This survey was designed to provide operational details about compensatory education programs that have been in existence for a relatively long period and are therefore likely to have adequate bases for meaningful evaluations of their results, and to spotlight good programs with implications for national educational policy. Those programs were selected which had good available evaluations, could produce data to support claims of success, and promised delineation of common elements in success. Good programs generally required high pupil expenditures and added regular and specialized staff. Successful programs offered a greater number of more intensive special services than less successful programs did. The single most important element in a program's success was the quality of the instruction by teachers who felt empathy for the disadvantaged. Successful programs tried to provide a less structured and formal atmosphere than the ordinary classroom offers, and recognized individual needs. Despite the claim of some educational experts that compensatory education is most effective when offered to primary and preprimary pupils, the most effective programs were designed for the upper elementary and high school grades. Relatively few programs were set up on a controlled experimental basis, and, where evaluative studies were conducted, outcomes were often ambiguous or questionable. The bulk of this document is a description of each of the compensatory education projects participating in the survey. (AF)
Report on Summer 1967 Site Visits
to
Pre-Title I Compensatory Education Programs

Pearl Peerboom
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### APPENDIX A

1. The Language Arts Program, Washington, D.C.
2. The Model School Division, Washington, D.C.
3. Perry Preschool Project, Ypsilanti, Michigan

**Project ABLE**

4. Greenburgh No. 8, Hartsdale, New York
5. White Plains, New York

6. Fox Run School Special Summer Reading and Related Arts Program, Norwalk, Connecticut
7. Transition Room Project, Pittsburgh, Pennsylvania
9. Homework Helper Program, New York, New York
11. School-to-Employment Program (STEP), New York State
12. Potential Dropout Program, South Norwalk, Connecticut

### APPENDIX B

Summary of Pre-Title I Compensatory Education Projects Surveyed
This report describes a limited inquiry concerned with projects of compensatory education (deemed successful) with disadvantaged children and with identifying the elements of the projects that account for their successes. The magnitude and variety of emerging compensatory education efforts and conflicting reports about how effective they are in improving achievement among participating students stimulated the survey which, it is hoped, will serve two purposes: first, that it will provide operational details about compensatory education programs that have been in existence for a relatively long period and, therefore, are likely to have adequate bases for meaningful evaluations of their results; second, that it will spotlight some good programs with implications for national educational policy to overcome deficiencies resulting from slum environments and poor schooling. In selecting projects for the survey, emphasis centered on whether (1) good program evaluations were available, (2) actual data supported claims of program success, and (3) common elements of successful programs could be delineated.

Summary of Findings

Although compensatory education has only recently become a prominent and controversial public issue, a number of projects have been operating for several years—some of them are of doubtful value; others appear to have achieved good results.

There is enthusiastic support for the programs among the people involved with them, and a considerable body of subjective judgment that the projects are of immense value. Teachers and administrators are unanimous in resisting efforts to cut-back the projects and want them expanded, but are insistent that adequate funding accompany any expansion. They are generally apprehensive over any prospect of extending their projects in a way that would mean a dilution of the program.

1/ The term compensatory education is used for programs of special and extra services intended to compensate for a complex of social, economic, and educational handicaps suffered by disadvantaged children. The programs are aimed at coping with problems of improving educational services for children in the big city slum schools and in the impoverished rural areas—at bringing children from hostile, different, or indifferent backgrounds up to a level where they can be reached by existing educational practices.
Among the projects visited, all appear to have been notably successful—although to varying degrees—in repairing the damaging effects on children of living in slum homes and neighborhoods and attending schools that were not equipped to meet their special needs.

The good programs have generally required high per pupil expenditures.1/ They have added regular and specialized staff—counselors, language experts, teachers' aides, social workers, nurses—and have offered the same kinds of compensatory services—field trips, home visits, health services, cultural enrichment activities, tutoring, special audiovisual equipment and instructional materials, reduced class size—noted in other projects not so highly regarded or even judged failures. The essential difference appears to have been that the successful projects provided more intensive and more special services than other projects which spent less.

A consensus of the opinions sampled would rank high-quality teaching by teachers with empathy for the disadvantaged as the single, most important element affecting the success of compensatory education projects.

What most successful projects have tried to provide is an entirely different atmosphere from the highly-structured, formal organization of the ordinary classroom with its rows of desks for the pupils and the forbidding, disciplinary effect created by having the teachers in front of the class, presiding over it from a position of marked authority. The "good" projects have recognized that the children involved in compensatory education, while all are under the same stultifying blanket of poverty, have varying needs. These needs are multiple. They are complex. They vary from time to time and from child to child. The program that successfully counteracts the interaction of poverty, poor academic achievement and poor schools, provides individual attention—a warm, accepting atmosphere in which a child may achieve his own maximum social and physical development, and an ordered atmosphere in which selected equipment, curricular materials, and activities are offered in sufficient variety to meet each child's own level of interest and ability.

Contrary to the claim by some educational experts that compensatory education is most effective when offered to primary and pre-primary pupils, research and administrative staff in the various survey projects report successful results also from compensatory education programs designed for upper elementary grades and high school students. Indeed, there were strong indications that "last-chance" efforts with underachieving high school students...
school students, dropouts, and potential dropouts may be the most meaningful educational programs for disadvantaged youth.

Other than differences in the quality of the instruction and the age levels of children in the programs, a major difference among projects surveyed is their duration. Some are summer programs extending only over an 8-week period; others are regular school-year programs; still others are of varied combinations, e.g., concentrated summer work with regular school year continuing, but intermittent, contact between pupils and project staff.

Survey findings largely dispelled hopeful expectations of finding "hard data" and program reports or evaluations citing significant improvement in the academic achievement of participating pupils, which would have supported successes claimed for compensatory education programs begun prior to enactment of the Elementary and Secondary Education Act (Title I). The available progress and evaluation reports, as well as discussions with people having specialized knowledge of the projects, revealed relatively few programs set up on a controlled experimental basis, with research to determine whether specific practices and program innovations actually do result in improved school performance.

In cases where evaluative studies were conducted, reports typically showed ambiguous or questionable outcomes. Achievement test scores provide little clear evidence of better achievement by project students than by similar students who never had the benefit of special compensatory services.

Repudiation of such programs would, nevertheless, not appear warranted in the face of indications of success that have been encountered, and in the light of authoritative opinion that there are substantial gains which are not measured by the traditional scales.

Research people and educators in the field think it likely that compensatory education programs have not been under way long enough yet for conclusive assessment; or, even more likely, that serious research has not been engaged with the critical questions that would reflect actual rather than imputed changes in a child's achievement—the "right" questions have not yet been asked to determine changes in motivation and the reversibility of learning disabilities caused by deprived early childhood.

Method of Inquiry

As a starting point, the work group used Compensatory Education for the Disadvantaged, the published report on research by Edmund W. Gordon and Doxey A. Wilkerson (both on the faculty of Yeshiva University's Ferkauf Graduate School of Education in New York), which appears to be the most intensive inquiry into compensatory education to date. The Gordon and Wilkerson study begun in the fall of 1963, sponsored by the College Examination Board and the National Scholarship Service and Fund for Negro Students (NSFNS) attempted to identify and describe the status of compensatory education programs and practices in the United States and to evaluate
them. Although the bulk of the material was compiled before June 1964, it includes some information received as late as March 1966.

Some 30 of the projects described by Gordon and Wilkerson in their 101-page "Directory of Compensatory Practices" were selected for further study. These projects had been operating for 3 to 7 years, good results had been reported for them, substantial program costs were involved, and evaluations (including comparisons with control groups for some) had been made. Spending per pupil was substantially higher than the cost of an ordinary school program. Extra costs ranged from $1,000 (Long Beach, New York, 5th and 6th grade children) down to a little over $60 (Miami, Florida, where about 60 disadvantaged "poor" high school graduates helped about 1,000 pre-school children—5 year olds—in exchange for free tuition at Miami-Dade Jr. College).

Early in the survey, the work group met with Dr. Wilkerson:

✓ to discuss recent and currently operating programs specifically designed to raise the achievement level of educationally disadvantaged children;

✓ to review with him the list of projects selected for further study; and,

✓ to ask his advise on where time available for the survey might most profitably be spent in site visits.

Dr. Wilkerson suggested visits to the following projects, where he thought "exciting things are happening:" South Norwalk and Hartford, Connecticut; Detroit, Michigan; St. Louis, Missouri; Greenburgh, Syracuse, and White Plains, New York. The most fruitful aspect of the trip to Yeshiva, though, was learning about and gaining access to their Information Retrieval Center on the Disadvantaged (IRCD).

The Center took over all of the research source materials used by Gordon and Wilkerson in their study of compensatory education programs and has continued to collect additional materials. The Center tries to collect everything written on compensatory education; if a copy cannot be obtained, the Center prepares summaries or abstracts of the material. Over a 2-day period, the work group examined evaluation reports for about 20 projects that Dr. Wilkerson considered good.

Another source for clues to "good" projects was the Civil Rights Commission Report on Racial Isolation in the Public Schools. The Report referred to the Commission's review of evaluations of more than 20 good compensatory education programs in large cities. (The Report generalizes that compensatory education in the cities means "special education for Negro children.") These evaluations, conducted by the local school systems, report mixed results. Because the data were often incomplete and the period in which the programs had been in operation often was short, it is not possible to draw firm conclusions about the relative success or failure of these programs. In most instances, however, the data did not show significant gains in achievement test scores.
Civil Rights Commission staff (David Cohen and Harriet Ziskind) were most cooperative and generous in spending time with the work group discussing their impressions and experience with compensatory education programs. (The great majority of programs were characterized as "complete failures.") In addition, evaluations (or more frequently, progress reports) of public school districts in the Commission's files were made available for the work group's use. Some promising projects were nevertheless noted among these materials which are, of course, focused primarily on the success of integration efforts in public schools. Commission staff are discouraged about prospects of really significant achievements under compensatory education programs; they believe that integrated or racially balanced schools will do much more to raise the achievement scores of disadvantaged children than any amount of remedial measures that could be pumped into the inner-city schools, as they are now conducted.

Information was also obtained from the National Advisory Council on the Education of Disadvantaged Children (Mike Kirst) on locations of good Title I projects; this information was used as guides for checking whether those cities might also have had good pre-title I projects.

In addition, an "Inventory of Compensatory Education Projects" prepared by the Urban Child Center, University of Chicago, revealed several hundred programs, of which about 85 were major compensatory education efforts. Each served 1,000 or more children in 1965 and operated in 5 or more schools of the system. The inventory was of somewhat limited help, since it showed descriptions of the projects, but had no indications of costs or evaluation results.

Discussions about UPWARD BOUND programs were held with people in the Office of Economic Opportunity (Annable Burgh and Dr. Tom Billings), who provided consolidated national program data. Each OEO Regional Director selected his "most successful" program, and evaluations of these projects were examined. Additional information was obtained in a telephone interview with David Hunt at Syracuse, who evaluated individual UPWARD BOUND programs.

Projects finally selected for site visits included examples from four comprehensive programs (Language Arts, Washington, D. C.; Projects ABLE and STEP, New York; UPWARD BOUND) an experimental program oriented toward development and dissemination of curricula and other educational innovations, two teaching projects. Seven of the projects were for preschool and elementary school pupils, three for upper elementary and junior high school and five were high school dropout programs. Detailed descriptions of these projects are included as Appendix A.

Highlights of Programs Surveyed

While it is not clear exactly what helps which pupils under what conditions, several program characteristics were frequently found among the reportedly good compensatory education projects surveyed. Appendix B includes a summary table showing the more significant aspects of the various projects. A listing of program characteristics according...
to their relative importance to project success, as judged by staff members of various projects, appears on the pages immediately following for programs listed below:

Preschool and Early Elementary School

Washington, D. C.
1. Language Arts Program
2. Model School Division

Ypsilanti, Michigan
3. Perry Preschool Project

Project ABLE - New York
4. Hartsdale (Greenburgh #8)
5. White Plains

Norwalk, Connecticut
6. Fox Run School Special Summer Reading and Related Arts Program

Pittsburgh, Pennsylvania
7. Transition Room Project

Upper Elementary and Junior High School

New York, New York
8. Higher Horizons Program
9. Homework Helper Program

Winston Salem, North Carolina
10. North Carolina Advancement School

Dropout Programs

New York, New York
11. STEP (The School to Employment Program)

South Norwalk, Connecticut
12. Potential Dropout Program (Project #3)
UPWARD BOUND

13. Queens College (Flushing, New York)
14. Yale University Summer High School (New Haven, Connecticut)

Boston, Massachusetts

15. College of Basic Studies

Teaching Projects

Washington, D. C.

16. Cardozo Urban Teaching Project
South Norwalk, Connecticut

17. Team Teaching Project

In the opinion of the project personnel who were interviewed, or as indicated in evaluation or progress reports, some program characteristics are important to the success of compensatory education efforts, other characteristics "also help," but are of less importance; and still others are not considered important. In general, a very high value was placed on quality teaching, having a large staff to achieve close, personal relationships with pupils and to give them individual attention, and reducing the size of classes.

Among some of the elements considered unimportant to the success of the projects, or as requirements that project personnel would not necessarily require in planning for a good project, are some that are frequently mentioned as significant in the literature about compensatory education.
SURVEY OF PRE-TITLE I COMPENSATORY EDUCATION PROGRAMS

Listing of Program Characteristics
According to Effect on Success of Projects

1. **Staff Characteristics**

   ✓ **Teachers**
   
   - Innovative, enthusiastic (See summary table projects numbered 1, 2, 4, 5, 6, 9, 12, 13, 14, 15, 16, and 17).
   
   - Having special empathy with disadvantaged children and sensitive to their strengths as well as their weaknesses (See summary table projects numbered 1, 2, 4, 5, 6, 9, 12, 13, 14, 15, and 17).
   
   - Highly competent, skilled in teaching (See summary table projects numbered 1, 2, 9, 13, 14, 15, and 17).
   
   - Recent training (within the last 5 years) and at least 3 years of experience working with disadvantaged children (See summary table projects numbered 9 and 17).
   
   - Paid higher than average salaries (See summary table projects numbered 2, 4, 9, 15, and 17).
   
   - High proportion of men (teachers and other staff) (See summary table projects numbered 5, 6, 13, 14, and 15).

   ✓ Tutors and/or aides who are indigenous to the area served, and where appropriate bi-lingual (See summary table projects numbered 2, 7, 9, 13 and 14).

   ✓ Counseling, guidance, and other professional staff—counseling guidance and comprehensive services addressed to the "whole child" and his complex of problems and maladjustments; (such supportive services were reported to employ self-confidence- and self-respect-bolstering techniques and foster the development of independence (See summary table projects numbered 2, 4, 5, 7, 8, 10, 11, 12, 13, 14, and 15).

2. **Program Methods**

   ✓ Stress on academic work, primarily language arts—e.g., remedial, compensatory, with other services calculated to eliminate block to learning and allow development of child's potential (See summary table projects numbered 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, and 16).

   ✓ Team teaching (See summary table projects number 2, 5, 7, 15, 16 and 17).
Important Elements (Continued)

2. Program Methods (Continued)

✓ Low pupil-teacher ratio or other arrangement for individual, "personal-touch" attention to pupils—e.g., large numbers of staff for work with small groups of students or on an individual basis with them (See summary table projects numbered 1, 3, 8, 9, 12, 13, 14, and 15).

✓ Innovative curriculum development; a flexible curriculum which adjusts to students, rather than vice versa—curricula appropriately responsive to stage of child's development; ungraded units (See summary table projects numbered 2, 3, 10, 12, 16, and 17).

✓ A rich variety of curricular materials, requiring substantial investment for materials, visual aides, equipment (some successful programs make $100 or more per term additionally available to each teacher as a discretionary fund for buying materials and supplies especially pertinent to classwork and not normally available in the schools (See summary table projects numbered 1, 5, 9, and 17).

✓ Flexible classrooms (See summary table projects numbered 5, 6, 15 and 17).

✓ Continuing in-service training for teachers, tutors, and aides (See summary table projects numbered 1, 2, 4, 5, 6, 7, 9, and 17).

✓ Good inter-action and exchange of experiences among teachers and other staff (See summary table projects numbered 1, 2, 7, 9, 12, 13, 14, and 15).

✓ Good inter-action between pupils and staff (See summary table projects numbered 1, 12, 13, 14, and 15)

3. Other Services

✓ Residential or provides meals (See summary table projects numbered 9, 10, 13, and 14).

✓ Student is paid a stipend (See summary table projects numbered 9, 11, 13, and 14).

✓ Supervised library and study-room activities, with regular arrangements for after-school and over-the-summer facilities and programs (See summary table projects numbered 1, 2, 7, 9, 12, 13, and 14).
Less Important, but Significant Elements

- Informally structured, but orderly environment (See summary table projects numbered 6, 9, 12, 13, 14 and 15).
- Conduct of program provides for absence of student coercion—and opportunity for voluntary choices (See summary table projects numbered 12, 13, and 14).
- Extra-curricular and cultural enrichment activities (See summary table projects numbered 1, 5, 6, 8, 12, 13 and 14).
- Planned recreational and leisure-time activities (See summary table projects numbered 12, 13, and 14).
- Field trips (See summary table projects numbered 1, 5, 7, 8, 12, 13, and 14).
- Parent involvement (See summary table projects numbered 1, 3, 4, 5, 7, 8, and 12).
- Community support (See summary table projects numbered 5 and 8).

Unimportant Elements

- High proportion of Negro teachers (judged unimportant by projects on summary table numbered 2, 9, 13, 14 and 16). But all of these would want a high proportion of Negro (or other indigenous to the neighborhood) tutors or aides.
- High proportion of young teachers; age of teacher was not a factor (See summary table projects numbered 1, 2, 4, 5, 6, 7, 9, 12, and 17); but length of teaching experience (more if available, but at least 5 years) and recency of training (within the past 5 years) were factors in selecting teachers for work with disadvantaged children.
- Age, condition, or size of building; not with respect to flexible use of available space though (See summary table projects numbered 1, 2, 9, and 16). Notable exceptions were Fox Fun School in Norwalk, Connecticut; Greensburgh # 8, Hartsdale, N.Y.; and College of Basic Studies in Boston.
- Proximity of facilities to children's neighborhood. There was no adverse effect when the transportation to the school took a long time; kids were reported to enjoy the bussing experience, and the high-school students were said to especially like going away, on their own, from their communities to colleges and high schools distant from their homes. As they widen the gap between their family and slum backgrounds, students are even better satisfied to travel far and remain long on the school premises (See summary table projects numbered 4, 5, 6, 9, 13 and 14).
- Wide variety of program content. Some project personnel strongly emphasized need to stress basic academic work and language skills with little and sometimes no emphasis on extra-curricular activities (See summary table projects numbered 9, 15, and 16).
Survey observations on a small number of "successful" projects described in the appendices support the following:

✓ Positive results appear to have been achieved from programs directed toward secondary, and post-secondary-level pupils who were "underachievers," as well as from those designed for pre-school and elementary school disadvantaged pupils.

✓ In general, results of such programs are asserted rather than observed.

✓ Two kinds of evidence indicating success of various programs were reported in evaluations:
  
  . Most often, subjective judgments by people involved in the projects;
  
  . Less often, data showing changes over time in pupils' scores on intelligence tests, achievement tests, attitude tests, and behavioral ratings by teachers.

✓ An almost unbelievably small amount of resources have been allocated to research and evaluation of most projects, even those that are highly expensive.

✓ Consequently, an unfortunate and major gap exists between enthusiastic claims of benefits and concrete data to support measurable effects of the programs.
  
  . Even in programs where hard data have been collected, fundamental questions must sometimes be raised about the validity of the data, the quality of the research design, and the value of traditional I.Q. or achievement measures to judge the benefits from compensatory education.
  
  . When well-conceived and competently conducted research on educational programs patently producing good results for disadvantaged children fail to yield statistically significant evidence of improvements, researchers are challenged to examine whether they are asking the significant question.

✓ It is clear, beyond any reasonable doubt, that special problems exist in providing "equal educational opportunities" to many children from disadvantaged backgrounds.

✓ It is also clear that some of these children are helped immensely by special compensatory and remedial efforts.
What is not yet exactly clear is which components of a successful project help various youngsters under different conditions.

- It is not yet known why certain practices that work for one child do not work for another.
- The particular aspects of some of the more elaborate programs that actually account for reported changes have not been conclusively demonstrated.

There remain unanswered critical questions related to motivation and to the reversibility of learning disabilities arising from deprivations in experience.

In reporting information from this limited and compressed-time-schedule survey, we want above all to avoid an impression that we have found more than we have about the effectiveness of compensatory education programs. Neither do we want, however, to leave an impression that merely because research has not been validated, or that such standard test scores as are available for pupils in compensatory education programs do not clearly show improved reading ability or other measures of achievement, we have found nothing to substantiate the claims of success made for various programs.

It is clear to a reasonable observer that there have been some good results from compensatory education programs.

It is also discouragingly clear that efforts to measure many of these good results have either not been made, or, have in many cases, produced ambiguous or inconclusive results.

Perhaps it is noteworthy that much of the research on characteristics of disadvantaged children has focused on their weaknesses, deficits, or limitations. Such studies have been directed toward traditional measurement of how a disadvantaged child performs or the way he appears to be when he is faced with a traditional school environment.

