated as being 'moderately enthusiastic' and 'moderately pleasant' during most observations. These ratings reflect the normal student-tutor relationship which is not expected to be consistently animated.

Most students observed (60%) communicated "very clearly" in the student-tutor situation, 40% communicated at the average or 'clear' level and 20% showed difficulty with oral communication in English. (1 student was observed speaking Chinese during the session.)

Summary: Tutors received high ratings on attitude, rapport and oral communication skills during classroom activities. These results are no doubt linked to the fact that 75% of the tutors have previous work experience in the program and have had previous training in tutoring skills.

Students showed average to good attitudes and communication skills. The need for help in language skills was evident in 20% of the tutoring situations observed.

G. Evaluation Objectives

1. Achievement

The first evaluation objective was: to determine the extent to which participant students had improved their skills and abilities, by comparing passing rates at the end of the school year and passing rates at the end of summer school.

Program participants received final grades ranging from 20-99%. The distribution of these grades, taken from a sample of 197 students, is given in Table VIII (final grades were not recorded on cover sheets for the remainder of students in the sample of 290).

TABLE VIII
FINAL SUMMER SCHOOL GRADES RECEIVED BY PARTICIPANT STUDENTS

N=197

Percentage Grade Received	No. of Students	%
90-99	7	3.6
85-89	15	7.7
80-84	21	10.6
75-79	26	13.2
70-74	27	13.8
65-69	43	21.8
60-64	0	0.0
55-59	21	10.6
50-54	19	9.6
45-49	8	4.0
35-44	9	4.6
20-34	1	.5
Total:	197	100.0

70.7%

As Table VIII indicates, 70.7% of the sample students received passing grades and 29.3% did not. This is a satisfactory achievement level and compares favorably with overall summer school rates. Although figures were not made available from all schools this summer on overall passing-fail ratings, 70-75% of summer school students traditionally receive passing grades. Thirty-five percent of students in the Homework Helper program received grades of 80% or more.

Figures comparing final passing rates in the program and the entire summer school were made available by 5 schools. This comparison is illustrated in Table VIIIa.

TABLE VIIIa
COMPARISON OF FINAL PASSING RATES: HOMEWORK HELPER PROGRAM
AND ENTIRE SUMMER SCHOOL
 N=5 SCHOOLS

School	Homework Helper		Summer School	
	No. Passing	%	No. Passing	%
John Dewey	121	92.	1587	74.
Erasmus Hall	73	76.8	1197	68.9
George Washington	39	46.	981	74.
James Monroe	*	77.	*	71.
New Utrecht	151	78.	2371	79.

* Figure not available

While the passing rates attained in the Homework Helper program are important, these figures can be examined in perhaps a more meaningful manner. It is obvious, for example, that a student may fail a subject during the year by only a few points and could obtain a passing grade in summer school almost by chance, or with very little extra work, depending on his motivation. Conversely, a student may receive a very low failing grade in school and have very little understanding of the subject failed. Such a student could become motivated in summer school and increase his end-term grade by 30 points but still not "pass". More significant, then, in terms of real student progress made during the program is the actual amount by which the student has increased or decreased his school-year final grade.

TABLE VIIIb
DEGREE OF CHANGE OCCURRING IN PARTICIPANT STUDENTS'
FINAL GRADES FROM JUNE TO AUGUST
 N=112

Percent	Increase		Decrease	
	N	%	N	%
over 50%	1	1.		
40-49%	2	2.		
35-39	7	7.4		
30-34	9	9.5	1	5.9
25-29	7	7.4		
20-24	16	17	1	5.9
15-19	14	14.7	1	5.9
10-14	24	25.3	3	17.6
5-9	8	8.4	9	52.9
0-4	7	7.4	2	11.8
Total	95	100.0	17	100.0

Table VIIIb shows that from the sample of 112 students, 95 (85%) students increased their end-term grades and 17 (15%) received lower grades. Of those students who received lower grades in summer school, more than half these grades were lower by 5-9 percentage points. Among those students who received higher grades, however, 57% earned a percentage increase of 10-24 percentage points. Twenty-four percent of these students increased their end-term grade 25-39 points. Three percent of the students increased their grades by over 40 percentage points.

These rates of grade improvement are substantial and illustrate a real growth and motivation on the part of program participants which cannot be observed in pass-fail rating alone.

2. Skills

The second evaluation objective was: to determine the extent to which participant students had improved their study skills, work habits and homework preparation by comparing their abilities as evaluated by tutors on a rating scale, at the beginning and end of the program.