A significant finding is that now—after considerable delay—some well-conceived research efforts are focusing on the serious investigations needed to improve educational opportunities for deprived children. Some of the research plans contemplate the encouraging approach of identifying positive characteristics and strengths of disadvantaged children and seeking to identify as assets those behaviors and conditions which can be used and built upon for purposes of educational improvement. These research attempts may eventually produce more meaningful instruments for measuring the true ability and achievement-levels of disadvantaged children; they may even produce educational methods and curricula innovations that will enable slum children to progress as rapidly through school as the average middle-class student. The ultimate answer to the cry for equal educational
opportunities for children who do not learn in the traditional setting may not be continuing massive and expensive injections of more and more of the same traditional educational methods under "compensatory" labels. It may, instead, come from an enlightened and imaginative effort to provide for these children unique educational programs with curricula and materials specifically designed to capitalize upon what a child has—rather than what he lacks—in his own background.

Nevertheless, such radical changes in the academic establishment would surely be long-range, and many good results from projects already underway are apparent and can be recognized and encouraged, even without benefit of a long-range, scientifically designed and carefully controlled experiment. You can see the same kind of good results when you wash a dirty shirt. You know that it is clean enough to use without needing precise data and controlled testing information about the percentage of soil removed, the relative effectiveness of different amounts and kinds of bleach and soap powders, length of washing time, temperature of water, and other possible variables. Though it would be desirable to have the measure of variables affecting the outcome in order to replicate the operation, or to improve upon it, there is no real reason to insist upon having them before you wear the shirt.
Appendix A

DESCRIPTION OF PRE-TITLE I COMPENSATORY EDUCATION PROJECTS SURVEYED

1. Washington, D. C., The Language Arts Program
2. Washington, D. C. Model School Division
3. Ypsilanti, Michigan, Perry Preschool Project
4. Hartsdale, New York, Greenburgh #8, Project ABLE
5. White Plains, New York, Project ABLE
6. Norwalk, Connecticut, Fox Run School Summer Reading and Related Arts Program
7. Pittsburgh, Pennsylvania, Transition Room Project
8. New York, New York, Higher Horizons Program
9. New York, New York, Homework Helper Program
10. Winston Salem, North Carolina, North Carolina Advancement School
11. New York, New York, The School to Employment Program (STEP)
12. South Norwalk, Connecticut, Project #4 Potential Dropouts
13. Flushing, New York, Queens College, UPWARD BOUND Project
14. New Haven, Connecticut, Yale University Summer High School, UPWARD BOUND Project
15. Boston, Massachusetts, College of Basic Studies
17. South Norwalk, Connecticut, Team Teaching Project
### SUMMARY OF PRE-TITLE 1 COMPENSATORY EDUCATION PROJECTS SURVEYED

<table>
<thead>
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<th>No.</th>
<th>DESCRIPTION</th>
<th>STARTING DATE</th>
<th>COST PER PUPIL</th>
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<td><strong>PRE-SCHOOL AND EARLY ELEMENTARY SCHOOL</strong></td>
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<tr>
<td><strong>No. 1</strong></td>
<td>Washington, D.C.—THE LANGUAGE ARTS PROGRAM to improve oral and written language facility and basic attitudes, habits, and skills; to develop specific language skills; to increase attendance; continuing curriculum enrichment among school administrators and regular teachers.</td>
<td>Jan. 1961</td>
<td>$ 23</td>
</tr>
<tr>
<td><strong>TARGET GROUP:</strong></td>
<td>11,000 pre-school and early elementary pupils in 25 schools; majority Negro; of low income.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>STAFF:</strong></td>
<td>Program director, 21 special language arts teachers, language arts supervisor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IMPACT:</strong></td>
<td>Very positive subjective evaluations. Some evidence increased competence in use of reading materials in grades 1-3. Continuing enthusiasm for program among school administrators and regular teachers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>No. 2</strong></td>
<td>Washington, D.C.—MODEL SCHOOL DIVISION, a group of inner-city schools, encourages flexibility and innovative approaches; ungraded units, team teaching; methods and materials suited to ethnic background and experience of students; language arts stresses in elementary schools; programmed instruction, remedial reading; use of neighborhood and local teacher aides for tutoring and counseling; summer programs; Also long-range programs to improve instruction. Inservice teacher training.</td>
<td>Oct. 1964</td>
<td></td>
</tr>
<tr>
<td><strong>TARGET GROUP:</strong></td>
<td>18,000 pupils in 5 preschools; 14 elementary schools, 3 junior high schools, 1 vocational high school; mostly Negro; 70 percent of families with incomes over $4,000 a year, middle-class, educated, have lived in area at least 10 years.</td>
<td></td>
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<tr>
<td><strong>STAFF:</strong></td>
<td>600 teachers, teacher aides.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IMPACT:</strong></td>
<td>Moderate success in achieving major goal of giving the average child basic education and cultural enrichment, providing community services and introducing new educational approaches. Greatest effects in increasing students' motivation to &quot;learn basic skills, proper attitudes and become good citizen&quot; by modifications of standard classroom practices; ungraded primary, team teaching, and individualized teaching.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>No. 3</strong></td>
<td>Ypsilanti, Michigan—PERRY PRESchool PROJECT, a 2-year program to assess effects of school and home-based program upon preschool culturally deprived and functionally retarded children; to develop specific techniques and curriculum, and to contribute to basic research. Daily a.m. program structured to contribute specific learnings in concept formation, use of symbols; low pupil/teacher ratio; extensive individual attention; field trips, children allowed to take school equipment home; teacher visits in homes in afternoons (2-hour weekly visit to each home) bringing nursery school equipment and continue teaching in mothers' presence; monthly mother-teacher group meetings; semi-monthly fathers' meetings include activities such as making toys for school.</td>
<td>Jan. 1966</td>
<td>$1,500 (Pilo)</td>
</tr>
<tr>
<td><strong>TARGET GROUP:</strong></td>
<td>24 3-year olds each year; (new 2-year group starts each year); majority Negro; of low income.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>STAFF:</strong></td>
<td>Special preschool teachers, social worker, and psychologists.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IMPACT:</strong></td>
<td>Large year jump of 33 to 21 I.Q. points for 4 successive experimental groups, which is not maintained. Increases for the group occurs in late 8 weeks and seems stable for a year. For some individual children, permanent (i.e., for 4-year period of study) improvement occurred. At 1st year, experimental group's average IQ declined and approached the control groups' average scores so that at the end of 4 years there was no real achievement superiority over the control group.</td>
<td></td>
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<tr>
<td><strong>No. 4</strong></td>
<td>Hartsdale, New York—A PROJECT ABLE SCHOOL, which attempts to make early school program more appropriate for disadvantaged children, and to provide compensatory education. Emphasis upon genuinely integrating previously disorganized schools. Special K. language development program, language and reading program in 1st grade; social work counseling; heterogeneous class-grouping, with flexible ability-grouping within class sections; effective tracking in junior high school so that students not averse to participating in class work; broad range of additional staff services reflects broad scope of these program; selection of staff with proper orientation of intense concern for all children as individuals and desire to innovate; parental counseling.</td>
<td>1961</td>
<td>$452</td>
</tr>
<tr>
<td><strong>TARGET GROUP:</strong></td>
<td>Present, about 600 pupils in grades 1-6 in 2 elementary schools (initially 150 in early elementary grades, expanded each year until included all elementary); 37 percent Negro.</td>
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<tr>
<td><strong>STAFF:</strong></td>
<td>Elementary supervisor, psychologist, language consultant, social workers, psychiatrist, teacher aides, professional volunteers and regular teachers.</td>
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<tr>
<td><strong>IMPACT:</strong></td>
<td>Well conceived research design, longitudinal study, extensive testing program shows generally increasing levels of performance over time for different age cohorts and for both whites and Negroes. Positive subjective evaluations of programs and quality of teaching staff. The program attracts and holds good teachers. General findings of a 5-year evaluation were that insights were sharpened, but that they &quot;could not identify the specific needs of disadvantaged children&quot; as a group, only as individuals.</td>
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<tr>
<td><strong>No. 5</strong></td>
<td>White Plains, New York—A broad-spectrum PROJECT ABLE PROGRAM designed to investigate ways of altering the home and school experience of disadvantaged elementary school children to bring their academic achievement in line with their aptitudes. Emphasis on individualization, heterogeneous homerooms; curricular enrichment with emphasis on language development and reading; new and original reading and instructional materials; use of volunteers for individual attention to children and enrichment activities; field trips and guest speakers; guidance and counseling for parents and children; participation in comprehensive education courses for adults; teacher inservice training. In September 1964, the elementary schools were reorganized. A predominantly Negro school was closed and children were bussed to 10 other elementary schools so that each school had 10-30 percent Negro children.</td>
<td>Sep. 1961</td>
<td>$38</td>
</tr>
<tr>
<td><strong>TARGET GROUP:</strong></td>
<td>Original program served 1st and 3rd grade children in 1 elementary school (September 1961); In September 1964 expanded to serve all grades in 10 elementary schools, 1,875 in K-grade 3; 774 in grades 4-6; 10-30 percent Negro since 1964; low income families.</td>
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</tr>
<tr>
<td><strong>STAFF:</strong></td>
<td>Classroom teachers, helping teachers (assist with curriculum and remedial work), psychologists, social workers, home-school counselor, physician, nurses, attendance teacher, teacher aides.</td>
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<tr>
<td><strong>IMPACT:</strong></td>
<td>Evaluation of 5-year operation, longitudinal study of a sample of the students, compared project children in grades K-3 with a control group in grades 1 and 4. Extensive testing results did not reveal any notable gains. Very positive subjective evaluations of community's acceptance of program and increase in children's self-concept; successful acceptance by community of plan for achieving full integration and racially balanced schools due to attention to details of implementation of the plan.</td>
<td></td>
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</tbody>
</table>
### Summary of Pre-Title I Compensatory Education Projects Surveyed

#### Description

**No.6**
**Norwalk, Connecticut—Fox Run School Special Summer Reading and Related Arts Program** for disadvantaged children stresses remedial and corrective reading behavior and music instruction integrated into the language work. Small classes of 20 or less. Team teaching is the predominant feature of the program; teachers are carefully selected for their special interest in working with disadvantaged children and teaching experience. Emphasize staff training; 2 evening seminars a week, outside speakers for inservice training, exchange of experiences, mutual help. Flexible classroom arrangement, new building in Sylvan setting, all 400 children are bussed to school. 1967 program is concentrating on younger children than last year’s program. Poor results with parent involvement.

**TARGET GROUP:** 1966, 250 pupils grades 1-9; 1967, 400 pupils grades 1-5. About one-fifth Negro. Low income families, neglected. (Parents, majority white, are slow to comprehend, children seem brighter than parents.)

**STAFF:** Project director, 50 teachers (46 reading, 2 art, 2 music) including 2 Negroes, 7 men, 2 Nuns, 4 lay Catholic teachers, and a part-time social worker.

**IMPACT:** Subjective evaluation of program by project staff is enthusiastically commendatory; they point to individual cases of apparently substantial improvement in children’s attitudes and participation in school activities. Some children are said to have advanced 3 to 5 grade levels in reading last year. Permanent record on each child includes diagnosis profile administered at beginning and again at close of program, teachers evaluate each pupil in summer program and forward child’s record to sending school with request for regular teacher’s evaluation and return of record to summer program the next year.

**No.7**
**Pittsburgh, Pennsylvania—Transition Room Project** for children with I.Q. of 85+ in 3rd and 4th grades who are a year or more below grade in reading level. Full compensatory education program provides remedial work, special reading and tutorial programs, neighborhood study halls, student and family guidance and counseling, field trips; features team teaching with transition room teacher integrated into teaching teams.

**TARGET GROUP:** 2,600 pupils in 46 schools, 85 percent in 3rd and 4th grades; 65 percent Negro; from low income families.

**STAFF:** Reading specialists, social workers, psychologists, community aides, coordinators for family and community work.

**IMPACT:** Improvement in reading scores for grades 3 through 6, decreased rate of progressive retardation for disadvantaged children. Positive subjective evaluations.

#### Upper Elementary and Junior High School

**No.8**
**New York, N.Y.—Higher Horizons Program** began in selected depressed area elementary and jr. high schools, was subsequently extended to 28 high schools, was intended to enable disadvantaged children to compete with other children on an equal basis. Small group instruction in reading, math and other needed curriculum areas; field trips, cultural enrichment programs, parent and community involvement in workshops, committees, teacher in-service training and help with curricula adaptations, counseling and guidance services for children and parents. (Was follow-up to successful Demonstration Guidance Project for pupils from impoverished and broken homes in slum neighborhoods, 3/4’s had I.Q.’s below 100, nearly all were below grade level in reading, arithmetic and other subjects. Project concentrated on special educational services.) Earmarked $100 to be spent for special curricular materials at discretion of Master Teacher in each study center.

**TARGET GROUP:** 64,000 pupils in grades 3-10, in 13 junior high schools and 52 elementary schools; underprivileged.

**STAFF:** Classroom teachers, plus supplemental staff—program and guidance teachers.

**IMPACT:** Few significant differences emerged between experimental and control groups on achievement, ability, and behavioral test scores. Project students were significantly superior to control group only on elementary school arithmetic scores. The evaluation report noted more improved prediction of achievement by teacher ratings than by prior test results. Dramatic improvements were found in Demonstration Guidance Project pupils; average student’s I.Q. went up 10 points; scholastic achievement increased to grade level and above, large number graduated from high school—some with honors—and went on to a higher education.

**No.9**
**New York, N.Y. Homework Helper Program**, a "mutual education" program employing disadvantaged high school students to tutor disadvantaged younger pupils. Original focus: to provide financial assistance for high school pupils to stay in school. Program puts high value on professional teachers who are effective in reaching disadvantaged pupils via student tutors.

**TARGET GROUP:** Initially grades 4-5; expanded to jr. high and high school: 750 pupils and 300 tutors in 1967; future expansion, 4,000 pupils and 1,500-2,000 tutors; 60 percent Negro; 28 percent Puerto Ricans, low income students.

**STAFF:** One master teacher in each of 13 centers.

**IMPACT:** Clear gains in reading level for both tutors and pupils, especially pupils who received 4 hours of tutoring per week. No follow-up to verify if gains were maintained. Nor did initial results indicate improvements in behavior, attitudes, or grade performance. Extremely positive subjective evaluations of the program. As evidence of success, it is being extended city-wide this year.

**No.10**
**Winston Salem, North Carolina—North Carolina Advancement School**, a 3-month residential school for underachieving boys of average or above intelligence, emphasizes development of basic skills in language arts, remedial reading and math, study habits and improving motivation and attitudes of pupils. Focus of program now is as a center for curriculum development, demonstration and dissemination of new methods for meeting problems of underachieving pupils. Strong emphasis on innovative methods.

**TARGET GROUP:** 8th grade boys, 1/4 Negro, from varying background levels.

**STAFF:** 15 regular teachers, subject specialists, counselors and research staff.

**IMPACT:** Improved behavior and attitudes; subsequently some improvement in school marks, but testing program did not reveal significant gains in achievement.
SUMMARY OF PRE-TITLE I COMPENSATORY EDUCATION PROJECTS SURVEYED

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>Beginning Date</th>
<th>Cost Per Pupil</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecticut—FOX RUN SCHOOL SPECIAL SUMMER READING AND RELATED ARTS PROGRAM for disadvantaged children stresses compensatory reading, enrichment activities; art and music instruction is integrated into the language work. Teachers are carefully selected for interest in working with disadvantaged children and teaching experience. Emphasis on in-service training. 2 sessions of 20 hours each per week, outside speakers for in-service training, exchange of experiences, mutual help. (Flexible classroom setting, new building in Sylvan setting; all 400 children are bussed to school. 1967 program is concentrating on younger grades than last year’s program. Poor results with parent involvement.)</td>
<td>1965</td>
<td>$195</td>
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<tr>
<td>Project director, 50 teachers (26 reading, 2 art, 2 music) including 2 Negroes; 7 men; 4 lay Catholic teachers, and a part-time social worker. Subjective evaluation of program by project staff is enthusiastically commendatory; they point to individual cases of apparently substantial improvement in children’s attitudes and participation in school activities. Some children are said to have advanced 3 to 5 grade levels in reading last year. Permanent record on each child includes diagnostic profile administered at beginning and again at close of program, teachers evaluate each pupil in summer program and forward child’s record to sending school with request for regular teacher’s evaluation and return of record to summer program the next year.</td>
<td>1966</td>
<td>$207</td>
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<tr>
<td>Pennsylvania—TRANSITION ROOM PROJECT for children with I.Q. of 60-85 in 3rd and 4th grades who are a year or more behind grade level. Full compensatory education program provides remedial work, special reading and tutorial pre-school study halls, student and family guidance and counseling, field trips. Features team teaching with room teacher integrated into teaching teams.</td>
<td>1963</td>
<td>$131</td>
<td>Pilot program; 1964 in 46 schools, 85 percent in 3rd and 4th grades; 85 percent Negro; from low income families. Reading specialists, social workers, psychologists, community aides, coordinators for family and community work. Improvement in reading scores for grades 3 through 6, decreased rate of progressive retardation for disadvantaged children. Positive subjective evaluations.</td>
</tr>
<tr>
<td>I.Y.—HIGHER HORIZONS PROGRAM began in selected depressed area elementary and jr. high schools, was subsequently expanded to 12 schools, was intended to enable disadvantaged children to compete with other children on an equal basis. Program included in reading, math and other needed curriculum areas; field trips, cultural enrichment, parent and community involvement in workshops, committees, teacher in-service training and help with curriculum, counseling and guidance services for children and parents. (Was follow-up to successful Demonstration Project for pupils from impoverished and broken homes in slum neighborhoods, 3/4’s had I.Q.’s below 100, nearly always grade level in reading, arithmetic and other subjects. Project concentrated on special educational services.) $100 to be spent for special curricular materials at discretion of Master Teacher in each study center.</td>
<td>1966; 250 pupils in grades 1-5; 10 junior high schools and 52 elementary schools; underprivileged. Classrooms teachers, plus supplemental staff—program and guidance teachers. Few significant differences emerged between experimental and control groups on achievement, ability, and behavioral test scores. Project students were significantly superior to control group only on elementary school arithmetic scores. The evaluation report noted more improved prediction of achievement by teacher ratings than by prior test results. Dramatic improvements were found in Demonstration Guidance Project pupils; average student’s I.Q. went up 10 points; scholastic achievement increased to grade level and above, large numbers graduated from high school—some with honors—and went on to a higher education.</td>
<td>1964</td>
<td>$224</td>
</tr>
<tr>
<td>I.Y.—HOMEWORK HELPER PROGRAM, a “mutual education” program employing disadvantaged high school students to assist younger pupils. Original focus: to provide financial assistance for high school pupils to stay in program puts high value on professional teachers who are effective in reaching disadvantaged pupils via student</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>P: Initially grades 4-5; expanded to jr. high and high school: 750 pupils and 300 tutors in 1967; future expansion, 4,000 pupils and 1,500-2,000 tutors; 60 percent Negro; 28 percent Puerto Ricans, low income students.</td>
<td>1963</td>
<td>$250</td>
<td>1964:</td>
</tr>
<tr>
<td>One master teacher in each of 13 centers. Clear gains in reading level for both tutors and pupils, especially pupils who received 4 hours of tutoring per week. No follow-up to verify if gains were maintained. Nor did initial results indicate improvements in behavior, attitudes, or grade performance. Extremely positive subjective evaluations of the program. An evidence of success, it is being extended city wide this year.</td>
<td>Nov.</td>
<td>$992</td>
<td></td>
</tr>
<tr>
<td>N.C.—NORTH CAROLINA ADVANCEMENT SCHOOL, a 3-month residential school for underachieving and neglected students, emphasizes development of basic skills in language arts, remedial reading and arithmetic, life habits and improving motivation and attitudes of pupils. Focus of program now is as a center for development, demonstration and dissemination of new methods for meeting problems of underachieving pupils. An innovative model.</td>
<td>1964</td>
<td></td>
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<tr>
<td>P: 8th grade boys, 1/4 Negro, from varying background levels.</td>
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<td></td>
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<tr>
<td>15 regular teachers, subject specialists, counselors and research staff. Improved behavior and attitudes; subsequently some improvement in school marks, but testing program did not reveal significant gains in achievement.</td>
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## SUMMARY OF PRE-TITLE I COMPENSATORY EDUCATION PROGRAM SURVEY