Tutors rated their students on daily anecdotal forms (See Appendix C-2) in the following areas: 1) strength in basic skills; 2) utilization of study skills; 3) ability to work independently, and; 4) attitude toward task (or degree of application to the work being done). It was hoped that each student would show an overall increase in his work-study skills and degree of application between the second and fifth week of program operation. The combined increase or decrease in skills was computed for each student in the sample according to school attended.

TABLE VIIIc

AVERAGE INCREASE OR DECREASE IN STUDENT WORK-STUDY SKILLS AND DEGREE OF APPLICATION FROM 2ND TO 5TH WEEK OF PROGRAM OPERATION

School	Average Increase + or Decrease -
Flushing I	+23.2
Abraham Lincoln	12.6
New Dorp	12.3
Brooklyn Tech	8.4
Flushing II	7.5
Wm. Cullen Bryant	6.7
Jefferson Annex	6.7
Theodore Roosevelt	6.3
John Dewey	5.6
Jamaica	4.8
George Washington	4.1
Thomas Jefferson	4.0

School	Average Increase + or Decrease -
Evander Child	3.3
James Monroe	2.5
Taft	2.3
Richmond Hill	0.
Washington Irving	- 2.1
Erasmus Hall*	
Total Average	+5.8

*Anecdotal forms not received from center

This Table shows that students improved their skills, according to tutor estimates, at all but 3 school (one of these schools did not report.) The reliability of this measure may be low, as ratings were made somewhat subjectively and with a minimum degree of standardization. All tutors used the same forms but were free to use their own standards or those of the Master Teacher to determine what was to be considered "satisfactory" or "good". Since curricular emphases differ widely from center to center, further standardization was considered inadvisable. Still, tutors should have been able to indicate with some degree of standard accuracy the degree of change which a given student demonstrated over a six week period in approach to task completion.

These results measure, then, tutor opinions on the progress made by their students in work-study skills and degree of application to their work over a six week period. It must be noted that the single school showing a decrease in skills abilities was considered by observers to be a well run and serious center with involved staff and volunteer adults helping in the program. Increases or decreases below the 4% level must be considered to be attributable to chance.

3. Attitudes

The third evaluation objective was: to determine the extent to which both tutors and students had improved their attitudes toward school and school related activities during the program.

a) Students - Students were asked 4 questions related to their attitude toward education on a questionnaire (See Appendix C-1) administered during the 2nd and 5th weeks of program operation. The questions were: A) "If you could go as far as you wanted in school, how far would you like to go?" B) "Sometimes what we would like to do is not the same as what we really do. How far in school do you expect you will really go?"; C) "What kind of grades do you think you could get in reading and English if you really tried?" and; D) "How important is it to you to receive passing grades in school?"

Students were asked in a 5th question (S.O.), on the same questionnaire to evaluate the degree of help given them by the program as either: 1) extremely helpful, 2) very helpful, 3) helpful or 4) of no real help.

The purpose of this questionnaire was not to describe the picture students had of themselves and of educational in general, but to determine the extent to which participation in the program influenced them to change that picture. The results of the pre and post administration of this questionnaire are shown on Table VIIIId with the number of students responding to each item, the mean, standard deviation, t test and significance level indicated.

TABLE VIIIId

DEGREE OF CHANGE IN STUDENT ATTITUDE TO EDUCATION AND EVALUATION OF
PROGRAM ON PRE AND POST ADMINISTRATIONS OF QUESTIONNAIRE

Question	N	Mean	S.D.	t	Significance Level
A pre	231	5.36	1.49		
post	231	5.44	1.44	1.5	N.S.
B pre	230	5.06	1.53		
post	230	5.12	1.54	.76	N.S.
C pre	232	1.72	0.79		
post	232	1.67	0.80	1.48	N.S.
D pre	229	2.790	0.48		
post	229	2.799	0.48	0.33	N.S.
S0 pre	226	2.02	0.52		
post	226	3.57	3.3	11.04	.05

No significant changes in attitude toward education were found when comparing pre and post responses on items 1-4. There was a very high positive level of change found, however, on student ratings of the Homework Helper Program (question S.0) over the same 4 week interval. This change in rating from lower to higher estimations was significant at the .05 level.

b) Tutors - Tutors who had worked in the program previously and tutors new to the program were asked the same 4 questions described above on the same pre-post basis. The 5th question (T. 0.) was: "How helpful do you think the program is to the students you teach?" (See Appendix c-1)

The results of this questionnaire are shown below for the two tutor populations: experienced tutors and new tutors.

TABLE VIIIe

DEGREE OF CHANGE IN TUTOR ATTITUDES TO EDUCATION AND EVALUATION
OF PROGRAM ON PRE AND POST ADMINISTRATIONS OF QUESTIONNAIRE

Experienced Tutors

Question	N	Mean	S.D.	t.	Significance Level
A pre	137	6.70	.54		
post	137	6.63	.57	1.39	N.S.
B pre	136	6.51	.68		
post	136	6.58	.62	1.78	.05
C pre	134	1.15	.45		
post	134	1.14	.43	.44	N.S.
D pre	135	2.69	.47		
post	135	2.71	.47	.47	N.S.
T0 pre	135	1.90	.82		
post	135	1.80	.79	1.76	.05

New Tutors

A	pre	56	6.446	1.142		
	post	56	6.517	1.026	0.814	N.S.
B	pre	56	6.482	0.687		
	post	56	6.428	1.024	0.651	N.S.
C	pre	56	1.035	0.267		
	post	56	1.071	0.374	0.814	N.S.
D	pre	56	2.696	0.685		
	post	56	2.767	0.539	0.850	N.S.
T0	pre	56	1.732	0.774		
	post	56	1.696	0.711	0.443	N.S.

Although it had been projected that new tutors would show a more significant level of attitudinal change, this was not the case. Tutors with previous experience in the program showed a significant change in their response to the questions "How far do you really expect to go in school?" and "How helpful is the program to the students you teach?" New tutors showed no significant change in attitudes to education or in evaluations of the Homework Helper Program.

Over a 4 week period new staff members did not undergo a significant change in attitudes toward education, their own abilities, or the value of the program. Staff members with previous experience, however, changed their level of academic expectation in a positive direction, and found the program to be more helpful to their students than they did previously.

SUMMARY AND RECOMMENDATIONSI. Summary

The start of the 1972 Summer High School Homework Helper Program was delayed by temporary cancellation and late funding, but program participants were able to 'make up' two of the three days lost at that time. Staff personnel were informed at the last minute that they would have no jobs and several tutors found other work before the program was permitted to go ahead. The program then became operational at 19 centers in the five boroughs of New York City for a six week period ending August 16. Each of the 18 sites observed utilized comfortable facilities which were most often one or two regular classrooms. A pleasant and orderly atmosphere which encouraged serious academic work as well as sound student-tutor relationships was also observed at most centers.

The staff included: a project coordinator who organized and directed the program and held regular administrative meetings; 3 general assistants who divided administrative responsibility for the 19 centers among themselves on a 7,6,5 ratio; 19 master teachers who were each directly responsible for supervising activities at their assigned center; 19 teacher aides who assisted master teachers with payroll and other clerical and tutorial activities; four auxiliary trainers who visited the centers to assist in any staff training necessary and ; approximately 300 tutors from area high schools and colleges who worked with students enrolled in summer school.

Most of the centers employed 16 tutors who were paid on a rising scale from \$1.60 per hour for inexperienced high school students to \$4.00 per hour for college students with 45 credits or more. Master teachers indicated that academic success and previous work experience in the program (with accompanying teacher recommendations) were the prime criteria used in hiring tutors. Most master teachers felt that the most important objectives in the program were development of good 1-1 student-tutor relationships, and center competence in the teaching of mathematics.

Staff members found the situation of late funding a demoralizing and inefficient one and hoped that in the future, programs could be funded for 2 consecutive summers. They also hoped that more tutors would be hired to meet the needs of the growing number of participant students.

Expenditures on books, materials and supplies were kept at a minimum by active administrators who transported requested items already available at any one center to another center as needed. The materials most often seen in use during classroom observations were textbooks and Regents Review Books.

2,015 students attended the summer program. Of these, 853 came to the centers only 3 times or less and 1162 came on a more regular basis - an average of 22.2 hours using 16.7 visits. Students in the program were 48.8% male and 51.2% female. Most students interviewed in the program had come because they failed mathematics during the regular school year. Most of the tutors interviewed felt that their students were there because they didn't receive enough individual attention in regular classes and because they had poor attitudes toward learning (among them, 'laziness').

The major single emphasis on any curriculum area was on mathematics, with most tutors required to teach some math. and 53.9% of student requests for tutoring were in that area. The next important emphasis was on remedial reading and English. Many teachers and tutors mentioned the importance of hiring tutors who speak Spanish, French (for Haitian students especially) and Chinese for students speaking those languages natively. Centers were flexible in regard to the individual needs of the students attending and in several instances sent tutors into the regular classroom to work with students needing remedial or language help there.

A great deal of warmth was added to the program at certain centers where dedicated staff members made special efforts which included: serving refreshments in a particularly cordial manner; putting on skits in classrooms to advertise the program; conducting parent workshops. Most centers concentrated on building significant student-tutor relationships.

Classroom observations showed the program to be of a serious nature, with tutors seen to be teaching and supervising 85% of the time, supporting 10% and socialising 5% of the time. Students were observed to be doing academic work 85% of the time observed.