### DROP OUT PROGRAMS

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Details</th>
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</thead>
</table>
| **No. 1** | New York, N.Y.--THE SCHOOL TO EMPLOYMENT PROGRAM (STEP) a work-study program, helps potential dropouts stay in school, or, if they do dropout, become employed; morning regular school classes; supervised work experience (mostly in public agencies) for which pupil is paid a stipend. | - **TARGET GROUP:** About 1,000 pupils aged 15+ potential dropouts due to scholastic failure, truancy and related behavior and attitude problems.  
- **STAFF:** One teacher-coordinator for each group of 20-25 students.  
- **IMPACT:** Reduced dropouts in some programs; induced some dropouts to return to regular academic program. Results are difficult to ascertain due to follow-up problems. Teacher-coordinator is the most important factor in program success. |
| **No. 12** | So. Norwalk, Connecticut--PROJECT #3, POTENTIAL DROPOUTS is part of the overall Norwalk School Improvement Program. Designed to keep potential dropouts in school through providing successful academic experiences, establishing positive attitudes toward work, raising education and vocational aspirations, and improving self-image. Emphasis on special academic classes, remedial reading and auditory perception, "concrete" projects, use of audiovisual aids; cultural, occupational and recreational field trips; group and individual guidance; guidance counselor performs intermediary and interpretative service between students and both the school and the community; social worker referrals of parents and students to appropriate helping agencies. | - **TARGET GROUP:** 7th grade followed through high school; 39 in first group; 58 in second, majority Negro, low income.  
- **STAFF:** Project director, one counselor, one social worker, and 1 full-time equivalent remedial reading teacher.  
- **IMPACT:** Reduced dropout rate; improved behavior, grades and attendance; Little analysis of test scores. |
| **No. 13** | Flushing, New York--Queens College, a Non-residential UPWARD BOUND PROJECT aims to give bright students opportunity for college by remedying poor preparation and motivations in secondary school. Great emphasis on academic work, summer classes 6 days a week, informal-structured environment, small classes, excellent teachers, flexible curriculum, individualized attention, self-respect bolstering activities; Contact over the regular school year with continuing follow-up, close personal relationship between faculty and students; effective use of small number of teachers with dual competencies. | - **TARGET GROUP:** 10-12th grade, high I.Q. underachieving, students who are culturally and educationally deprived; 69 students (60 in 1966) about half boys, from 17-18 different high schools. 70 percent Negro, 15 percent Puerto Rican, 15 percent white, from poverty backgrounds.  
- **STAFF:** 4 faculty, 6 tutors, 8 student tutorial assistants, 3 part-time staff (community relations, art and psychologists)  
- **IMPACT:** Program has had only one dropout; 13 of the 15 1967 seniors have been accepted by colleges and the other 2 had applications pending. 10 of these would not have made it without their UPWARD BOUND experiences. Reduced high-school dropout rate and improved attitudes, particularly when students and programs are matched. Mixed effect on grades and behavior in high school. |
| **No. 14** | New Haven, Connecticut--YALE UNIVERSITY SUMMER HIGH SCHOOL, a residential UPWARD BOUND demonstration project to discover capable students who would not be likely to attend college and prepare them for college work. Also, to prepare colleges for this type of student, who does not have conventional skills, conventionally measured. Concentrated academic work and campus centered activities, classes 6-days a week, with required study at night; individual tutoring, cultural enrichment programs, high degree of self-direction encouraged, informal atmosphere with emphasis on learning. | - **TARGET GROUP:** Boys between 10-11th and 11-12th grades, all adjudged leaders with high aspirations. 150 in 1966; 75 in 1964; mixed racially; poverty backgrounds;  
- **STAFF:** Carefully recruited staff of college and high school teachers; 18 Yale and Harvard students as tutors. Staff mixed racially and, like the students, represent a national cross-section.  
- **IMPACT:** High college admission rates to good schools (70 out of initial group of 75 will attend college, 4 in prep school, 1 in Marine Corps before going to college.) |
| **No. 15** | Boston, Mass.--COLLEGE OF BASIC STUDIES, Boston University, a 2-year intensive collegiate program for marginal students, emphasis on counseling, tutoring and remedial work; employs team teaching, a core curriculum limited to five subjects and highly student-centered orientation. Unique structure--team teachers and student-section system produces complete and intimate involvement of small group of top-line faculty in education of 100 students, with extensive individual and personal student attention. | - **TARGET GROUP:** 550 freshman each year; (total 1100) freshmen and sophomores in college who could not meet regular college admissions requirements; 99 percent white, well above average income.  
- **STAFF:** About 50 total, all top-line teachers, no assistants, divided in teams of five (4 teachers of core subjects and 1 guidance teacher) which works with 4 groups of 25 students.  
- **IMPACT:** Apparently high rates of continuation in 4-year program. Good performance on grade averages. Increased success in predicting performance on basis of personality ratings by peers. |
### Dropout Programs

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>DESCRIPTION</th>
<th>BEGINNING DATE</th>
<th>COST PER PUPIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York-Queens College, a Non-residential UPWARD BOUND PROJECT</td>
<td>Aims to give bright students opportunity for remedying poor preparation and motivations in secondary school. Great emphasis on academic work, summer programs, remedial reading and auditory perception, &quot;concrete&quot; projects, use of audiovisual aids; cultural, occupational, recreational field trips; group and individual guidance; group referral of parents and students to appropriate agencies.</td>
<td>1963</td>
<td>$750</td>
</tr>
<tr>
<td>Connecticut--YALE UNIVERSITY SUMMER HIGH SCHOOL</td>
<td>A residential UPWARD BOUND demonstration project to discover students who would not be likely to attend college and prepare them for college work. Also, to prepare college-type students who do not have conventional skills, conventionally measured. Concentrated academic work centered activities, classes 6 days a week, with required study at night; individual tutoring, cultural enrichment, high degree of self-direction encouraged, informal atmosphere with emphasis on learning.</td>
<td>1964</td>
<td>$1,384</td>
</tr>
<tr>
<td>Massachusetts--COLLEGE OF BASIC STUDIES, Boston University</td>
<td>A 2-year intensive collegiate program for marginal students, counseling, tutoring and remedial work. Emphasizes team teaching, a core curriculum limited to five subjects, student-centered orientation. Unique structure--team teachers and student section system produces complete involvement of small group of top-line faculty in education of 100 students, with extensive individual and student attention.</td>
<td>1953</td>
<td>$1,500</td>
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**SUMMARY OF PRE-TITLE 1 COMPENSATORY EDUCATION PROGRAM SURVEY**

- **Student retention**
- **Graduation rates**
- **College admissions**
- **Behavioral changes**
- **Economic impact**

**Programs Effective in Reducing Dropout Rates**

- **Project #1**
  - New York-Queens College
  - Focus: Remedying poor preparation and motivations in secondary school
  - Emphasis: Academic work, remedial reading, audiovisual aids
  - Objectives: Reducing dropout rate, improving grades, and increasing attendance

- **Project #2**
  - Connecticut--Yale University Summer High School
  - Focus: Residential program for students in need of academic support
  - Emphasis: Summer work, peer tutoring, cultural enrichment
  - Objectives: Reducing high school dropout rate, improving academic performance

- **Project #3**
  - New York-Queens College
  - Focus: Non-residential program for bright students
  - Emphasis: Remedial reading, cultural enrichment, academic support
  - Objectives: Reducing dropout rate, increasing college admissions

**Programs in Demonstration Projects**

- **Step**
  - Focus: Employment program for potential dropouts
  - Emphasis: Work-study program, regular school classes, supervised work experience
  - Objectives: Reducing dropouts, increasing employment rate

**Programs for Marginal Students**

- **Project #4**
  - Focus: Program for marginal students
  - Emphasis: Remedial work, cultural enrichment, individual counseling
  - Objectives: Reversing academic failure, improving self-image

**Programs in General Improvements**

- **Project #5**
  - Focus: Improving overall school environment
  - Emphasis: Small classes, flexible curriculum, staff development
  - Objectives: Increasing student success, improving school climate

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**Notes**

- **High school dropout rates**
- **College admission rates**
- **Economic outcomes**

**Table Data**

<table>
<thead>
<tr>
<th>Date</th>
<th>Cost Per Pupil</th>
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<tbody>
<tr>
<td>1961</td>
<td>$340 average:</td>
</tr>
<tr>
<td>1962</td>
<td>$360-9742</td>
</tr>
<tr>
<td>1963</td>
<td>$500</td>
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<tr>
<td>1966</td>
<td>$1,400</td>
</tr>
<tr>
<td>1964</td>
<td>$1,384</td>
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<tr>
<td>1953</td>
<td>$1,500</td>
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</tbody>
</table>

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**Conclusion**

- **Impact of programs**
- **Future directions**
- **Policy implications**
<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Target Group</th>
<th>Staff</th>
<th>Impact</th>
</tr>
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<tbody>
<tr>
<td>16</td>
<td>Washington, D.C. -- CARDOZO URBAN TEACHING PROJECT is a pilot effort to attract and train young people to teach in inner-city schools. Main elements: supervised internship, seminars, curriculum development, after-school contact with students and community. Encourages experimentation and development of curriculum materials relevant and meaningful to urban children. Concentrates on classroom teaching; after-school teacher seminars cover discipline, testing, and teaching methods; interns work for 2 months with neighborhood centers and then concentrate on before and after-school work with students and home visits.</td>
<td>2,200 high school students, majority Negro, primarily low-income (20 percent are on assistance), with some middle income professional, white and blue collar workers; 40 percent of children from 1-parent homes, 22 percent of city's juvenile delinquents come from the area.</td>
<td>15 interns</td>
<td>Positive subjective evaluations by observers. Of 26 trainees (1963-65) 21 remained in teaching either in urban schools, the Job Corps or overseas (10 of the 26 are in D.C. schools; 7 of them teach at Cardozo).</td>
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<tr>
<td>17</td>
<td>South Norwalk, Connecticut -- TEAM-TEACHING PROJECT aimed at greater flexibility to permit individualized instruction for each student, primarily a redeployment of staff for more effective teaching, with addition of aides to perform non-professional duties; varied team pattern of 3 to 8 members may include specialists; teams cross grade lines; provides in-service teacher training and intensive summer workshops. Enhanced attraction of teaching career with increased status and higher salaries; comprehensive curriculum materials center includes wide variety of audio-visual resources; classrooms designed for team teaching with flexible space arrangements for large, medium, and small group instruction; also adaptable to conventional classroom organization.</td>
<td>Nearly 4,000 students in all elementary, 7, 8, 10 and 11th grades in 14 schools, with 25 teacher teams, including a team for mentally retarded children. (Has expanded from initial effort with 4 teams for 300 children in 4 schools.)</td>
<td>A team consists of 1 team leader (master teacher), 4 other teachers and 1 aide--6 adults for about 150 children. The majority of master teachers are men.</td>
<td>Claimed success in attracting and retaining good teachers. Original impetus for team teaching arrangement was to save the good teachers for teaching rather than having them transfer to administration or counseling. Costs were reallocated rather than increased; aggregate data for 1965 show additional stipends to team leaders, $25,000; to teachers, $30,250; teacher aides, $82,500; and part time help, $36,412. Better use of teachers' talents and of space and equipment; student achievement test scores show no loss after change to team teaching; favorable findings from adjustment studies of pupils.</td>
</tr>
<tr>
<td>Description</td>
<td>Beginning Date</td>
<td>Cost Per Pupil</td>
<td></td>
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<tr>
<td><strong>TEACHING PROJECTS</strong></td>
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<td>D.C. — CARDozo URBAN TEACHING PROJECT is a pilot effort to attract and train young people to teach in inner-cities. Main elements: supervised internship, seminars, curriculum development, after-school contact with students. Encourages experimentation and development of curriculum materials relevant and meaningful to urban students. Interns work for 2 months with neighborhood centers and then concentrate on before and after-school work with and home visits.</td>
<td>1963</td>
<td>$75,000 annual total cost. Approx. $35 per pupil.</td>
<td></td>
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<tr>
<td>2,200 high school students, majority Negro, primarily low-income (20 percent are on assistance), with some middle income professional, white and blue collar workers; 40 percent of children from 1-parent homes, 22 percent of city's juvenile delinquents come from the area.</td>
<td>1963</td>
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<td>15 interns</td>
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<td>Positive subjective evaluations by observers. Of 26 trainees (1963–65) 21 remained in teaching either in urban schools, the Job Corps or overseas (10 of the 26 are in D.C. schools; 7 of them teach at Cardozo).</td>
<td>1963</td>
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<tr>
<td><strong>TEAM-TEACHING PROJECT</strong> aimed at greater flexibility to permit individualized instruction to each student, primarily a redeployment of staff for more effective teaching, with addition of aides to perform clerical duties; varied team pattern of 3 to 8 members may include specialists; teams cross grade lines; provides an opportunity for teacher training and intensive summer workshops. Enhanced attraction of teaching career with increased higher salaries; comprehensive curriculum materials center includes wide variety of audio-visual resources; designed for team teaching with flexible space arrangements for large, medium, and small group instruction also to conventional classroom organization.</td>
<td>1958</td>
<td>No increase.</td>
<td></td>
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<tr>
<td>Nearly 4,000 students in all elementary, 7, 8, 10 and 11th grades in 14 schools, with 25 teacher teams, including a team for mentally retarded children. (Has expanded from initial effort with 4 teams for 300 children in 4 schools.)</td>
<td>1958</td>
<td></td>
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<tr>
<td>A team consists of 1 team leader (master teacher), 4 other teachers and 1 aide—6 adults for about 150 children. The majority of master teachers are men.</td>
<td>1958</td>
<td></td>
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<td></td>
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<tr>
<td>Claimed success in attracting and retaining good teachers. Original impetus for team teaching arrangement was to save the good teachers for teaching rather than having them transfer to administration or counseling. Costs were reallocated rather than increased; aggregate data for 1965 show additional stipends to team leaders, $25,000; to teachers, $30,250; teacher aides, $82,500; and part time help, $36,412. Better use of teachers' talents and of space and equipment; student achievement test scores show no loss after change to team teaching; favorable findings from adjustment studies of pupils.</td>
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The Language Arts Program
Washington, D. C.

The Language Arts Program1/began in 1961 as a pilot project to "develop the oral and written language facility and comprehension of culturally different children" in early primary grades (K-3) and to guide development of positive feelings, basic attitudes, habits, and skills "essential to a wholesome adjustment."

Innovative when it was initiated, the program is equally innovative and creative today. This judgment is supported by many requests from principals of elementary schools serving pupils from low income communities throughout the nation for Language Arts Program staff to discuss techniques and demonstrate instruction materials at local and national meetings, conferences, workshops, and institutes. Most District of Columbia school principals are clamoring for extension of the project to all District of Columbia schools.

The pilot project designed to operate in 14 elementary schools from 1961 to 1964-65, included summer educational centers for primary children. The program began in January 1961 in 7 schools, 2 were added in February 1966, and 5 in November 1962. Some 7,395 children were enrolled in grades K-3 in the 14 schools, and staff included 241 regular classroom teachers and 14 special language teachers. Now expanded to operate in 23 elementary schools, the program serves 11,400 children with 368 regular teachers and 21 special language arts teachers. The majority of the students are Negro, from low-income families, and many of them from homes with only one parent. About 92 percent of the language arts teachers are women, and the project director is particularly concerned with encouraging men to enter the program in order to provide children with a male image during their early school experience.

Per pupil costs for the program average about $23 over regular school expenditures. About three-fourths of the project cost goes for salaries.

The generally acclaimed success of the Language Arts Program is attributed to the specialized language teachers, who are the heart of the program. In addition to being excellent teachers, they act as catalysts to generate a high level of interest, concern, sensitivity and understanding of the language needs of disadvantaged children among regular teachers. They also provide a continuous inservice training program for the other teachers in using specialized language arts skills in all class work.

1/ One of the 10 Greater Cities Programs for School Improvement funded by the Ford Foundation—an unprecedented and unique aspect was inclusion by the Executive Board of the Ford Foundation of an additional grant of $5,000 over the amount requested for limited research to reinforce subjective evaluations. 2/ 1965 evaluation by George Washington University.
A language arts teacher may serve from 8 to 25 classes a week and averages 17. The special teacher visits 5 or 6 classes each day, working from 15-25 minutes with a class using visual aids, projectors and other special equipment.

The active support and cooperation of classroom teachers is deemed essential to the success of the program, especially since the specialized language arts teacher had no direct responsibility for a classroom. The 8 percent turnover rate among the regular teaching staff reflects a rather stable corps of teachers in an area where teaching is generally considered difficult and where turnover is expected to be much higher. (Some 30 percent of teachers who left went out on maternity leave.)

The success of the program also depended heavily upon participation by specialists from all parts of the school system. Therapists in the Speech Department helped children overcome speech handicaps. Consultants in general education, social psychology, linguistics, reading, English and literature, and sociology were used for in-service teacher training.

The natural desire of teachers for self-improvement and their interest and concern for advancing their own careers was exploited in a number of important ways. For example, structured demonstrations were aimed at improving teacher performance in the classroom. In addition to attending demonstrations at Demonstrations Centers and Laboratory Schools, capable teachers on regular school staffs were encouraged to give demonstrations in areas where they had special competence, thus providing recognition for them. Another excellent learning experience was provided by arranging for teachers to use experimental readers and evaluate their worth for children. The large number of teachers who took graduate work and the high participation in workshops reflect the strong emphasis the program places on improving teacher performance.

In general, the language arts teachers have a very high level of motivation from the role they play, and the program enhances this by involving them in planning and evaluation, curriculum development, demonstrations, and observations, with continuing encouragement to pursue their own efforts for improving their skills.

An evaluation study carried out in 1965 compared test scores\(^1\) for an experimental group of 262 students in the program since 1961 with scores for a matched control group.

Reading test scores indicated that children in project schools have improved their general level of reading competence. The test was administered to the students in 1963 and 1964, and the following shows how

\(^1\) Included Metropolitan Reading Readiness Test; Metropolitan Achievement Test; Stanford Achievement Test; Gates Reading Test; Daily Language Facility Test (Evaluates growth in language facility in preschool programs. The test was designed to obtain a standardized sample of speech in 10 minutes or less, and to be administered and scored by personnel with a minimum of training. Results are relatively insensitive to the sex or cultural group of the examiner.); and teacher ratings on quality of homework, motivation, getting along with other children, and how the home situation affected the students' work.
average performance improved in both first and third grades. However, there still is a distinct pattern of increasing retardation at third grade level compared with the national norm.

Gates Reading Tests, average of all sub-tests (Washington, D.C., Language Arts Program):

<table>
<thead>
<tr>
<th>Grade</th>
<th>National Norm</th>
<th>Project Norm 1963</th>
<th>Project Norm 1964</th>
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<tbody>
<tr>
<td>1</td>
<td>1.7</td>
<td>1.9</td>
<td>2.0</td>
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<tr>
<td>2</td>
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<td>2.7</td>
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<tr>
<td>3</td>
<td>3.7</td>
<td>3.4</td>
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</table>

No other significant test score improvements were reported.

Nevertheless, to conclude that the program had a limited impact would be considerably at odds with the impressive number of enthusiastic evaluations of the program's success by nationally-known educators published as part of the 1967 evaluation of the project. The question is whether or not there are other ways in which the impact of the project might have been measured to correspond more sensitively with the subjective evaluations of experienced observers.

Program evaluations also reflected the judgment of project teachers and officers that the children, in general, are demonstrating a more wholesome and positive attitude toward school: that they have developed greater self-confidence and self-assurance, which is reflected in improved communication skills. There is also evidence of growth in oral language power. Children who formerly responded in monosyllabic answers now respond in good sentences using acceptable English. There also appears to have been growth in listening skills, improved speech habits and enriched vocabularies as the result of consistent teacher emphasis on these skills.

Children who had attended kindergarten as well as having Language Arts in grade 1 earned more A's, B's, and C's on report card marks in language and reading than children who had only Language Arts in grade 1, indicating that kindergarten experience helps children achieve better grades.
The Model School Division
Washington, D.C.

The Model School Division, a group of inner-city schools in the District of Columbia, constitutes a relatively self-contained system which encourages flexibility and innovation in developing approaches to educating the disadvantaged. It also undertakes long-range programs to improve instruction.

The area served by the Division is about 4 square miles of the Cardozo District and it is Washington's ghetto. Some 61 percent of the city's population is nonwhite. Approximately 91 percent of the public school students are nonwhite—nearly all of the children in Cardozo are Negro.

Seventy-three percent of Washington's Negroes have lived in the city for at least the last decade. Many of them, including school principals and teachers, are middle-class, educated, and successful. But 30.5 percent of Cardozo residents have incomes under $4,000 per year.

Ten years ago Cardozo was part of a segregated system of separate and unequal schools, many of which have never recovered. Every school in Cardozo displays startling inadequancies: all are overcrowded, many lack auditoriums, playgrounds, libraries or lunchrooms. The crime rate for the area is high; juvenile delinquency is common; and one in six students drops out of Cardozo High School.

The Model School Division, in operation since 1964, was funded by the Board of Education through the District of Columbia Government, the President's Committee on Juvenile Delinquency of the Department of Health, Education, and Welfare, and the United Planning Organization. It was established to innovate, to experiment, to bring new life to the inner-city schools and to provide guidelines for the D.C. school system as well as for other urban areas.

The project involves a total of 600 teachers and 18,000 school children in five pre-schools, fourteen elementary schools, three junior high schools, one vocational high school, and the Cardozo High School.

A number of experimental programs underway in the Model School Division show some indications of success. These include newly developed reading programs, secondary school curriculum programs, organizational programs, and community school services programs.

From the outset, the project has joined with united social agencies, community organizations, and sympathetic forces from the general public in attempting to stop the cycle of deepening deprivation among a large segment of the area's population. In line with its primary goal: to find the means for insuring greatest possible student achievement within a public school system, the Model School Division has explored various means of improving school-community relations; it has experimented with organizational changes, implemented innovative curriculum changes, and has attempted evaluation.
The Pre-school Program, begun in 1964, was a forerunner of the Nation's Headstart trend. The program is for children aged 3, 4, and 5 from low-income families who live in the Model School Target Area. Children who had the greatest economic and cultural needs were selected for the program, which was designed to offset the school problems which many children coming from lower economic and cultural backgrounds frequently have.