Tutors were rated as being very "highly interested" in their work and as having "pleasant" to "mildly cheerful" attitudes during specific student-tutor observations. Students were seen to be "interested" and to have "pleasant" attitudes in the same situations.

The program and the following evaluation-objectives:

1) to determine the extent to which participant students had improved their skills and abilities, by comparing passing rates at the end of the school year and passing rates at the end of summer school.

2) to determine the extent to which participant students had improved their study skills, work habits and homework preparation by comparing their abilities as evaluated by tutors on a rating scale at the beginning and end of the program.

3) to determine the extent to which both tutors and students had improved their attitudes toward school and school related activities during the program.

It was found that 70.7% of participant students received passing grades in summer school - comparing favorably with students in the school who did not attend the program. Furthermore, 57% of the students participating raised their final grade in June by 10-24 percentage points and 24% raised their grades by 25-39 percentage points.

The average change in work-study skills at each school was an improvement of from 2-23% at 15 of the 19 schools with an overall average of +5.8% improvement per school (one school showed no change, one showed a decrease in abilities of 2% and one school did not report).

Students showed no significant change in their attitudes toward education on a questionnaire administered on a pre-post basis over a 4 week interval. A significant change was shown only on one item which evaluated the effectiveness of the Homework Helper program. Tutors with previous work experience in the program showed a significant change in their estimations of the academic level they would achieve in school and in the degree of effectiveness they attributed to the Homework Helper program. Tutors with no previous work experience in the program (25%) showed no significant changes in attitudes.

II. Recommendations

1) The evaluators agree with administrative staff that the program should be allowed to start with mandated changes if notice of cancellation is not received from Albany at least two weeks in advance of the opening of summer school. Last minute cancellations cause bad feelings in school communities, as is evidenced by letters received from parents of tutors, and causes low morale among staff members in general even after late funding is granted.

2) The program should be funded for 2 years at a time (2 summers). In this way: 1) administrators would not be forced to spend time and duplicate efforts in rewriting proposals that are basically the same; 2) more time would be available for administrators to directly supervise and help improve teaching activities; 3) a job commitment could be made to outstanding teachers and tutors and the need for hiring last minute recruitments would be minimized; 4) closer communication with the high schools would be possible. The schools could be made aware that the program would be in operation the following summer and could encourage students to attend, and; 5) arrangements could be made in advance to keep materials in schools where the program does not operate in the winter.

3) Money allocations should be made to the high school division earlier so that proposals can be sent through the proper channels in time to receive early funding.

4) Centers should maintain their current degree of flexibility and their emphasis on warm personal relationships as well as academic success. Those particularly personal aspects of the program such as the serving of snacks and 'program advertising' by tutors should be continued.

5) The centers should be divided on an equal numerical basis among the 3 general assistants to assure that each center receives an equal degree of direction.

6) The program appears to be so successful, educationally sound and well organized that it could very profitably be expanded to serve more students. All centers doing remedial work are in need of more tutors to help students with very poor reading skills and centers doing predominantly advanced academic work need more tutors at the college level.

7) The starting salary of \$1.60 per hour for high school students could be raised to a more appropriate level. Although college students usually teach more advanced subjects, this is not always the case and it does not seem fair that one tutor may have excellent academic competencies and expend a great deal of energy and dedication while earning less than half the salary of another tutor. It is not suggested however, that the salary be raised to a level which negates the obvious incentive value of the college pay scale.

8) Tutor training should continue and some effort should be made to acquaint all tutors with motivating techniques. Young tutors should acquire a deeper understanding of the attitudes of failing students so that they don't attribute all failure to 'laziness' but try to motivate and encourage such students.

9) Centers should be aware of the great demand on the part of students for tutoring in mathematics and should prepare for the next program by hiring tutors competent in that field as well as by acquiring or ordering math materials, books or games. They should also be aware of the possible need for hiring tutors fluent in Chinese, Spanish and French and tutors capable of helping students with reading and language difficulties.

10) A greater emphasis should be placed on work-study skills. Very little work in this area was seen during classroom observations and many tutors seemed to be very preoccupied with subject matter, perhaps at the expense of more valuable skills. Tutors should be trained to integrate skills lessons so that students who may insist on subject matter work are trained subtly and "painlessly". Good students (tutors) often do not recognize the need to emphasize skills and study habits if they are not made aware of this failure on the part of the poor student by supervisors. This should be done during training sessions. In connection with this, there should be less stress on evaluation objectives which measure passing grades and other academic

progress. This kind of stress is frustrating and puts unfair pressure on staff members who know that a student may fail his Regents exam but have become a more capable student during the summer session.