The project attempts to establish stable, warm relationships between the children and adult staff. It also permits children to have positive, intensive, direct sensory contacts with much that has not previously been within their realm of experience. For example, they visit the zoo and see the animals. They go to a fire station and actually touch a real fire engine—they may even climb upon it. They look through magnifying glasses at threads and leaves and flowers. They hold a magnet and pick up paper clips. For the first time, they are given paper and colors—they smear paints; they hold crayons. And thus, what Homer Carter and Dorothy McGinnis refer to as the key to reading, MENTAL CONTENT, is developed.

To achieve this and several other purposes—creating a "love of learning," improving the intellectual, physical, and psychological skills basic for that "love;" self confidence, persistence in school activities, higher frustration tolerance, less withdrawal or aggressive behavior—400 children attended five centers several hours daily in 1965-66. There are long waiting lists of children eligible for the program at each center who could not be accommodated.

In 1966 a Teacher Aide Program was initiated and is credited with significant contributions to the success of the pre-school project. Aides who were employed were warm, mature, specially trained women, who lived in the school area. They work with the children in a variety of nonprofessional situations. Aides help with the routine clerical jobs and with getting class materials ready and putting them away, thus giving the teacher more time for adapting the program especially for her class and the individual children. Aides from the immediate neighborhood can also help the teacher understand the community and its peculiar problems. Most importantly, both the aides and teachers join in mutually reinforcing efforts to fill the child's need for warm and individual attention.

When children first come to the project, they very often are frightened of the new and strange surroundings. They cry easily and fight among themselves in the early weeks. Later, they come eagerly to school, happy, and anxious to be again with other children working on new and amazing materials. Teachers note that many seem to find their self-identities.

The parents have demonstrated their interest in the project by getting their children to the pre-school every day. And this is often a difficult achievement. A mother who works at night must have great incentive to get the children up early, dress them, take them to the school, and call for them again after a few hours. Parents have demonstrated their appreciation of the program by persistently inquiring about summer programs and continuation of the pre-school for the next year.

Project staff think that both the parents' interest and cooperation and the children's behavior changes are due to the favorable atmosphere of educational experiences and enjoyment of the centers' activities.
The Pre-School Project also conducted a day-care service—a problem of severe shortage in the city, and a prohibitively costly item when more than "just baby-sitting" is provided. The service was made available to families where there is only one parent in the home, or the mother works or is overburdened by illness or care of a large family. The project also included an educational program for the parents. Project staff evaluation reports note that this part of the project provided an important opportunity for parents to work with teachers and other staff and enabled parents to learn how they could help their children by supplementing the work of the school. It fostered continuing concept development at home related to the basic school work.

Funds became available in January 1966 to employ teacher aides to assist elementary and secondary as well as pre-school level teachers. A continuous training program for the aides enables them to relieve regular teachers of many time-consuming, non-teaching duties. Teachers who used aides express an almost unanimous opinion that they have been very helpful and have been effectively used in many ways. Those most frequently mentioned were group activities, such as songs and games; helping individual students and small groups with reading and mathematics; correcting papers; clerical work, such as duplicating materials, assembling papers into sets, posting teacher records; operating tape recorders, film projectors, and assisting with art activities.

Three new techniques for teaching reading have been introduced in the Model Schools. "Words in Color" is a beginning reading program designed to teach English phonetics through the use of color, which helps the pupil associate the image with the sound. Working with the entire class, the teacher also has individual pupil drill for each sound. Children work from beginning correct pronunciation through progressively more complex patterns of sounds in words with increasing awareness of relationships among sounds, words, meaning, inflection, speech, written signs, and reading. Teacher evaluations were generally enthusiastic about the success of the method and recommended an additional year of "Worlds in Color" for children who were using it.

The second, the "Initial Teaching Alphabet (ITA) Program," teaches reading through the use of 44 symbols (for the 44 phonemes of the English language). The program is constructed so that printed English words are introduced by stages. Teachers evaluate the program as very successful. They point to pupil enthusiasm and readiness to read alone or with guidance. They recommended extension of the technique to other schools and that all pupils in ITA continue the program for a second year.

The ITA Experimental Group of 90 children was first tested in October 1965. In May 1966, only 48 of the ITA participants were tested, since only they could be matched with a control group. Results were qualified because some of the children were on half-day sessions, one teacher for the experimental group had been on extended sick leave, and the test used introduced bias. Nevertheless, the ITA Group placed above the control

1/ Gates Primary Rating Tests were written in traditional orthography—The experimental group having read almost exclusively in ITA were at a disadvantage compared with the control group.
group on both tests, and showed higher gains over the year than the control group. The difference between the median gains in comprehension favored the ITA group by three months.

The third technique was used in the "Basal Progressive Choice Reading Program (BPC)" for teaching reading skills to first and second grade children. Organized around a controlled vocabulary, the 2-year program is designed to advance a child who completes the program to the 4th grade or higher reading level. Teachers and coordinators reported that results from the analytic and linguistic approaches of the program were impressive. Their evaluations noted particularly that some pupils unable to read after instruction in reading were able to learn with BPC. They were also enthusiastic about the availability of a wide variety of BPC reading materials and the program's emphasis on word-attack skills.

These three reading programs are cited by the Model Schools as examples of the variety of programs and techniques encouraged "in the spirit of action research experimentation;" their evaluations of results from these various experimental efforts are expected to identify the most successful programs for application in the Model Schools Division as well as in other schools.

"English in Every Classroom" is a junior high program designed so that every teacher is a teacher of English. Reading materials appropriate to the varying student levels are provided. Teachers in various subjects coordinate assignments and devise integrated programs of composition writing. Students are encouraged to read by easy access to many and many kinds of paperback books, magazines, and newspapers. They are encouraged to express themselves in writing by keeping a personal journal.

Model Schools personnel believe the program is a great success. The team teaching approach of this project is believed to account for much of its success. Administrative and consultant staff, 43 junior high school teachers, 3 student teachers, and 6 teacher aides each contributed a special competency and all worked in close cooperation on assignments that required writing and "English in every classroom." A staff evaluation report stated: "Never before have the pupils in this school read so widely. Pupils on every level of ability are carrying around paperback books and actually reading them. The spirit of acquisitiveness has reared its head and each pupil desires to own or borrow for brief ownership a book or some books."

Especially good results were noted from VICORE, a developmental reading course taught in 23 English classes at Cardozo High School. Six thousand paperbacks were distributed to the students; 1,500 became property of the school. The following table shows results of pre-and post tests for 430 VICORE students. These are impressive results and indicate the positive effect of VICORE reading methods and techniques.
CARDOZO HIGH SCHOOL STATISTICS

Assisi Test

Reading Efficiency Index

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<tr>
<th>Class &amp; Track</th>
<th>Beg</th>
<th>End</th>
<th>Increase</th>
<th>Rate</th>
<th>Comp. % tile</th>
<th>Voc. % tile</th>
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<td>7</td>
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<td>8. 9 R</td>
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<td>223%</td>
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<td>223%</td>
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<td>7</td>
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<tr>
<td>12. 10 G</td>
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<td>369%</td>
<td>241%</td>
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<td>203%</td>
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<td>20. 11 R &amp; G</td>
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<td>269%</td>
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<td>21. 12 G</td>
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<td>22. 11 &amp; 12 G</td>
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<td>639</td>
<td>299%</td>
<td>364%</td>
<td>15</td>
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</table>

All class statistics indicate the mean or average performance of the classes involved. The ASSISI test is a 10 minute reading test, with no opportunity to refer back to the text in order to answer the multiple-choice questions. The comprehension scores are in percentages. The standardized NELSON-DENNY TEST indicates the actual rate in words per minute. Comprehension, and vocabulary scores are in percentiles according to grade level. When percentile scores were converted to grade levels on the NELSON-DENNY TEST, one class rating showed a gain in comprehension from 7.8 to 9.8 grade level and gain in vocabulary from 8.2 to 9.4 grade level.

The Summer Staff Development Institute of the Model School Division has been conducted during the last three summers for teachers, supervisors, and administrators. The program provides 6 weeks of training in improved methods of teaching math, science, and social studies, and enables participants to exchange ideas, to improve their sensitivity and sharpen their observation abilities by sessions in group dynamics and to watch master teachers work in demonstration classrooms. A Demonstration School is
operated in conjunction with the Institute and offers an opportunity for teachers to see new materials in actual classroom use. This action-oriented, in-service training is thought to have been quite successful because of the widespread feeling among participants that it is now easier to talk with staff in formerly inaccessible positions—either up or downwise in the educational hierarchy. Both the administrators and teachers, as they become involved with one kind of change, became receptive to other kinds of changes. Fresh material was presented in new ways. The enthusiastic reactions of the 200 children in the first Institute provided a stimulus for teachers to implement the new materials and procedures. It was the children's reactions which also served as guidelines to the feasibility of introducing the specific units in the follow-up program during the regular school year.

In 1965, 150 teachers were in the Institute. In 1966, there were 200. In both years, the major focus was on using new materials and techniques for teaching social studies, mathematics, and science, with each participant assigned to one of three groups for a "course" in one of the subjects. Each teacher who attended the 1965 Institute received $200 to spend during the following school year for supplies to continue with new methods and curricula. In addition, teachers' workshops in each subject were held during and after school hours.

The 1966 Institute provided participants with orientation based upon experience from the first Institute and school-year application of methods introduced in the summer of 1965. Other improvements of the Institute were also made in 1966. A major progressive step was the formation of a Teacher's Committee, which constructed a questionnaire and administered it to the Institute participants. Responses to the Teacher's Committee Evaluation Questionnaire influenced program development toward introducing curricular and structural changes which would be more effective with disadvantaged youth than "traditional" methods.

During the 1966 Institute, more clearly defined objectives were developed. Specific goals for the program include establishment of a reservoir of training resource people for the eventual self-perpetuation of the program; dissemination of information about newly developed materials to Model Schools teachers, principles, supervisors, and other staff; provision of an Institute laboratory as well as an effective summer school for area children; continuing support and assistance for Institute participants during the regular school year.

Among the varied innovative efforts underway in the Model Schools are ungraded class units and team teaching methods. In the belief that the traditional structure failed to provide a satisfactory degree of school success for Target Area children, Model Schools instituted curricula changes in both elementary and secondary classrooms, which are making noteworthy contributions to increased student achievement. The "traditional" educational structure did not appear to give Target Area children a feeling of "I am capable," or a chance for their special abilities to be recognized or accepted by the teacher.

The Nongraded Primary Sequence is a specially designed method of operation. It replaces fixed grade levels and operates in a highly individualized, flexibly-timed teaching atmosphere, with traditional marking eliminated and children
progressing at their own pace. It creates a psychological atmosphere conducive to learning. Children are able to complete their work as they are able. Teachers evaluate students in a more long-range manner, and there is less pressure on teachers to "cover the book." Starting with children just entering or just promoted from kindergarten, the Meyer School has operated under this method since September 1965. The children were placed in five first-year, primary groups of 25 each based on ability as predicted by reading readiness tests and by teacher judgments. The following September, the entire primary level, including all grades 1, 2, and 3, were nongraded.

The Nongraded Intermediate Sequence operates in a similar manner, with each child's rate of progress set by his own ability. The program provides continuing, individual attention; enables the child to compete with himself; and changes student and teaching perceptions of the academic curriculum.

Associative Team Teaching in the intermediate grades also provides for ungraded progression. Supplementing the regular nongraded instruction program with multi-level materials, Associative Team Teaching meets individual and group needs for special academic curricula and slow-learner classes. The program capitalizes on the special competency of each teacher and introduces flexibility. Underachieving pupils have responded well to the new method, and teachers involved report that pupil motivation and achievement levels have increased.

A team-teaching project was designed especially for the Bundy Elementary School; it involved a coordinator, 6 teachers, a science and mathematics consultant, and 122 pupils. Bundy is a special school with city-wide enrollment. School records revealed that most of the pupils had scores indicating average or above abilities on the Reading Readiness Tests administered when they entered school. However, following kindergarten and first-grade experiences, when the needs for the use of abstract ideas and vocabulary imagery increase, the achievement level of the children fell. Therefore, in an effort to provide an alternative to more failure, the project capitalizes on the special competence of each teacher and increases the attention given to the individual needs of each child. It provides a mechanism for continuous exchange among team teachers of information about their pupils, thereby improving changes for building upon the interests and abilities of each child having two or more teachers concerned with him. For example, such subjects as reading and Language Arts, mathematics and science, or geography and history would be taught by a teacher with strong competency in that subject. Other subjects—perhaps handwriting, physical education, music or general shop—would be taught by their "homeroom" teacher, and regular conferences between the two would result in coordinated efforts to supplement instructional needs identified by either member of the team. The program incorporated new, interesting techniques and allowed flexible teaching and a reduction of teacher tension. The underachievers responded to this increased teacher knowledge and flexibility so that both their motivation and achievement levels increased. Teachers thought the program was so important that a full-time coordinator should be provided, and more special equipment made available. They judge the most significant aspects of their overall program to be continuing teacher training efforts, ungraded instruction units, team teaching, and close individual attention to each child provided by a number of the projects.
Project No. 3

Perry Preschool Project
Ypsilanti, Michigan

Preceded by a pilot study in 1962-63, a preschool project in Ypsilanti, Michigan, with the lengthy title "Intervention in the Cognitive Development of the Culturally Deprived and Functionally Retarded Negro Preschool Child" began in January 1964, with 24 age 3 Negro children, all testing at I.Q. levels under 90, and all from lower socio-economic status families.

A 2-year program, the project is designed to assess the effects of a school and home based program upon the educability of a group of Negro preschool culturally deprived and functionally retarded children, to develop specific techniques and curriculum for operation of such a program, and to contribute to basic research. A new 2-year experimental group matched with a control group starts each year, and evaluations conducted under a well-conceived research design have been made under the joint sponsorship of the U.S. Office of Education, Cooperative Research Program, and the local school district, Michigan Department of Public Instruction, Washtenau County.

Initial test results for each successive experimental group were very positive, but there is some question whether the spurt in pupils' intellectual and language development during the early stages of the program is maintained.

The per pupil costs for the project average $1,500 a year and include expenditures for four special preschool teachers, a social worker, and a psychologist.

Daily morning sessions are structured to promote specific learnings in concept formation and use of symbols. The program provides for a very low pupil/teacher ratio and extensive individual attention. Because a lack of high quality verbal self-expression is one of the most consistent characteristic of children from homes with limited advantages, the Perry Preschool Program considers improvement in the quantity and quality of speech production a major goal. The project emphasizes activities to stimulate language uses, such as reading aloud, discussing stories, naming objects, and rhyming games. They also make use of field trips to community places of interest as another way of broadening the child's base of experience and encouraging the naming of activities as well as questions and conversation about what he is seeing.

One important part of the program is its outstanding method of working in the home, with teacher visits to homes in afternoons (2-hour weekly visit to each home). The teacher brings nursery school equipment and continues teaching in the mother's presence to involve the mother in the educative process. There are also regular monthly mother-teacher group meetings; semi-monthly fathers' meetings include activities such as making toys for school.
In evaluations of the project, David Weikart and others reported first-year I.Q. gains of 13 to 21 points for four successive experimental groups (which is not, however, maintained). Increases for the group occur in the first 8 weeks of participation and seems stable for a year. For some individual children, permanent (i.e., for the 4-year period of study) improvement occurred. After the first year, the experimental groups' average I.Q. scores declined and approached the control groups' average scores so that at the end of four years there was no real difference in measured I.Q.

Three experimental groups (or "Waves") of children entered the program. "Wave 0" consisted of 13 four-year-olds who entered in the fall of 1962, spent one year in nursery school, one year in kindergarten, and were in first grade during 1964-65; "Wave 1" was 10 three-year-olds who entered in the fall of 1962, spent two years in nursery school, and were in kindergarten during 1964-65. Each wave was matched with a control group on the basis of Stanford-Binet I.Q. and a Cultural Deprivation Rating. There was also rough balancing of sex composition and percentage of working mothers for the experimental and control groups.

The developmental impact of the program was assessed mainly on the basis of changes between fall 1962, spring 1963, and spring 1964 in the scores of the several experimental groups and their matching control groups on three instruments: the Stanford-Binet Intelligence Scale, the Leiter International Performance Scale: Arthur Adaptation (wholly nonverbal), and the Peabody Picture Vocabulary Test. Further assessment was made by comparing the performance of the experimental and control groups in the spring of 1964 on the Illinois Test of Psycholinguistic Abilities and Gates Reading Readiness Test. Still further assessments were made on the basis of experimental-control differences on Teacher Ratings of Pupil and Parent Behavior in the spring of 1964, a Parental Attitude Research Instrument in 1962 and 1963, records of attendance, need-achievement measures, and other instruments. Statistical tests were made of the significance of observed differences in test and scale performance.

The data from one experimental group are presented in the table below:

<table>
<thead>
<tr>
<th>WEIKART: PERRY PRESCHOOL PROJECT, STANFORD-BINET INTELLIGENCE SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wave 0 Data</td>
</tr>
<tr>
<td>Time of Comparison</td>
</tr>
<tr>
<td>Fall, 1962 - Entrance into preschool</td>
</tr>
<tr>
<td>Spring, 1963-Completion of one year (in preschool)</td>
</tr>
<tr>
<td>Spring, 1964-Completion of kindergarten</td>
</tr>
<tr>
<td>Spring, 1965-Completion of first grade</td>
</tr>
<tr>
<td>Spring, 1966-Completion of second grade</td>
</tr>
</tbody>
</table>
Weikart reported that item analysis showed that "the decline in I.Q. scores was due to deceleration in the rate of growth--and not to a loss of previously demonstrated abilities."

More persistent gains were reported in achievement and attitude improvement. Project children were reported to "open up" and seem better adjusted than those in the control group. The experimental group showed a highly significant achievement superiority over the control group, despite almost identical intellectual ability. Based on teacher rating of classroom behavior in K, 1st and 2nd grades, project children displayed increasingly positive response to school and education, compared with the control group.

Achievement test scores for the Wave 0 experimental and control groups are shown in the following table:

**Weikart: Perry Preschool Project, California Achievement Tests**

**Wave 0 Data**

<table>
<thead>
<tr>
<th></th>
<th>Mean Percentile Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experiment</td>
</tr>
<tr>
<td><strong>Spring, 1965, completion</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>of first grade:</td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>30</td>
</tr>
<tr>
<td>Arithmetic</td>
<td>10</td>
</tr>
<tr>
<td>Language Skills</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
</tr>
<tr>
<td><strong>Spring, 1966, completion</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>of second grade</td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>23</td>
</tr>
<tr>
<td>Arithmetic</td>
<td>17</td>
</tr>
<tr>
<td>Language Skills</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
</tr>
</tbody>
</table>

Accumulating experimental evidence as well as pragmatic experience both suggest that preschool programs designed to develop in socially disadvantaged children the specific skills which middle-class children bring to kindergarten can compensate for a good deal of the gap in background experiences of children from poverty backgrounds.
PROJECT ABLE
New York

The New York State-sponsored PROJECT ABLE program started in 1961, with projects in 16 schools. It has now been expanded to 28 projects, which vary widely from one community to another. The program functions in both large and small communities, it emphasizes curricular and cultural enrichment to improve the educational achievement and attitudes of disadvantaged children. Some of the projects are aimed at preschool and early elementary school children, others at the higher elementary grades, junior and senior high school levels. Per pupil expenditures range between $2 per pupil (in Schenectady) to $778 (in Greenburgh), reflecting the wide differences in program content and services provided. In general, the distinguishing feature of the PROJECT ABLE program is a "systematic, positive, attempt to concentrate effort, attention and additional resources on children who have special kinds of educational handicaps." The result has been reduction of class size, remedial work in reading and math, provision of guidance, counseling and other special services.

An overall evaluation of the program by Theodore Bienstenstok and William C. Sayres indicates that in most school districts where PROJECT ABLE schools operate there is evidence of improved scholastic performance. For each project it is possible to cite individual cases where a child's aspirations have been raised and noticeable improvement in attendance and classroom behavior has resulted; there is also substantial community interest, support, and participation.

Two of the projects, Hartsdale and White Plains, were visited.
Greenburgh No. 8
Hartsdale, New York

Greenburgh No. 8 is a school district in Hartsdale, a small New York suburban community, which as been cited as an early example of pairing of schools to achieve racial balance. It has also had favorable publicity for its attempts to tailor its early elementary school program to more adequately fill the needs of disadvantaged children for compensatory education.

Greenburgh is a fairly small school district serving about 4,000 students, of whom approximately 37 percent are Negro. In general the school population of the area comes from "middle" middle-class families, but a larger proportion--maybe three-quarters--of the Negroes would be considered working class or "near poor," according to their income levels. However, like many other school districts in Westchester County, the expenditure per pupil is high. On the average, expenditure is about $1,200 per pupil, and the compensatory program now in effect may add an additional $800-$900 for some of the disadvantaged students.

Initially, the project served about 180 pupils in early elementary grades. It has been expanded each year until it now includes all pupils in grades 1-6. Project staff include: elementary supervisor, psychologist, language consultant, social workers, psychiatrist, teacher aides, professional volunteers and regular teachers. This broad range of additional staff services reflects the broad scope of the program; care in selection of staff obtains people with proper orientation of intense concern for all children as individuals and desire to impovate. There is particular concern with hiring the type of teacher who is "psychologically appropriate" for a school district committed to change and constantly in flux as well as to the philosophy of "letting all the children learn," requiring attention to the needs of all types of children without ignoring one or another group.

The program emphasizes home-school communications weekend trips, and curriculum changes to provide for language development. This includes a special kindergarten language development program, language and reading program in 1st grade; social work counseling; heterogeneous class-grouping, with flexible ability-grouping within class sections; effective tracking in junior high school so that students not averse to participating in class work.

Elementary classes are carefully balanced not only by sex and race but also by the proportions of pupils falling into three I.Q. levels, three reading levels, and two socio-economic status levels. Averaged class size is 22-24.

Greenburgh has conducted an extensive program of innovation and experimental involving curricula content, classroom design, use of mechanical and other instructional equipment, and intensive efforts to involve parents.

The plans for the project provided for a well-conceived research design. The early data from the longitudinal study and extensive testing program shows generally increasing levels of performance over time for different age cohorts and for both whites and Negroes. Positive subjective evaluations of programs and quality of teaching staff. The program attracts and holds good
teachers. General findings of a 5-year evaluation were that insights were sharpened, and that they "could not identify the specific needs of dis-advantaged children" as a group, only as individuals.
A broad-spectrum Project ABLE program, designed to improve the attitudes and achievement of elementary school children from small depressed areas in a generally upper socio-economic status community, was begun in 1961 in one elementary school. The project served first and third grade disadvantaged children in White Plains—a city of about 50,000 people. The early orientation of the program was to achieve racial balance in the schools, and White Plains was one of the first cities to attempt to do so by bussing pupils who lived in one part of the city to schools in another area.

In 1964, the elementary schools were reorganized. The predominantly Negro Rochambeau elementary school was closed, and children from Rochambeau were transported to the 10 other elementary schools so that no school in the city had less than 10 percent or more than 30 percent Negro pupils. At the same time, the Project ABLE program was extended to include more than 1,000 disadvantaged children in all grades of all 10 elementary schools of the system.

The program has experimented with flexible class groupings, curricular enrichment with emphasis on language development and an intensive reading program including remedial reading, flexible scheduling; increased individual and group guidance and counseling for parents and children; parental involvement through home visits and school meetings; field trips and guest speakers; and adult evening school programs; teacher inservice training through faculty meetings and conferences.

How a child feels about himself and his ability to succeed appears to be a key factor in his desire to learn and do well in school. During the first three years of the program, much emphasis was placed on giving the children as much opportunity to succeed as possible. Many attempts were made to give them experiences through field trips and other means which would broaden their horizons. Teachers reported that many of the children had gained a much better opinion of themselves. The children had drawn on their field-trip experiences for compositions and for show and tell activities. Many parents commented favorably about the improvement they had noticed in their children's feeling about themselves.

What a child thinks he may do in the future may also be indicative of how he feels about himself. Each of 38 project children interviewed in 1966 said he expected to finish high school. Eighty-two percent said they expected to go to college. The remainder indicated that they were uncertain about going to college. In a 1960 study of aspirations of junior high children living in the same area of the city, 56.6 percent said they expected to go to college and 43.4 percent said they did not expect to go. In the group interviewed in 1966, 17 of the 38 plan to go into a profession (teacher, doctor, lawyer, engineer). Seven are interested in business or secretarial work. Six plan to become a nurse or medical technician. The remaining 8 spoke of going into the military service or a skilled job. The aspirations of Project group children are, in general, higher than those reported in the 1960 study of aspirations of junior high school children living in the same neighborhood.
Thus, it appears that some educationally disadvantaged children who have been in the White Plains compensatory education program have been helped to improve their self-image and to raise their aspirations.

Heavy stress is placed on modified curricula and encouragement of innovations. This summer new curricula are being written in social studies, language arts, math and science, which will include sections specifically geared to educationally disadvantaged children and slow learners. New emphasis is being placed in the curriculum on integrating background information about the contribution of all—including minority—groups to the Nation’s development. Project ABLE appears to have made a major contribution to the White Plains district by encouraging the staff to look more closely at children as individuals and to search for more effective ways to help each child learn. This freedom to experiment is bringing about more flexibility in the total program. In many more situations it is now possible to ask what does this child need and to arrange for him to have it.

Project staff include social workers, counsellors, psychologists, and aides, in addition to regular teachers.

Regular annual per pupil educational expenditure at White Plains is $1,200. The total 5-year project cost for additional compensatory education services was $102,527, with per pupil expenditures decreasing from $69 to $29—the 5-year average per pupil additional cost was $38.

An evaluation of five years' operation of the program included some preliminary results from a longitudinal study of a sample of pupils, comparing project children in grades K and 3 with a Control group in grades 1 and 4. The test scores (following the reorganization of the school system and bussing of students to achieve racial balance) showed no substantial changes—improvements or declines—but the teachers made subjective evaluations that students had gained better opinions of themselves.

Comparison of achievement test scores showed the project group to be slightly better at the median and first quartile in Paragraph Meaning, Word Meaning, Spelling, Arithmetic Computation and Arithmetic Reasoning than the Control group. The third quartile of the Project group is higher in Word Meaning than the Control group; in all other areas, the third quartile was approximately the same in both groups. A review of test scores showed that some individual children made tremendous gains in both achievement and mental ability scores. The evaluator noted that too little time has elapsed to know what the effect may ultimately be. Experience has shown that the farther the disadvantaged child goes in school, the greater the gap between his achievement level and his grade placement. A comparative study of test scores of the project group and the Control group at the end of junior high school should indicate whether this gap has been decreased.

Data collected for the longitudinal study includes teacher marks, achievement scores, mental ability test scores and the attendance record for each child in the sample. The study will extend through the 1967-68 school year, when the first kindergarten group will have completed junior high school.
A noteworthy aspect of the White Plains experience with genuinely racially integrating its schools is the small amount of community friction generated. School district officials attributed the generally favorable acceptance by the community at large and by the school staff to the meticulous attention accorded to all details of their carefully and completely planned procedures to achieve integration. During the summer prior to the actual transfer of Negro pupils to formerly all-white schools, exchange activities were organized between playground groups in Negro neighborhoods and those in the white neighborhoods. This was credited with bringing different (i.e., white vs. Negro) parts of the community into initial contact, and with accustoming people in white neighborhoods to the sight of Negro children in the community prior to the school year, when Negro children would be walking through white neighborhoods to school. This precautionary measure was intended to ease any developing difficulties and to show the parents that the schools were really trying to anticipate possible problems and to resolve any that occurred. There were also meetings with school secretarial staff to discuss potential problems (e.g., lack of father's name for school records) in dealing with children from the more disadvantaged backgrounds and to instruct staff in ways to avoid embarassing children.

When the school system could not extend bus service to one area of the inner-city, parents organized a "bussing corps" to provide transportation for their children. The attendance teacher was called upon to load the busses; this gave him a "friendly" contact with the children rather than casting him in a "police role" to check on their truancy.

There were also, the school people noted, some mistakes. One debacle of the White Plains effort was their attempt to measure attitudes of the pupils with respect to the racial balance program. This attempt was highly criticized by parents and general public, generating a huge amount of ill-will. The effort was dropped.

In general, the White Plains program has had successful experience with parental involvement. Progressively, parents from the more depressed areas are becoming more likely to keep their appointments for meeting with school personnel, and they are increasingly becoming participants in school-parent meetings.

White Plains indicated that one of their successful projects has been the formation of a Teacher's Committee for Educational Equality to reevaluate various aspects of the school system and to increase the flow of ideas throughout all levels. The director of this committee stated that it was the first time she had ever had volunteers for committee work. The committee is credited with recommendations that resulted in actions to obtain teacher aides, coordinator for volunteers from the Negro community both on an occasional and periodical bases, evening study centers, and "building conferences" for improved communication and exchange of new ideas on a school-district-level.
Compensatory education projects are important components of the Norwalk School Improvement Program, which is a large-scale attempt to accelerate the pace of improving the schools. The well-planned Fox Run School Special Summer Reading and Related Arts Program is particularly noteworthy for its efforts to provide both innovations and expanded services based on demonstrated local needs. As with all other projects in the Norwalk School Improvement Plan, there is provision for the systematic collection, organization, and evaluation of data.

Begun in 1965, the summer project was designed to serve 250 disadvantaged pupils in grades 1 through 9 by providing remedial and corrective reading and enrichment activities. Art and music instruction is integrated into the language work. The 1967 program is concentrating on younger children than last year's program and has been expanded to serve 400 pupils in grades 1 through 5. About one-fifth of the children are Negro; all of the children are from low-income families; many of them are neglected children. The project has had poor results with parent involvement. The Project Director said that the children, in fact, seem brighter than their parents.

Subjective evaluation of the program by project staff is enthusiastically positive. They point to individual examples of substantial improvement in children's attitudes and participation in school activities. Some children are said to have advanced 3 to 5 grade levels in reading last year. A permanent record is kept for each child. It reflects a diagnostic profile administered at the beginning and again at the close of the program. Teachers evaluate each pupil in the summer program and forward the child's record to his regular school with a request to the regular teacher that an evaluation of the pupil's progress be entered and the record returned to the summer program the following spring. Each summer program teacher writes an evaluation of the program and assesses the achievement of each child in her class. Test scores are available from California achievement test, Ginn Reading Test (to detect frustration level) and home developed tests.

In addition to the Project Director, there are about 50 teachers (46 reading, 2 art, 2 music) including 2 Negroes, 7 men, 2 Nuns, 4 lay Catholic teachers, and a part-time social worker. The Project Director would like to expand further to accommodate about 200 additional children who also need the special services of the project.

The average cost per pupil was $207 in 1965 and $155 in 1966. The 1967 budget is $62,665 (up from the 1966 allowance of $51,765).
The program has emphasized development of a curriculum which is pertinent to the real life situation of the children involved, and which takes advantage of the characteristic of many children "to do," rather than to be "told."

The program, which runs this summer from May 1 through August 19, provides for classes of no more than 20 pupils, and is organized to allow for flexible grouping and regrouping of the children according to their ability for work in various subject areas.

The school is located some little distance outside the city in a beautiful woodland setting with a stream behind the school. The people involved in the program think that the location in the country and the beautiful building mean as much to the deprived children as the instruction they get. An interesting feature of the school building is the very flexible arrangement of the classrooms--each room has a door opening directly to the outside. And each classroom has its own individual washroom, which looks like a real bathroom in a home. This is something many of the children have not previously experienced, since many of them live in little shacks with no indoor plumbing and no electricity. Since there is a concentrated effort to enlarge the pupils' self-awareness and improve his self-concept in a general sense, the physical features of the building itself are important. For example, mirrors are installed in classrooms and in washrooms to foster an awareness of themselves in the children. There are hallway spaces for posting large block letter lists of the names of the children in each class. Opportunities are created for the frequent use of each child's written name.

Norwalk views its summer school program not only as an effort to provide compensatory services for disadvantaged children but also as a laboratory for the development and trial of curriculum changes that will benefit the entire school system. Team teaching is the predominant feature of this program--it is used both in the regular school and in this special summer program. The project places high value on skilled teaching, and teachers are carefully selected for their special interest in working with disadvantaged children and for their teaching experience. Some of last year's teachers were not rehired because they indicated a lack of interest in the program and some were totally disorganized--which is a bad example for a child who comes from a disorganized home. The Project Director commented that a teacher who does good work with classes in the regular school system may not be good in the summer program, which is aimed at improving the reading skills of economically and educationally disadvantaged children by using the motivating relationships among art, music, drama and reading. The Norwalk concern with problems of teacher attitude was especially pointed toward having the teacher believe that the child from a deprived background does have the ability to learn and that it is the teacher's responsibility to find the right key--to develop the appropriate curriculum to reach the child and to release his potential. The project therefore puts very heavy reliance upon teacher orientation and in-service training.

Prior to opening the summer program, teachers attend a 3-day orientation. There is a regular program of staff training with two evening seminars each week. Outside speakers stimulate ideas for new approaches to the teaching of disadvantaged children and there are
opportunities for teachers to discuss their problems, to exchange information about their experiences and to obtain mutual help in devising innovations in methods or new instruction materials.

Teachers are encouraged to provide for many "doing" activities in addition to participation activities which include dramatics, singing, dancing, painting and nature walks.

The project emphasizes approaches to learning that require the active physical participation of the children. It also makes an effort to provide instructional materials that are within the scope of the present ability of the children. Many teachers have devised a good deal of original teaching material and supplementary instruction materials dealing, for example, with Negroes as important components of society provide a high interest level for pupils and provide them with a sense of having a significant place in the culture. They also use bulletin board and display pictures of Negroes at work in the community thereby seeking to give Negro children pride in themselves and in their place in the community.

Special emphasis is put upon integration of language class activities with art and music. There is a real effort to adapt the curriculum to a multi-sensory approach to learning. The use of a specialist in music and art has served to upgrade instruction in those fields. Special group music instruction supplemented in the classroom by phonograph records and art prints—as well as by singing, rhythm—hard instrument and bongo-drum playing—motivates pupils' interest in participating as well as in listening.

One teacher built several primary grade lessons around the story of the gingerbread boy. She was particularly imaginative in using a multi-sensory approach to learning through providing a wide variety of touch, taste, smell, and sound experiences, which gave the children new bases for language expression.

A gingerbread boy had no relevance for many of the children. The teacher brought in a gingerbread boy cookie for each child to eat the day after the story was first read to them. They were then led into a discussion of how their own cookies had been made. Some of the children had never heard of spices. The following day, the teacher brought in boxes of different spices from her own kitchen shelves and each child was allowed to feel a small sample of each kind and to taste the different ones. They were then asked to describe how the spice felt to the touch and how they tasted. They also talked about other foods, and whether they thought spices were used in them, and if so, what kind. Later, the teacher, who could play a guitar, helped the children make up and sing about the gingerbread boy. They were also encouraged to walk and run "like the gingerbread boy." Another session found them busy drawing and painting the gingerbread boy and engaging in quite an exchange of conversation about him. The final fillip was provided when the teacher had one of the parents bring in ingredients and let the children watch while she made up a batch of gingerbread boy cookies, which were baked in the school oven and given to the pupils before they were dismissed for the day.
The gingerbread boy example is illustrative of the imaginative way in which plants, animals, foods, pictures, and records are brought into the classroom—anything, no matter how commonplace it is among middle-class children, that can represent a new experience or evoke a new word from a deprived child who has never been exposed to these objects.

There was quite a variety of manipulative materials available that provided for individual discovery of basic number concepts—for example, scales that are in balance when a child placed the cut-out numbers 3 and 4 on one side and the number 7 on the other; abacuses, geometric figures, fractional parts, peg boards and other concrete objects.

In addition to child-invented stories and child-created pictures, teaching techniques also included word cards and specialized reading materials which provided appropriately advanced and interesting information at a variety of simplified reading levels and dealing with experiences, such as family arguments, with which these children could identify.

One big advantage of this kind of summer program is that it permits emphasis on the individual child. Pupils had an opportunity to explore new and interesting subjects in an informal atmosphere. The program also provided teachers with a situation conducive to trying out new materials and new approaches to reaching and teaching pupils with whom they may be less than successful during the school year. The resulting enrichment of experiences and related individual reading materials makes learning to read a personally important goal and a personally relevant function for the project pupils. The provision of appropriate reading materials for these children is one of the areas in which the school feels an unfilled need. The Project Director pointed out that the subjects in the typical readers for beginners describe middle-class family situations and seem to be critical of him and his family. The stories that depict the father as a major figure in the home, for example, may be so unrealistic to a child from a fatherless home that he becomes alienated from all reading; To counteract such a reaction, the project has encouraged teachers to have children develop their own reading materials. Thus, the children's own pictures were used to illustrate stories that the children dictated to the teacher. These were reproduced and given to the children.

Project personnel contend that there is no substitute for effective teaching and for a wide variety of instructional materials that are relevant to the experiences and interests of the pupils. They are also convinced that flexible classroom arrangements are important for success with all pupils, but are basic for success with disadvantaged children. Some plan for breaking a group into smaller groups is necessary for effective teaching in some areas.
Pittsburgh has been in the forefront in seeking improvements for its inner-city public schools. The system includes 88 elementary and 23 secondary schools; 2,800 teachers, 5,000 supervisory staff, and 77,000 students. (Some 50,000 other children attend parochial schools.) Pittsburgh's schools are about 38 percent Negro. Two-thirds of Pittsburgh's Negro school children attend elementary schools that are more than 80 percent Negro; more than half the Negro high school students are enrolled in institutions that are predominantly black. As everywhere else, the Negro schools compile the city's lowest reading scores, its greatest percentage of academic failures, and its most severe social problems. (It should also be said that among the ten schools with the lowest reading scores, one is 85 percent white.)

School administrators made early progress in compensatory education and team teaching, in the development of new courses and curricula (written in collaboration with the University of Pittsburgh and Carnegie Tech.), and the city initiated programs that anticipated Head Start and Upward Bound. Team teaching, organized along grade lines in first, second, and third grades and by subjects in later years, is now the standard method in almost half the schools. The compensatory education plan also provides for remedial work and special programs for teaching reading, with special transition classes at the end of third grade for pupils not ready for a regular fourth grade program. It has been noted that despite its penchant for innovation and change, Pittsburgh is not a city of demonstration projects: What it tries, it expects to institute across the board. The city is committed to providing parity education for all children—and to offering compensatory programs for the disadvantaged.

The Transition Room Project is oriented towards children with an I.Q. of 85 or higher in the third and fourth grades who are a year or more below grade in reading level. The project aims: (1) to improve the academic performance of the chronic underachiever, as demonstrated by his increased ability to read and understand material written for children of his age and grade; and (2) to strengthen the self-image of the underachieving child, as measured by his progress in social and work habits after participating in a specially designed remedial program with other children who have a similar school problem.

Following successful completion of a pilot project, which ran from 1960 to 1964, the regular transition room program was started in September 1964, in seven schools.

In 1965-66, the project was extended to include 32 schools serving 1,330 children, and 14 additional transitional rooms were opened in the fall of 1966 (for a total of 46 serving nearly 2,600 children). Average per pupil costs run about $131 a year.
The regular annual per pupil expenditure for public schools in Pittsburgh averages $447. In the disadvantaged area schools, expenditures average $578, reflecting the additional cost of compensatory services including student and family counseling and guidance, tutorial programs, field trips, special TV programs, community involvement in providing personnel and financing for neighborhood study halls, in addition to special staff (for example, reading specialists, group social workers, psychologists, community aides, coordinators for family and community work). Various community agencies have made contributions to Pittsburgh's compensatory education efforts. They have provided luncheons, book review sessions, and other experiences to small groups of children. Through funds provided by outside groups, as an example, 16 children were enabled to attend a 10-week summer course in general science at the Buhl Space Academy.

The additional costs for the Transition Rooms were minimal, however, because the main thrust of the program provided increased individual attention to the students by reallocating the time of a single teacher in each school. Teachers experienced in remedial instruction were given transition room assignments; when such teachers were not available, teachers who expressed an interest in the program were selected.

The Transitional Room Teacher, although especially selected for the assignment, is included on the team where she seems to fit most naturally—either third grade or intermediate. She may need further communication with a team or teams other than the one to which she is assigned. Project staff deem it important, however, that she be part of the planning group. The cross-communication and interaction of team teachers and Transition Room teachers are relied upon to gain increased understanding of the Transition Room pupils by their other teachers.

As many as 120 pupils are grouped for instruction under a team of four teachers and a team leader, augmented by a teacher intern and a paid team "mother" or aide trained in handling audiovisual equipment, duplicating equipment and classroom supplies. Early primary grade teams are assembled on the basis of skill in teaching the particular grade level. Intermediate teams are made up of teachers having competence in different subjects: language arts, social studies, science, arithmetic, and library. Junior high school teams are organized by subject matter. In actual operation, the total group of students—whether it is 60 or 120—is rarely taught as a unit. While one of the team teachers instructs a large group in one room, other members of the team work with small groups of five or six (or even with a single pupil) to provide special work, remedial help or—in the case of pupils with outstanding ability—enrichment. The size of the instruction-group unit is influenced by the specific learning tasks and nature of the subject, as well as by the ability and achievement levels of the students. Where the subject matter is technical, small groups are instructed; where the subject is general, with emphasis, for example, on social learning, large groups are taught.

Operation of the Transition Room follows a variety of patterns in the different schools. Generally, 20 students are assigned to a Transition Room for about half of each school day (although this varies, as shown in the table which follows.)
### Characteristics of the Four Schools Returning Most Pupils to Regular Classes

<table>
<thead>
<tr>
<th>School</th>
<th>% pupils reading less than 1 year below grade level</th>
<th>Average number of periods per week</th>
<th>% Negro in Tr.</th>
<th>Number of pupils returned to regular classes (all grades)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3rd grade and below</td>
<td>4th grade and above</td>
<td></td>
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</tr>
<tr>
<td>Baxter</td>
<td>37</td>
<td>60</td>
<td>9.5</td>
<td>97.4</td>
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<tr>
<td>Beltzhoover</td>
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<tr>
<td>Dilworth</td>
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<td>Schiller</td>
<td>65</td>
<td>95</td>
<td>10</td>
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</tbody>
</table>

(Source: Compiled from Evaluation Report, 1966: Transition Room, Leonard Glasser)
A unique feature of Pittsburgh's program is the combination of the "Transition Room" approach—emphasizing spelling, handwriting and reading, written and oral language work—with an ungraded primary structure going through the third grade. The idea of ungraded sequences of learning rather than single age-grade steps is an attempt to correlate school organization with the way children really learn and provides for a child to reach the end of grade 3 without being stigmatized by failure. Children are moved from class to class and from group to group within a class according to their readiness for the next level of work, but classes are distinguished only by a teacher's name and the designation "primary." In this kind of an arrangement, children progress through the various areas at the speed of which they are capable.

Despite the concentrated efforts and substantial expenditures for compensatory education programs in Pittsburgh schools located in disadvantaged areas and positive subjective evaluations of results, there is little hard evidence of improvement in academic achievement.

The table below compares reading scores for three years for grades 3 through 6.

<table>
<thead>
<tr>
<th>Grade</th>
<th>No. Students</th>
<th>Mean Scores</th>
<th>Annual Rate of Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>65-66</td>
<td>63-4 64-5 65-6</td>
<td>64-5 65-6</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>514</td>
<td>1.8 2.3 3.0</td>
<td>+0.5 +0.7</td>
</tr>
<tr>
<td>4</td>
<td>480</td>
<td>2.5 2.9 3.6</td>
<td>+0.4 +0.7</td>
</tr>
<tr>
<td>5</td>
<td>93</td>
<td>3.1 3.4 4.5</td>
<td>+0.3 +1.1</td>
</tr>
<tr>
<td>6</td>
<td>73</td>
<td>4.0 3.9 5.6</td>
<td>-0.1 +1.7</td>
</tr>
</tbody>
</table>

In general, the pattern shows the smallest average gain for a grade level during the year that the Transition Room program was in effect (1965-66) exceeds the largest gain made during the year prior to the program. Thus, even though pupils are below grade level in reading, the program appears to have slowed down the expected increase in retardation of disadvantaged children.

Shown below is a comparison of all students in grades 1 through 8 in the Transition Room program.

<table>
<thead>
<tr>
<th>Race</th>
<th>Sex</th>
<th>No. Students</th>
<th>Mean Scores</th>
<th>Annual Rate of Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>65-66</td>
<td>63-4 64-5 65-6</td>
<td>64-5 65-6</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>male</td>
<td>313</td>
<td>2.5 2.9 3.7</td>
<td>+0.4 +0.8</td>
</tr>
<tr>
<td>White</td>
<td>female</td>
<td>183</td>
<td>2.7 3.1 3.9</td>
<td>+0.4 +0.8</td>
</tr>
<tr>
<td>Negro</td>
<td>male</td>
<td>424</td>
<td>2.3 2.6 3.3</td>
<td>+0.3 +0.7</td>
</tr>
<tr>
<td>Negro</td>
<td>female</td>
<td>337</td>
<td>2.3 2.6 3.3</td>
<td>+0.3 +0.7</td>
</tr>
</tbody>
</table>
The larger gains noted for the year the Transition Room program was in effect than for the year prior to the program suggests the beneficial effects of the project.

Pittsburgh has recently developed an ambitious evaluation plan which is expected to produce an adequate data base for meaningful analyses. The Evaluation Model developed attempts to provide information requisite to program development and stabilization and for valid program assessment to the decision makers responsible for changing the program. Evaluation and decision making are seen as separate functions. The Model views separate educational programs as discrete subsystems of the total school system.

In the 1966 evaluation of the Transition Room remedial reading program, researchers pointed out their need for an instrument to measure attitudes (particularly about school) at the third and fourth grade levels. Consequently, a unique "Faces" test was developed to obtain information for a Non-Verbal Attitude Scale. The research staff believe the test will effectively measure early attitudes, and the earlier the test results are available, the greater the probability of strengthening facilitative attitudes or effecting a change in those attitudes which seem to impede social and academic progress at school.

The highly-developed and carefully-drawn evaluation plan for Pittsburgh promises to produce meaningful data after a few years of operation. As such data accumulate they will serve as guidelines for further compensatory education efforts.
The Higher Horizons Program in New York, which attempted "to raise the academic performance of disadvantaged students, improve their motivation, and broaden their cultural horizons," has been termed "the most extensive project ever undertaken in the area of education for disadvantaged children. The Program began in the fall of 1959 in selected depressed area elementary and junior high schools and was subsequently extended to senior high schools. It was "intended to provide the kind of education that would enable disadvantaged children to compete with other children on an equal basis."

The program involved over 64,000 underprivileged pupils in grades 3 to 10 in 52 elementary and 13 junior high schools.

Supported by both city and Federal funds, expenditures for the 1963 school year amounted to $3.8 million—about $60 per pupil. Much of the pioneering work in compensatory education was done in Higher Horizons and the program has served as a model for other school systems.

The program was instituted on the basis of a highly successful pilot project, the Demonstration Guidance Project, which began in 1956, and showed what can be achieved by severely handicapped Negro and Puerto Rican pupils when compensatory education opportunities and services are provided, even as late as the junior and senior years of high school. The pilot project involved about 700 students from impoverished and broken homes in slum neighborhoods. Almost three-quarters of them had I.Q.'s below 100. And nearly all were below grade level in reading, arithmetic and other subjects. After a few years of specialized educational services, the average student's I.Q. went up 10 points, scholastic achievement increased to grade level and above. And unprecedented numbers of the project students graduated from high school, some of them with honors, and went on to further study.

Per pupil expenditures for the Demonstration Guidance Project were increased by about $80 per year above regular costs at the junior high level and by about $250 per year in high school. The additional services thus provided in the project achieved dramatic results. An evaluation found that of 250 pupils who entered the project in the 7th grade, 147 showed an average gain of 4.3 years in reading achievement after 2.6 years in the program. In addition, among the 327 high school students involved, a significantly larger proportion continued their educations beyond high school than did a similar group of children who graduated from the same school prior to the project. (A number of factors would appear to throw into question the validity of the very positive results reported. For example, the experimental group was selected from the upper ranges of ability, but its performance was compared with that of unselected pupils enrolled in previous classes in the same schools, the specific characteristics of whom were not defined. Also, during the evaluation period, a middle-income housing project was constructed in the area and more opportunities for post
high school education were offered by the expansion of junior college programs in the area.)

Compared with the Demonstration Guidance Project, Higher Horizons was different in that: (1) its aim was to reach a larger group of children, not limited to those who showed academic promise; (2) its per capita costs were much smaller and provided for relatively less intensive compensatory services; and (3) its operation was widely dispersed and decentralized, with the staff of the various schools and several local districts involved determining the program content.

In general, Higher Horizons methods relied upon four major remedial efforts:

In-Service training for all regular classroom teachers with encouragement and support intended to improve both their expectations of the students and their own ability to teach disadvantaged children. The project staff arranged for teacher training conferences and workshops where teachers received specialized help with curricula adaptions; observe demonstrated lessons by program teachers; as well as obtain assistance with planning and special activities.

Extended and increased counseling and guidance services to stimulate higher student aspirations and to help students find and take advantage of opportunities for employment and further education. The school-wide guidance program serves all pupils from kindergarten to grade 12 in the 13 junior high schools and 50 elementary Higher Horizons schools. Because individual guidance is considered a significant aspect of the program, sufficient guidance staff was added to provide for at least one individual interview with each child and his parents per year.

The project coordinator in discussing this basic program objective commented: "We seek to raise the educational, cultural, and vocational sights of all children, especially children from the less privileged groups. . . . Our basic approach is to create in the mind of a child an image of his potential, fortify this image by parent, teacher, and community attitudes." In addition to individual counseling, the program also emphasizes group counseling for children and parents; involvement with local community agencies and cultural resources of the city; and arranges for parent participation through committee assignments and trips.

Provision of culturally broadening activities to expand student backgrounds and horizons through visits to museums, libraries, colleges, historically important sites, plays, and concerts. Cultural enrichment efforts include music and art instruction, as well as field trips with complementary pre- and post-trip activities. Reading and discussion before the trip; written reports, making a scrap book, drawing a map of the route they traveled, writing thank-you notes, and other activities after the trip are exploited to extract the greatest possible educational benefits from the experiences.

Field trips, taking the child into the community, and often involving participation by parents are relied upon to enlarge the self-awareness of the disadvantaged child and simultaneously to enrich his
educational experience. For Negro and Puerto Rican children who inhabit Harlem's ghettos—and many of them have never been more than a few blocks away from the run-down area where they live—a field trip to downtown New York can open windows on the world. Classes are taken to art exhibits, famous buildings, flower gardens and parks, airports and factories—all provide new experiences for them.

Special remedial teaching to upgrade the reading, writing, and arithmetic skills. The program stresses small group and half-class instruction in subject areas where there is an indicated need. The project makes double use of its experienced, specialized teachers. During the school day, seven full-time teachers assigned to Higher Horizons schools are available to regular classroom teachers for help with curricula and guidance activities. They then take charge of an all-day neighborhood school program for two hours after school and provide special tutoring or other help for students.

An evaluation of the Higher Horizons program by New York City school administrators was based on five years' experience. Experimental control comparisons in the Higher Horizons study (Wrightstone, 1964) were made between groups which had been more or less equated, and observed differences were tested for significance. The Higher Horizons experimental schools were fairly representative of all Higher Horizons schools on the same levels in ethnic composition and in pupils' I.Q. ratings and reading comprehension. Although they were roughly comparable to their counterpart control schools on these and other criteria, the experimental schools tended to have somewhat smaller classes; lower rates of transiency; larger proportions of regular teachers, as opposed to substitute teachers; and, in the junior high schools, more professional services, especially counseling.

In contrast to the findings of the predecessor Demonstration Guidance Project study, the experimental Higher Horizons groups were found to be superior in only one of the many comparisons of measured academic achievement—elementary school arithmetic. No significant differences emerged between experimental and control groups on ability, behavior, or other standard achievement test scores. The evaluation noted that Higher Horizons schools made more favorable showings than control schools with respect to pupil attendance, truancy rate on the elementary level, and suspension rates on the junior high school level.

Most faculty involved with the Higher Horizons project made quite positive subjective evaluations of the program's impact on the performance and attitudes of pupils; they expressed the view that the program was successful in expanding students' cultural horizons and in giving them additional guidance services. However, 10 percent of the teachers recommended canceling the program; they felt that the special Higher Horizons personnel could be much better used for classroom assignments to reduce overall class size. While the majority of teachers involved in the program were convinced that the additional services had been helpful, the program evaluation noted that these
services still had not been adequate and attributed the greater success of the earlier Demonstration Guidance Project in part to this factor.

Dr. Elliott Shapiro, principal of a Central Harlem elementary school included in the Higher Horizons Program reported:

"With that limited budget...pretty soon...instead of an enriched program [we got] changes of title so that people became Higher Horizons Reading Improvement Teacher...we also lost a classroom teacher at the same time....As a result of this dilution, maybe there were some few changes in attitude that occurred that are hard to measure or evaluate, but there was really very little change in achievement."

Clearly, part of the project's declining effectiveness resulted from the wide expansion accompanied by a filtering away of its resources with gradual erosion of attention to the needs of individual students. As the Higher Horizons Program expanded, extra attention for individual children became less feasible. In 1959, one teacher, in addition to regular staff, was provided for every 108 pupils. By 1962, there was an additional teacher or counselor for every 143 children. The program became too thinly spread to achieve its objectives.
The Homework Helper project was developed in 1961 with a grant from the Ford Foundation and launched in 1963 as a full-scale experimental program under a contractual arrangement between Mobilization for Youth and the New York City Board of Education. The program is one of mutual education among ghetto children and employs high school students as tutors for younger pupils, with both showing academic gains from the experience.

School administrators, teachers, tutors, pupils, and parents—all who are connected with the program—are enthusiastic about it. Teachers report positive changes in pupil attitudes and school work. And carefully designed research reveals that the Homework Helper program actually has had significant impact on the reading levels of both the younger pupils and the tutors although there has been no follow-up to verify if gains were maintained. Nor did initial test results show improvements in behavior or grade performance.

Researchers have reported that the results were "startling" and "remarkable." The method not only produces many tangential social benefits, it also has the advantage of replicating the natural out-of-school experiences of children, where they generally tend to learn from each other.

In recognition of the program's success, the Board of Education has adopted it for city-wide expansion for the 1967-68 school year.

In the fall of 1966, the project was operating in 13 centers in public schools, each center supervised by a Master Teacher. A Coordinator of the Homework Helper Program has overall program supervisory responsibilities. The Master Teachers, each of whom is a regular staff member in an area school, are responsible for training and supervising tutors assigned to their centers and for program operations. A group of about 25 tutors is directed and aided by the Master Teachers, who work in the centers four afternoons a week and attend staff conferences with the Coordinator on alternate Friday afternoons.

Each center is supplied with instructional materials including books, educational games, reading laboratories and kits, audiovisual materials, puppets, and art supplies. Everybody involved has access to the school library. Master Teachers have access to the MFY Curriculum Center and Materials Development Unit resources.

1/ Detailed description of the research design and results has been published by Robert Cloward, "Studies in Tutoring," 1966, the Columbia University School of Social Work. The research results showed that the program had a dramatic impact on improving the reading levels of the students being taught and produced even more significant gains in reading achievement recorded for the tutors—as much as three and a half years' gain in a six-month period.
Neighborhood high school students are hired as tutors of elementary school pupils for the summer program and for after-school employment during the regular school year; some college students are also hired to tutor junior and senior high school underachieving pupils. Each tutor works primarily with two pupils on an intensive basis. The tutors are paid from $1.50 to $1.75 to $2.00 per hour (the $2.00 rate applies to college students and high school pupils who have served as tutors for three years). Tutors attend 2-week orientation training sessions before they begin to work with their pupils; thereafter, they meet in weekly training sessions with the Master Teachers throughout the year.

The summer program operates on a 2-shift basis, with one group of students coming in for the morning session; another group at 1:00 for the afternoon session. Both students and tutors receive free lunches at the school. (Any child who lives in the neighborhood—even if not enrolled in the summer program—may, if he has been certified for the school-lunch program, come into the school for a free lunch.) During the regular school year, tutorial sessions are conducted from 3-5 p.m. four days each week. Pupils are scheduled to attend 2-hour sessions twice a week.

In early discussions about the program, school officials advocated relatively high academic requirements for tutors, in the belief that only youngsters successful in school could serve effectively as inspirational models for low-achieving pupils. Subsequently, however, it was decided that low-achieving high school students might be better able to understand and establish empathy with low-achieving elementary school pupils.

Further, if tutor eligibility were defined in terms of better-than-average school achievement—or even reading achievement at or above grade level—Negro and Puerto Rican applicants could not be hired. (The majority of the pupils needing tutoring help were Negro or Puerto Rican.) On the premise that the main vehicle for change would be the pupil’s identification with his tutor as a role-model—an identification that would be greatly facilitated by ethnic pairing of pupils and tutors—eligibility was set at satisfactory (passing) marks in school and reading achievement no lower than three years below grade level when last tested by the schools. Thus, as many Puerto Rican and Negro youngsters as possible were hired as tutors. Even so, of the 1963 tutors, only 19 percent were Puerto Rican, 18 percent Negro, 2 percent oriental, and the remaining 61 percent were white. In 1967, 60 percent were Negro; 28 percent, Puerto Ricans; the program included 750 pupils and 300 tutors. Plans for 1967-68 school year project 4,000 pupils and 1,500-2,000 tutors.

Nearly 850 young people have served as tutors in the program and nearly 3,000 pupils have been tutored. About 2,500 more pupils applied for the program during the period since it started than the project could accommodate. Statistics shown below reflect the program’s expansion:
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>February 1963</td>
<td>9</td>
<td>110</td>
<td>330</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1963-64</td>
<td>10</td>
<td>240</td>
<td>540</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1964-65</td>
<td>10</td>
<td>250</td>
<td>550</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1965-66</td>
<td>13</td>
<td>250</td>
<td>600</td>
<td>$200</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1966-67</td>
<td>13</td>
<td>300</td>
<td>750</td>
<td>$200</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1967-68 Projected</td>
<td>116</td>
<td>1500-2000</td>
<td>4,000</td>
<td>$150</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The program cost per hour of tutoring has been relatively low; it is estimated at $4.13, which includes tutor payments, Master Teacher stipends, materials, and such incidentals as refreshments and field trips. When the program is expanded city-wide in 1967-68, the New York City Board of Education plans to reduce tutor payments so that most of them will be paid the minimum $1.50 an hour, rather than $1.75 or $2.

The Project Coordinator has some misgivings about wide expansion of the program with possible resulting dilution of its effect, as has occurred in other projects that showed initial promise of success. He believes, though, that having knowledge of the history of other casualties will provide forewarning and guidance sufficient to avoid a similar fate.

It is somewhat ironic that such a highly successful compensatory education project as Homework Helper did not begin as an effort in remedial education. The original focus of the program was on prevention of juvenile delinquency and its primary purpose was to encourage high-school students to remain in school (through economic aid). The rationale for the program was that high-school students from low-income families need financial help to continue in full-time schooling. A major reason why they drop out of school is the lack of sufficient family income. It was reasoned, therefore, that a program to help alleviate their financial problems should encourage low-income students to remain in school.

Thus, what began as an attempt to offer summer employment to teen-agers has engaged them in the highly purposeful, constructive activity of after-school and summer tutoring of younger pupils in need of help with basic skills. It should be emphasized that the tutoring help is not a form of remedial or technical aid. The program does not assume that the tutors either have, or will acquire, on the job, the skills and insights necessary for remedial tutoring; it is aimed only at providing the encouragement and extra reassurance which will help younger pupils with their school work.

The program has been generally effective in keeping the teen-age youth who work as tutors busy, off the streets, and out of trouble. In addition it has influenced many of them to continue full-time schooling by providing some financial return for their work, and some of them to choose teaching as a career. The program is designed to further the educational and personal development of the tutors, increasing their skills in academic work, enabling them to improve their social relationships, and helping them to lessen self-defeating attitudes. The project director reports that the levels of vocational and educational aspiration of the tutors have been raised as a result of participation in the program. The tutorial help which the younger pupils
receive enables them to acquire new skills and to experience some success.

Pupil reading achievement tests showed 1/ that a control group of pupils had a mean growth of 3.5 months in reading over a 5-month period. Project pupils had 6.2 months over the same period. The tutors (high-school students) were reported to have even greater changes in reading scores. The test instruments were revalidated on a population similar to that of the Homework Helper pupils, and the pupils were randomly assigned to experimental and control groups. An overall comparison of experimental and control pupils did not reveal significant differences. However, when the pupils were broken out by the number of hours of weekly tutoring they received, significant differences emerged between the controls and those pupils who were tutored four hours a week.

The research findings would appear to reinforce the premise that personnel added to a classroom to reduce teacher-pupil ratio need not be professional. Additional findings 2/ revealed that student tutors were particularly successful with pupils most severely retarded in their reading. The report indicates that this is probably the result of increased individual attention and absence of ridicule or condescension that teachers sometimes direct toward the severely backward readers. The research did not, however, clearly identify the personality traits of the tutors that accounted for their success with the younger pupils. Findings from a sub-study of 38 of the tutors 3/ showed that their success was not related, for example, to intellectual, demographic or attitudinal characteristics such as previous test scores or marks, sex, ethnicity, or grade, or responses to an attitude questionnaire.

High truancy rates are a persistent problem in slum schools. Guidance personnel are deeply concerned with nonattendance, since compensatory education and efforts to motivate poorly achieving students are possible only if the pupil actually is available. And very often, children stay out of school or stop going to school with the full knowledge, and if not support at least without active opposition, of the parents. Thus, the attendance record of both pupils and tutors in the Homework Helper Program are further indications of the project's effectiveness. In 1966, pupil attendance was at a rate of 82 percent; attendance of tutors averaged better than 95 percent.

Plans for the next year contemplate incorporation of the Homework Helper Program into the already-existing Neighborhood After School Study, Library, and Homework Centers and retraining the Study-Center teacher for work with the tutors. As noted earlier, the project director is hopeful that expansion of the program will not reduce its effectiveness (in the

1/ Cloward, p. 5.
2/ Cloward, p. 29.
3/ Cloward, pp. 31-32.
way, for example, that extension of the Higher Horizons Project drained away its initial effectiveness). Another potential problem he sees under the program expansion is the lack of a plan for continuing research and evaluation.

The project director believes it quite likely that their success would not have been illuminated so clearly without the results of the carefully conceived and conducted research. He thinks that it is almost certain that the expansion of the program would have been more difficult without research evidence to substantiate its value, a compelling argument for setting up research designs at the beginning of a program, and not after it has been in operation for some time. While large-scale research efforts under the enlarged program may not be feasible along the lines of the Cloward study based upon test results for experimental and control groups, some research to assess what is going on and to isolate the more effective parts of the program would be worthwhile.
The North Carolina Advancement School in Winston-Salem, North Carolina, is a residential school, which has been set up specifically to develop means of educating underachieving pupils through a combination of motivational techniques and training in basic skills.

Begun in November 1964, under the sponsorship of the U.S. Office of Education, the North Carolina State Office of Education, and the Carnegie Foundation, the Advancement School offers a 3-month residential program for underachieving 8th grade boys of average or above intelligence potential from throughout the State. About one-fourth of the children are Negro. Between 1964 and 1967, the program served over 2,300 boys with home backgrounds of varying levels of income and family stability. ("Stable family" was defined as one having two parents in the home.)

Regular Advancement School staff included 15 teachers, fluctuating numbers of visiting teachers and college tutors, as well as subject specialists, counselors, and research staff. The project cost amounts to just over $950 per pupil for the 3-month term (or about $3,800, if computed on an annual basis), with 56 percent allocated to residential expenses, 33 percent for instruction costs, and 11 percent for research.

Evaluation of the program included intensive pupil follow-up beginning in the fall of 1966. (Results from field-testing of school-developed materials, which started in the spring of 1967, are not yet available.) Achievement-test results did not reveal distinct gains for students enrolled in the Advancement School, compared with scores for a matched control group of children who did not attend the Advancement School. Nevertheless, improvements in attitudes of the Advancement School pupils were reported, both on the basis of test results and from follow-up evaluations made by home schools. The greatest improvements were noted for Negro students. Interestingly enough, students who had completed the 3-month residential course did achieve improvements in school grades when they returned to their home schools—even where no changes were apparent from achievement-test scores.

In its residential pupil program, the project placed heavy emphasis on developing basic skills in language arts, remedial reading, mathematics, study methods and habits, as well as on altering the motivations and attitudes of the students.

The most innovative feature of the Advancement School is the involvement of the student in learning through his own experiences. The development of new materials and techniques for reaching the pupils was calculated to appeal to students' present interest. Toward this end, various curricula are devised with content areas as much as possible around pupils' direct experiences. Students are guided in the development of mathematical concepts through performing
probability experiments, recording their results, and reaching conclusions. Geology is organized into lessons using maximum physical and visual contacts with relevant materials. A communications unit introduces students to a broad range of stimuli in the popular and fine arts—including films, modern dance and ballet, music, and painting. Each medium is employed, as appropriate for each student, to resolve individual problems and to extend his ability to express himself through diverse communication forms. In addition, units for study of urban problems, experiential grammar, and a series of "games" or simulations have been developed based on the work of James Coleman.

The Advancement School aims to increase the desire of the students to seek further education and to raise their aspirations for themselves. Initially, the School sought to effect this motivation by offering each pupil materials and methods of learning that reinforce his "success" experiences. Convinced, however, of (1) the limited impact that a 3-month interval has on remedying academic deficiencies stemming from social disadvantage, and (2) the widespread incompetence of public school systems generally in educating socially disadvantaged children, the Advancement School determined to develop and test the kind of instructional materials, methods, and situations that are of optimum value in educating the socially disadvantaged. Consequently, the School became an experimental laboratory for trying out new materials and new approaches basic for curriculum change; it provided for setting up class rooms that were close to ideal situations and for concentrated attention to individual pupils.

The Advancement School has shifted its primary emphasis away from direct impact upon students and is currently oriented toward development and dissemination of curricula and other instructional innovations. The fundamental aim of the structural rearrangements and special classes which are being experimented with at the School is to suit the education to the child and to individualize instruction.

In addition to working with students, the project provided in-service training for some 200 public school teachers in the State. The teacher trainees were selected from the same schools represented by the student enrollees and helped with the design of the instructional program for the school children. The project helps the visiting teachers accept the role of developing new curricula, disseminating information, and providing demonstrations of instructional methods of particular value in meeting the problems of underachievers.

Demonstrations represent one of the more important aspects of the Advancement School program. Through leadership institutes conducted on a Statewide basis, work with local school superintendents, visits by State teachers to the Advancement School, and publicizing its methods. The School extends to many school districts the benefits of its innovations and experience in improving educational methods.

Over fifty classrooms in North Carolina are participating in a program of field testing instructional units developed by the School. In addition, two out-of-State schools are following methods employed by the North Carolina Advancement School, and a third out-of-State school plans to adopt them.
School-to-Employment Program (STEP)  
New York State

A New York State comprehensive work-study program for potential dropouts, the School to Employment Program (STEP) was one of the earlier concentrated efforts to provide remedial education for disadvantaged students. The program began in 1961 under the auspices of the New York State Education Department and the various local school districts involved.

Projects involving supervised work experience and instruction in school to develop habits, attitudes, and skills needed to get jobs are now operating in approximately 30 communities to help potential dropouts stay in school, or if they have left school, to help them become employed.

The program serves some 1,000+ students 15 years of age and over who are identified as prospective dropouts due to scholastic failure, truancy, and related behavioral and attitudinal problems.

Median costs are $400 per pupil (including the cost of work stipends) but range from $210 in New York City to $700 in Maine-Endwell. Students are paid a stipend for work in public agencies. There is one teacher-coordinator for each group of 20-25 students, who in addition to conducting a daily session for general work orientation and counseling also is responsible for placing students in appropriate jobs.

An evaluation for the STEP program was made by Theodore Bienenstok and William C. Sayres in 1964. They compared the June 1963 status of 1961 STEP students with a matched control group and reported a substantially higher number of STEP students to be in school or employed than were the members of a control group. Although all of the 30 some projects are said to be substantially the same, the wide variations in expenditures among various communities reflect differences in the numbers of students and the payment of stipends. Thus, the evaluation report's aggregated data, shown below, may be misleading, since some projects would very likely have had much greater success than others.

<table>
<thead>
<tr>
<th></th>
<th>In School or Employed</th>
<th>Unemployed</th>
<th>Other*</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEP Students</td>
<td>65.6</td>
<td>6.3</td>
<td>4.6</td>
<td>23.5</td>
</tr>
<tr>
<td>Control Group</td>
<td>48.5</td>
<td>5.5</td>
<td>6.0</td>
<td>40.0</td>
</tr>
</tbody>
</table>

* Married, military service, deceased, etc.

There is also a question whether the employment experience of project students reflects their training in the program or the local employment market. One Project STEP director noted that he had considerably better luck persuading students out of school a full year to return to class than
he had with recent dropouts, an indication that the student's inability to find work influenced his decision to re-enter the project.

Each project provides for regular school classes in the morning plus at least one daily session with the teacher-coordinator for general work orientation and counseling. Some of the projects (Yonkers, for example) include remedial work aimed at preparing students for regular classes if they return to school, as well as preparing them for work. Specific instruction concentrates on writing, reading, math, penmanship, speaking, listening, and information about the business world. On-the-job training includes learning to operate business machines and to work with such materials as maps, magazines, newspapers, bill boards, stencils, etc.

From 15 to 20 periods per week are spent at work stations, which have been arranged for by the teacher-coordinator. The program requires parental consent for the students to engage in the work-study activities and emphasizes guidance and counseling of parents as well as students. Vocationally or educationally-oriented field trips are frequently included, to factories, offices, printing plants, hospitals, colleges and universities to make students aware of the positive rewards of successful school achievement as a way of motivating them to continue with school.

The teacher-coordinator is cast in a continuing public relations role to communicate the aims and methods of the work-study program to the community and to obtain the assistance of the business community, which is essential to the program's success. The cooperation of the local merchants, manufacturers, and businessmen in hiring project students is necessary to the success of the program. Once a student has been placed in his work assignment, the effectiveness of the teacher-coordinator in providing careful supervision of the student in his job also determines the success of the drop-out prevention program.

The program also encourages participants who are preparing for full-time employment to study for the high-school equivalency examination and/or to enroll in regular night-school classes. The students receive intensive counseling on local employment prospects and job placement.
The Potential Dropout Program is Project No. 3 of the overall Norwalk School Improvement Program. The project is designed to keep potential dropouts in school by providing them with successful experiences, helping them to establish positive attitudes toward work, raising their educational and vocational aspirations, and helping each student to improve his own self-image.

The pilot program started in 1963 with a group of 39 predominantly lower socio-economic status, majority Negro pupils at the Franklin Junior High School in grade 7 (matched by an exactly balanced control group). The experimental group has been followed through 8th and 9th grades and has now moved over for their first year at the McMahon High School. The program, which is continuously evaluated, was financed in part by a grant from the Ford Foundation and also by the local school board. The annual cost runs $675 per pupil (above regular costs).

Because so many of the pupils in the control group had dropped out of school by 1966, the remaining control-group pupils were merged with the experimental group pupils, and an entirely new control group was drawn from the other 10th grade students at McMahon High School. The same criteria were used as with the original pupils. Project plans contemplate following the combined original experimental and control group through high school graduation or job placement and extension of the project to incoming junior high school students. A new experimental group of 7th grade students at Franklin High School has been matched with a new control group in terms of poor school grades, excessive absenteeism, reading retardation, low socio-economic family status and occupational level of the family wage earner.

The original—and current—efforts have been to stimulate a desire on the part of students to remain in school, to seek new vocational horizons, and to perceive of themselves as valued persons. Experiences usually alien to culturally deprived children have been provided. These experiences include:

- Work-study programs within the school system,
- Intensive casework with student and family by a full-time social worker at Franklin,
- Substantive individual and group counseling by a project counselor,
- Volunteer homework and reading help and tutoring,
- Trips to "Cultural" activities in 1966 included:

  - the U.N., symphony, West Point, and Stratford Shakespear Theatre.

The staff assigned to the original project group (which is now at McMahon High School) currently include a counselor-coordinator (Jack Waldon, who is no blind, is the strong continuity element of the project and has been with the group as a counselor since they started in
the 7th grade. He is also the coordinator for both groups.), a corrective reading teacher and a clerical assistant. When the project started in 1963, there were two part-time social workers, a white man for work with the boys, and a woman for the girls. The man left at the end of his first year because he was not suited to the work. He was replaced with a good worker, a Negro, who provided a father figure for the boys. He also left at the end of the year—for a better-paying position. For the third year of the project, they had the same woman social worker on a full-time basis for both boys and girls. The group has no social worker assigned to it now, since the worker decided not to move with the group from junior high school to the high school. From time to time, there have been volunteers to help with tutoring the students, and they have been particularly helpful; three Catholic seminary students—who measured 6'8", 6'6", and 6'5"—were especially effective with the students; they played basketball with them as well as providing tutoring services.

The budget requested for the new group starting at Franklin Junior High School provided for:

- Guidance counselor $9,000.00
- Social worker 9,000.00
- Corrective reading teacher 9,000.00
- Summer work counselor 900.00
- Equipment, testing, psychological services, supplementary materials, field trips 3,000.00

The pupils in both schools carry a regular academic load, but have the advantage of the special reading help which includes remedial reading and training in auditory perception, with emphasis on "concrete" projects and extensive use of audiovisual aids; cultural, occupational, and recreational field trips; group and individual guidance and counseling to help ease adjustment problems.

The guidance counselor-coordinator spends a large amount of time on social worker referrals of parents and students to appropriate community agencies, such as the Mid-Fairfield Child Guidance Clinic; and extensive interpretation of programs to the community. He also spends quite a lot of time working with regular teachers who have the project students in classes. The project pupils attend regular classes, conducted under a team-teaching plan, but they attend the classes in a group.

The coordinator reported that some of the really good academic teachers either didn't see much of these children or didn't accept them as worthy of their best efforts. The pupils themselves are aware that they are getting special services to see if they will have a lower dropout rate than those who do not get the services.

However, there is no stigma attached to being in the project—i.e., their peer group does not look down on them for participating. The children do have some feelings that they are "threatened" by the team teaching situation due to the greater impersonality of the classroom, the less intimate contact with the teacher, and the decreased amount of individual attention. They are afraid of large numbers of people;
they are scared of new people. They do not have enough self-confidence to trust their own abilities in large groups, although they perform well on a 1:1 ratio or when they are in small informal, familiar, "closed-group" situations.

Moving the experimental group to high school for the 10th grade marked a year which was a critical one in many ways. The warm, friendly atmosphere of the junior high school was replaced by the huge, seemingly hostile high school. Also, it was a critical year in terms of pupil age; that is, most students had reached legal school-leaving age. The holding power of the project is demonstrated by the many students who, despite difficulties, have remained in school beyond age 16, when there was no longer a compulsory attendance requirement.

As evidence of the project's success, the Annual Report showed that achievement tests given in the fall of 1966 and again in the spring of 1967 showed a remarkable reading gain among the lower academic half of the experimental group. A growth of 0.4 or 0.5 grade levels per year might be expected from such a group. This group's average gain was 1:1 in Word Knowledge, and .86 in Reading.

The special reading teacher assigned to the lower half of the project group was an exceptional one. Through her attitude as well as her skills, she created an atmosphere in which the students could achieve and grow.

The experimental group also had three times as many "A's" as the control group. The control group had one and one half (1-1/2) times as many "F's" as the experimental group. Quality point ratios obtained by the experimental group surpassed those of the control group at the .02 level of confidence. In average and above average grades, the experimental group exceeded the control group by a ratio of 1.4.

In terms of attendance records, the experimental group had significantly better attendance than the control group at McMahon. The control group was absent approximately 1.5 times as often as the experimental group.

Again, in referrals to the office of the assistant principle for discipline, the experimental group had a significantly better record than the control group, as shown on the following chart:

<table>
<thead>
<tr>
<th>Number of Times Referred</th>
<th>X</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>22</td>
<td>17</td>
</tr>
<tr>
<td>1</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>4-2</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>5 or more</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Total number of students referred</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>Total number of referrals</td>
<td>31</td>
<td>60</td>
</tr>
</tbody>
</table>

Slightly over two-thirds (68 percent) of the students in the experimental group at McMahon High School worked at paid employment during the first seven months of the school year. This is to be expected
since two-thirds of the group are now 16. Several of the students work five hours every night after school, yet have managed to maintain their school work. One student's W-2 form shows that he earned $1,987.00 during 1966. This boy has a perfect three and one-half (3-1/2) year attendance record.

The project coordinator cited a number of other notable items as further evidence of the programs' success. For example students and parents have made increasing uses of recreational, educational, and therapeutic resources in the community. Services extended through the project enabled students to find more satisfactory solutions to family crises. Project services have also extended to siblings who have benefited by improved family situations.

The reports suggests that although exact comparative figures are lacking, students in the experimental groups at both schools participated a great deal more in all activities offered by the schools than those in the control groups--three of the starting five, and one other member of the McMahon J.V. Basket Ball team were from the experimental group. One of the boys was elected co-captain for next year's varsity. No control group students were on the J.V. squad.

Based upon teacher ratings made in October 1966, and again in June 1967, there appears to be evidence that intensive counseling and case work have an effect upon certain areas of personality that can be measured. In both groups this seems to be so. Teachers rated students in five (5) areas: self-reliance, respect for others, group cooperation, work-study habits, and ability to communicate.

The group at Franklin showed in all areas, statistically significant growth in self-reliance, respect for others, and group cooperation.

The group at McMahon showed growth in four (4) areas. Significant growth in respect for others, and group cooperation. It should be noted that teachers of this group felt that in ability to communicate the growth was not significant, in fact, the difference was negative to a significant degree.

The main elements of the Norwalk program for potential dropouts seem to be the intensive and readily accessible counseling services, the single, cohesive and mutually reinforcing group—especially in the earlier years, and the exceptionally strong remedial reading help.

Project staff listed the following as characteristics of teachers who appear to do well with disadvantaged children who would be likely to quit school at the earliest possible point:

1. Most important of all, the teacher must be flexible and able to adapt methods to the needs of the group.
2. The teacher must be a very secure person—the children give teachers a very hard time; much more than the average group, they will "test" the teacher to see how far they may go; these children can't be threatened by traditional forms of discipline—they laugh at it.

3. The teacher must want to work with disadvantaged children—there must be an element of personal involvement for success.

4. The teacher must be someone the children can identify with—they have to be able to imagine that this person is like them.

5. The teacher must be able to accept the values held by the children, without adopting them.

The most successful teaching situation for disadvantaged children is believed by project staff to be one where a small group of 10-15 children work on an intensive basis with an interested teacher who knows them well and understands their strengths as well as their weaknesses.

Another very important aspect of the Potential Dropout Program is the continuing over-the-summer, all-year-long contact the guidance counselor maintains with each child and the strong loyalties that project children have built up for him. He is looked upon as a friend, a protector, someone who will intercede for them in crises situations outside of school as well as in school.
Upward Bound

Upward Bound, designed to give bright children from low-income families an opportunity for college educations, began in 1965 as a small pilot program in 18 colleges with a student enrollment of 2,061. It was expanded in 1966 to 20,139 students in 220 projects. For the summer of 1967, the enrollment is 22,286 students in 248 projects, with expenditures amounting to $26,942,163. Federal costs average an estimated $1,300 per pupil for the summer, but that varies considerably depending on whether the program is residential or not.

Students receive weekly stipends which may be as much as $10 weekly; and full expenses for residential programs or free lunches and transportation for nonresidential programs.

A program to remedy poor preparation and motivation in secondary school, it involves a full-time summer pre-college preparatory program to generate skills and attitudes that enhance a pupil's chance for acceptance and success in a college environment, and follow-up during the regular school year to keep the student college-bound.

Upward Bound seeks to find and redirect secondary school students with college potential who have been handicapped by economic, cultural and educational deprivations. Students in the program are all "bright" (the 1965 average I.Q. was 122), and not doing as well in school as they ought to be.

The programs concentrate on campus-centered academic work over an 8-week summer term and follow-up during the regular school year, combining secondary school and college teachers as faculty and college students as tutors. About 30 percent of total staff were Negro. Tutors had a median age of 20.8 and had a median education level of college junior. Slightly over half were men. The average staff/student ratio is 1:7.

Nearly half of the 1967 projects are concentrated in Northeastern regions of the country. Students were drawn from the largest metropolitan areas (40 percent lived in cities of over 100,000 population; and the most isolated rural regions (25 percent lived in communities with less than 2,500 population.) Most attended densely populated high schools, with 55 percent reporting their high school enrollment in excess of 1,000 students. Eight percent attended schools with fewer than 300 students. A wide variety of recruitment sources were used, including recommendations from schools, juvenile courts, churches, youth and community organizations.

Nearly four out of five Upward Bound students first heard about the program through school contacts: 47 percent from a school counselor, 16 percent from a teacher, 10 percent from a principal and 8 percent from a school friend.
Although most of their parents looked favorably upon their being enrolled in the special academic program (80 percent according to the students), their neighborhood friends were much more skeptical (only 43 percent were reported to favor students' joining the program).

Small classes and discussion groups are employed where individual attention can be given, and all students can be stimulated to participate. Teaching materials relevant to student interests are used; and students are provided opportunities for application of learning experiences; e.g., self-government.

Most of the students are in the 11th and 12th grades or have just graduated from high school. Although a few are in the 9th and 19th grades.

A large percentage of the students come from families below OEO's minimum poverty level. The mean family income was $3,501.86 (OEO considers $4,000 a poverty level for family of 6); 53 percent of the students have 6 or more members in a family; 55 percent were living with only one parent (30 percent living with mother) or with no parent.

The program is planned to keep a student from the time he enters until he has completed the 8-week summer program following his graduation from high school.

The dropout rates--3.3 percent--for Upward Bound students have been very low. Program data show that 80 percent of the students in the program continue their educations, with 78 percent of them going on to college. Only 12 percent of the Upward Bound alumni dropped out doing their freshman year at college--less than half the customary dropout rate for the freshman year. Older siblings of Upward Bound students have a high secondary school dropout rate and extremely low college attendance record. Only 5 percent of older siblings are college graduates, while 30 percent of the older brothers, and 26 percent of the older sisters have already dropped out of school without a high school diploma.

Upward Bound students showed significant test score improvement in 6 psychological measurements after completion of the 1966 summer program: (1) motivation for college, (2) possibility of graduating from college, (3) self-evaluation of intelligence, (4) self-responsibility, (5) interpersonal understanding, and (6) self-esteem.

The Upward Bound director estimates that 700,000 high school students could benefit from the programs. The ultimate goal for the programs, however contemplates expansion to over 100,000 students. This, they think, would represent a critical mass and there would be spin-off and ripple effects--stimulation of State, local and private efforts.
The Queens College UPWARD BOUND Project was recommended by OEO as "one of the best" UPWARD BOUND programs. It is a non-residential program on the large metropolitan campus of Queens College with about 70 students drawn from 17-18 different high schools.

The Project aims to give bright students from disadvantaged backgrounds an opportunity for college by remedying poor preparation and motivations in secondary school.

The program participants are in 10th, 11th, or 12th grades. They are high I.Q. underachieving, students who are culturally and educationally deprived; the 1967 summer program enrolled 69 students (60 in 1966), about half boys, from 17-18 different high schools. Seventy percent of the students are Negro; 15 percent, Puerto Rican; 15 percent white, all from poverty backgrounds.

Program costs are about $1,400 per student per year. Each student receives $8 a week stipend, transportation costs are reimbursed, all curricular supplies and lunch every day are furnished. During the school year, all of the students meet with all members of the staff on Monday nights, with transportation and dinner furnished.

Project staff consist of four regular faculty members, six tutors, eight student assistant tutors, three part-time staff (for community relations, art instruction, and a psychologist). A most notable aspect of the Queens project is its highly enthusiastic, really able staff, who are dedicated and willing to give a great amount of their time to the project. Not only are they 100 percent available to students during the eight-week intensive summer all-day-long, every day session, they also keep in touch with the students after the end of the summer program and on a regular, continuing basis throughout the regular school year.

The program is believed, by the faculty, to have had a terrific impact upon the students in terms of improving their own self-images, raising their aspirations for further education, sharpening their perceptions, stimulating them to question rather than to passively accept whatever they read in published form or hear on radio or T.V. (This is reported to have had a perhaps surprising repercussion in the home schools of the UPWARD BOUND students, however. The Project Director said that the students sometimes get lower school marks after the UPWARD BOUND experience than they received prior to it. This is because students are not so docile in class as they were before they have learned to question; they have developed independence in thinking and they sometimes ask regular school teachers penetrating questions that the teachers are hard-put to handle. Consequently, the teacher develops resentment and some antagonism toward the student. She begins to look upon him as a disruptive influence in her class—as a trouble-maker, a smart alec, who is trying to show her up, and sometimes does! On more than one occasion, the project counselor has gone to discuss a pupil's behavior difficulties with his regular school guidance or classroom
teacher. But these efforts have not been of much value in paving the way for better acceptance of the UPWARD BOUND student by the home school. What has developed as a result of school resistance to these students is a real esprit de corps among students, a strengthening of their allegiance to the project staff and a reinforcement of the bond that exists among them. The students see their UPWARD BOUND participation as a special privilege status. They develop a mutually protective attitude and seek to encourage each other in a kind of clan cohesiveness based upon "our families, schools, and neighbors don't understand us and what we're trying to do—we're far beyond them and going farther—it's us against the World!"

The results of the Queens project efforts to help academic-risk pupils overcome their educational deficiencies to stimulate them to succeed with learning activities, and to enter colleges for continuing their educations are reflected in their experience to date. They have had only one dropout; 13 of the 15 seniors in 1967 have been accepted by colleges and the other two had applications pending. Ten of these would not have made it without their UPWARD BOUND experiences. Seven are working. The program has been remarkably successful in placing students in colleges.

The Queens College UPWARD BOUND Project's success at college placement needs to be considered somewhat apart from its educational results for the students. Much of the effort required to locate college places for the students centers on convincing college admissions boards of the value of taking "academic-risk" students; i.e., students who have apparently not been able (even after additional compensatory efforts to meet the regular admissions requirements. Some modification of admissions criteria which apply to other students are generally required for the disadvantaged youths in the academic-risk category to enter college and demonstrate their abilities. Most of the students require financial assistance for college, and many of them whose high school grades and performance on College Board tests would not qualify them for college-level work must be helped by project staff to gain special dispensations based upon personal interviews and recommendations from the project staff. The teacher-counselor who concentrates his attention on finding scholarships for students facilitates their college admission interviews and helps them with other entrance problems, reports that they have been able to get almost two-thirds support for students generally. They rely greatly on Economic Opportunity Grants and the Work-Study Program in addition to special scholarships offered by some colleges. Some of the public institutions have waived tuition for non-matriculated students or allowed special procedures for matriculation to take in the UPWARD BOUND students. Private institutions sometimes have been even more flexible in granting admission and giving scholarship help.

In general, they have had better experience in placing students in private colleges which do not—as public colleges must—operate under legal requirements, although some private schools insist upon SAT or other entrance examinations and rigid requirements.
The summer program puts great emphasis on academic work—i.e., not remedial—and services calculated to eliminate blocks to learning. For example, the 1967 summer program was centered around two themes: (1) social issues—examining why things are the way they are, with special work on urban life; and (2) survey of scientific methods—studying logical methods of investigation. There is a prevailing attitude of informality in small classes and an evident close personal relationship between the students and their teachers. In one class on Social Issues in American Government visited, there was active participation by all eight pupils in the group (three Negro boys, three Negro girls, one white boy, and one white girl). Using Mitchell Gordon's *Sick Cities* as a text, the class assignment was "highways vs. public transportation." The discussion was animated and intelligent. The teacher's role was to question and encourage students to express their own beliefs, to back-up some of their points by relating incidents from their own experiences, to enumerate some of the reasons why recently publicized proposals affecting public transportation would or would not work. The tutorial aide, who was a very alert and personable Negro girl, was used extensively in and after the class. (All of the tutors and teacher aides in the 1967 program are former students in the UPWARD BOUND program. Project staff have found that the students respond very well to young staff members—there seems to be a higher degree of acceptance; the tutorial aides are extremely helpful and they are given a great deal of responsibility.) The class was planning and making arrangements (outside of class) for a field trip the following Saturday to the New York City Pavilion to see a public housing scale model. One student reported on her contact with the Chamber of Commerce and successful efforts to obtain a film strip on urban problems for the group to use. Another student reported on his arrangement with an official from the Urban Housing Agency to talk with the group.

The major strengths of the program appear to be the excellent teachers, and their concern for and services to the students, and the staff's deep commitment to a significant academic component. For example, the rule is: NO TAKING KIDS OUT OF CLASSES FOR FIELD TRIPS. Every Friday there is a planned time for a regularly scheduled activity of a cultural nature when students see a play, attend a concert, visit a museum, etc. The individual attention and small group methods have permitted a "whole-child" approach and concern for the intellectual, physical, moral, and personality development of each individual child.

The intensive summer work is followed by a regular continuing program over the school year designed to continue close personal contact between students and staff, to offer students encouragement, bolster their morale, encourage them to continue their efforts, and to reinforce the gains made in the summer. Each staff member works with a group of five students over the regular school year, meeting with them once a week, usually in their own neighborhoods. This is in addition to regular Monday-night dinner meetings of students and staff. The project staff ran what amounted to an after-school program every day. The National Director of the UPWARD BOUND program noted that it's the only program in the country which has classes six days a week during the regular school year.
The after-school program focuses heavily on helping the students with their academic work and provides regular, individual tutoring in specific subjects. Late afternoon and evening classes and tutoring sessions were conducted in World history, American history, economics, Spanish, the writing of book reports and term papers, English, geometry, 11th year math, French, chemistry, and biology. Unlike the summer program, these after-school classes are parallel to the courses which the students are taking in school, and are viewed by the students as remedial in nature, designed to help them with difficulties they are encountering with the same subjects in school.

Not every class meets every day, but some of the classes are going all during the following hours on the days indicated:

Monday - 5:00-6:15, 4 classes
Tuesday - 5:00-7:45, 5 classes
Wednesday - 4:30-7:00, 8 classes
Thursday - 4:00-6:15, 8 classes
Friday - 4:30-6:15, 5 classes
Saturday - 10:30-12:45, 3 classes, and personal guidance and counseling conferences.

In addition, students are urged to eat dinner (which is paid for by the program) with staff members after the afternoon classes. Most students avail themselves of this opportunity whenever they come to a class.

Although the Queens project is without question, a very excellent one, there are some problems. One is, the lack of adequate space for classes and optimum facilities for counseling. A major weakness stems from the wide dispersion of project students who come from 18 or so different school locations. The time element is bad from the standpoint of students' having to travel too long to reach the campus and from the standpoint of effective work by staff with the students in their own neighborhoods. Further, the project people appear to be reluctant to become involved with the schools on a regular basis. The project psychologist does most of the counseling work, and he reported that he had made contacts with some of the regular school teachers, but it is difficult. He is free from his regular work at Van Bowne High School as a counselor at 3:00 and the schools close at 5:00. The teachers he tries to contact in the student's regular schools seem reluctant to call back or to cooperate. He observed that contacting a child's teacher actually seemed to do more harm than good.

Project staff also reported no effort to involve home communities or parents in helping project students. All of the emphasis is on working with students themselves and responding to their needs, for the most part, academically.

It would appear that students are drawn from too many different schools and that it would be better to have them located in schools closer to the campus.
The site visit certainly confirmed the characterization of this project as "one of the best" and most fruitful efforts around. The program is outstanding, very ambitious, and is being beautifully administered.
An UPWARD BOUND demonstration project, supported by the Ford Foundation, the National Science Foundation, the Cummings Engineering Foundation, and the Whitney Foundation, was conducted by Yale University during the summer of 1964 (a year prior to the national UPWARD BOUND Program). The objective of the program was to discover capable students (socially disadvantaged boys from all over the country) who would not be likely to attend college; direct them toward and prepare them for college work. A collateral objective was to condition colleges to accept this type of student, who does not have conventional talents, conventionally measured.

The underlying philosophy of the Yale University Summer High School Program was to concentrate on efforts, over a short time, to instill a love of learning in pupils. The demonstration project at Yale is somewhat atypical of the general run of the UPWARD BOUND Projects, most of which are co-ed and draw their students from nearby schools.

There were 75 boys from 35 different States in the first (1964) group; there were 150 in the 1966 summer program. All were under-achievers and potential high school dropouts. All of the boys were considered bright (1965 average I.Q. was 122; 1966 was higher), but were not doing well in school. All were judged to have leadership capabilities and to have high aspirations. The boys were from poverty backgrounds and were entering either their senior or junior year of high school. Two-thirds of the group were from urban areas, and one-third from rural areas. Half of the boys were Negro; somewhat less than half, white. There were also some American Indians, Mexican Americans, Puerto Ricans, and Cubans. All of these latter groups were from homes where Spanish was the principal language spoken.

The Yale Program was residential extending over a seven-week period with students brought to the University campus with all expenses paid. The average first year cost per student was $1,384.

There was heavy emphasis on concentrated academic work and campus centered activities. The students attended classes six days a week, with only one free period each day and required study every evening. A rich variety of cultural activity was available to the group, including listening to prominent speakers, attending plays, field trips to New York and to parts of New England. The academic work was difficult and considerably above the level of instruction generally available at the high school level. Project staff had been carefully recruited nation-wide and were college or high school teachers—mixed racially.

Students' studies covered courses in English fiction, poetry, advanced composition, history of art, mathematics, Boolean algebra, experimental physics, and computer sciences. There was provision for
individual tutoring and the project encouraged an informal atmosphere with emphasis on learning and a high degree of self-direction.

There was a tutor for every ten boys. The tutors were Yale and Harvard students, who also represented a national cross-section. In addition to their teaching responsibilities, each taught a seminar. The tutors were chosen partly for their intelligence, and partly for their athletic abilities. They served as tangible symbols to students that young men of all backgrounds can be accepted at Harvard and Yale; and further, that academic excellence and manliness are not mutually exclusive. For example, a college football player is also a teacher—he teaches a class in poetry and conducts a seminar on Yeats.

Of the 1964 summer group, who are college age this year, 70 of the 75 will attend college, four will be in prep school, and one has enlisted in the Marines. On the basis of this evidence alone, the Yale project director thinks the program is succeeding. An evaluation of the program by Lawrence Gould and Edward Klein is underway, but the results will not be available before 1970. The study plan contemplates that each student will be followed. The Yale project students will be compared with two control groups—one drawn from students nominated by their own schools but not selected by Yale, and a second group with the same characteristics as the boys selected for the project, but who did not impress their own schools.

This appears to be a successful summer program effort with disadvantaged high school students who are risk candidates for future college entrance, without the usual element of continuing over-the-year contact between project staff and students that exists in all of the other UPWARD BOUND projects examined. Yale, by providing concentrated academic work in a high-prestige college setting appears to be elevating the achievement and motivation levels of pupils for whom college attendance would have not been likely without the special stimulation from the program.
The College of Basic Studies (CBS) at Boston University is a two-year, intensive collegiate program for students who aspire to a four-year college degree but who—because of poor high school records, shortages in prerequisites, low academic aptitude scores, or some combination—could not meet the admissions requirements of Boston University.

CBS, developed from an educational experiment designed in the late 1940's by the faculty of what was, at that time, the College of General Education, Boston University. The experiment involved establishing a junior college division to admit marginal students into a general education, college-level program with heavy emphasis on counseling and on tutorial and remedial work.

But CBS is not a junior college from the standpoint of representing a terminal or vocationally-oriented program. On the contrary, it is a transition program to higher education for students who need personal attention and a sheltering situation to encourage their development and future adaptation to a more impersonal university environment. The college offers a general education program consisting of five freshman-year and four sophomore-year courses.

The CBS plan began in 1953. Its methods include team teaching, a core curriculum, extensive guidance counseling, and a highly student-centered orientation. These four features combine to produce a unique administrative and social structure conceived as a means of strengthening the motivation of teachers as well as pupils and of increasing the per-hour efficiency of teacher-pupil contact.

The program enrolls about 550 freshmen students a year and divides them into 20 groups of about 25 students each. Four of these groups (called sections) are assigned to a team of five faculty members, who represent the five divisions that make up the structured core curriculum—social science, humanities, natural science, communications, psychology and guidance. A faculty team assumes major responsibility for instruction of the same groups (100-125 students in 4 sections) for an entire academic year.

Most instruction is given in section meetings, although a varied pattern—including class lectures, team lectures, team seminars, small group meetings, and individual study opportunities—arranges students into appropriate-size groups, as indicated.

The faculty members, except for the guidance counselor (who is assigned a private office to protect the confidential nature of the counselor-counsellee relationship), share a common office, where they have full opportunity to discuss their students and their common problems and to work cooperatively for the improvement of teaching and
learning. Originally designed "to facilitate integration among the various subject matter areas within a curriculum," the instructional team has developed a unique set of relationships between and among faculty and students, faculty and Vacuity, and student and student. The closeness and personal nature of the relationships create an educational climate particularly favorable to the growth and progress of marginal students.

The faculty team begins to function prior to the registration of new students. At the annual faculty conference, which precedes the beginning of the academic year, each team elects a team coordinator. Planning for the year gets under way at once. Schedules are arranged to permit regular weekly meetings of team members. (Informal contacts are continual, throughout the year.) The team coordinator conducts the regular meetings, maintains team records, and communicates with other teams and the college administration on areas of mutual concern and interest. To facilitate college-wide communication among the teams and between the teams and the college administration, a council of team coordinators meets monthly. The meetings are intended to clarify issues and to discuss matters relevant to the effective operation of the teams. Items for the council's agenda are submitted either by the individual teams or by the college administration.

The team system involves a small group of faculty more completely and more intimately in the education of the students assigned to them than more traditional systems permit. It is as though the college were divided into a number of small colleges, each with a faculty of five.

The close student-faculty interaction at CBS results from the program's unique structure rather than from a low student-faculty ratio. Most of a student's faculty contact is with his five instructors. He may have only a nodding acquaintance with most other faculty members, but he knows his five and they know him. It is this feature of the program that provides the unusual combination of economy of teaching and extensive individual student attention. The actual student-faculty ratio at CBS is about 20 to 1.

Probably the primary values of team teaching at the College of Basic Studies are reflected in the nature of student-faculty relationships. The team approach reduces the impersonal atmosphere often noted in the instructional process, as well as the rigidity and inflexibility of academic courses which are organized rather tightly around the five core areas. Productive relationships develop among faculty and among students as well as between faculty and students. Education becomes more completely a corporate venture.

Faculty team members, in day-to-day close contact, share information about their students, their rates of progress, or difficulties and individual problems; they share experiences, discuss and evaluate various teaching methods, and join together in developing common goals. They
are thus informed about overall demands on the students and are better able to schedule examinations, papers, and major assignments in accordance with requirements of the total program of study.

Students are reassured upon discovering that their peers have similar educational backgrounds, goals, and purposes. They are prompt to identify their own leadership and willingly accept appropriate leadership and followership roles. Mutually reinforcing, the group develops strong protective responses in relation to its members. They recognize the competitive nature of their educational experiences, but rarely let this influence the relationships within the group, which become increasingly cohesive and meaningful as the academic year progresses. Perhaps most important, the team concept helps to build a sense of individual responsibility in the students as they participate directly with the faculty in the planning of their own education.

By providing large components of guidance, contact primarily within a group of about 25 students and five staff, and a specially focused curriculum in the five core areas, the CBS program seems to have been successful in giving students the kind of special preparation they needed in order to function later in the larger and more impersonal atmosphere of their third and fourth college years in a regular university. A strong element of the philosophical base for the program is the underlying concern for the students. Development and implementation of the CBS program has been based on three assumptions: (1) Many rejected applicants to the Boston University four-year programs do have the potential to complete such programs, and this ability can be demonstrated if appropriate educational advantages are made available. (2) Team teaching, a core curriculum, extensive guidance counseling, and a highly student-centered orientation can provide such "appropriate educational advantages." (3) Student enthusiasm, interest, and motivation to learn are stimulated by active student participation in group discussions, in tutoring sessions, and by sincere faculty interest in each student's individual needs, scholastic effort, and academic achievement.

There is no special financial subsidy for CBS; students pay the regular Boston University tuition charges (about $1,500 a year). The program is not specifically directed toward students from disadvantaged backgrounds. (In fact, most of the students are from definitely privileged backgrounds.) The majority of students recruited are probably from middle-middle or high-middle class backgrounds who have been poor achievers in high school and who have not been able to meet regular college admissions requirements. Less than 10 percent of the students are Negro.

The CBS staff totals about 50, with 10 teachers in each of the five subject divisions. Faculty are primarily oriented towards teaching to an almost total exclusion of research interest in evaluating the program. Their median age is in the mid-30's; about two-thirds of them have Ph.D.'s. Most have been on the staff for a number of years (8 to 15), and all are top line people--there are no teaching assistants or fellows. The present size of the staff is considered near optimum--maximum faculty size would be 60 teachers (no more than 12 teachers for a core subject), and maximum student body would not exceed 1,250. To
support such a judgment, CBS personnel cited such limiting factors as the plan of operation, organization, and physical layout of the class-
rooms, offices and study activity areas of the building, which has been in use only for the past two years. The building was designed by the faculty especially for this program and incorporates a number of dis-
tinctly unique features and innovations in classroom arrangements.

A careful research investigation of the program by a contract consultant from Harvard University has been underway for the last four years. He devotes about one day a week to research and evaluation to assess whether the program is, in fact, successful. And if so, to de-
terminate what contribution is made by each component of the program.

Study data indicate considerable apparent success in the proportion of students passing from the two-year program into the regular four-
year baccalaureate program. Based on five CBS classes, data indicate that 80 percent of CBS transferees within BU receive a baccalaureate degree. Despite initially poor academic promise, approximately 40 per-
cent of the entering students complete the two-year program at CBS, and then transfer with full status as juniors, into four-year programs at Boston University. An additional 15 percent transfer to other univer-
sities offering baccalaureate programs. The significance of the 55 percent transfer figure at CBS is evident from a comparison with Medsker's finding of a 33 percent transfer rate for a national sample (N=17,627) of students in two-year collegiate programs.

More importantly, Medsker found that only 40 percent of transfer-
ees from two-year programs throughout the Nation received baccalaureate degrees; whereas, by contrast, 80 percent of CBS transferees within BU receive the baccalaureate degree.

Comparison of mean upper division grade point averages of CBS and non-CBS students in Boston University's high prestige four-year College of Liberal Arts indicates very slight inferiority of CBS students.

GRE Area Test administered to CBS students as entering freshmen and administered again, in parallel forms, as graduating sophomores, revealed surprising growth. Based on ETS norms for freshmen, the mean percentile scores of CBS freshmen for Social Science, Humanities, and Natural Science were 37, 27, and 47, respectively. Based on ETS norms for sophomores, the mean percentile scores of CBS sophomores in these same areas were 65, 68, and 62.

The research into the extent to which the various program elements--team teaching, core curriculum, extensive guidance counseling, and stu-
dent centered orientation--contribute to the program's success has been started but results may not be available for sometime. The CBS group

is particularly interested in developing a mechanism to identify both students and staff who function optimally in the unique structure of the CBS program.

The College of Basic Studies would like to become increasingly organized on a demonstration and research project basis. The faculty and research consultant think that the model and techniques being developed and tested there offer a productive approach for similar college transition programs directed toward providing higher education for disadvantaged students.
The Cardozo Project in Urban Teaching was started in 1963, to attract and train young men and women to teach in inner-city schools and to have them experiment with and develop curricula materials that would be relevant and meaningful to urban youngsters.

First funded by the President's Committee on Juvenile Delinquency, the Cardozo Project trained returned Peace Corps volunteers, who seemed to be ideal candidates for the challenge of educating disadvantaged children. The assumption was that the sense of commitment, desire to serve, flexibility, understanding, and energy found in many volunteers—and so necessary for effective teaching in schools serving the disadvantaged—would be applicable to the inner-city school. Since 1963, 26 interns at Cardozo and Banneker Junior High School have tested that assumption.

Over 2,200 students (of whom less than 10 are white) attend Cardozo High School. The faculty ranges from a core of dedicated, well-qualified teachers down to the usual number of time-servers. Although the school draws students from a population including middle-income professionals, white- and blue-collar workers, it is in a predominantly low-income area. Over 20 percent of the people in the area are on Public Assistance. Three of every ten families earn less than $4,000 a year. Forty percent of the children are from one-parent homes. While 13 percent of the city's population live in the Cardozo district, 22 percent of the city's juvenile delinquents come from the area.

There have been highly positive, subjective evaluations of the Project. Further evidence of the relative success of the Program's special efforts to recruit teachers for the difficult assignment to a slum school and to keep them for the Program is reflected in figures showing that 21 of the 26 trainees in the Project from 1963 to 1965 have remained in teaching either in urban schools, the Job Corps, or overseas. (Ten of the 26 are in District of Columbia schools; seven are teaching at Cardozo. Recent interns have also been recruited from among civil rights workers, college-trained housewives with children in school, and recent college graduates.

The Program offers a one-year internship program to about 15 trainees each year and has an annual cost of approximately $75,000. The interns carry a two-fifths teaching load and earn half of the credits required for a Master's Degree.

The Cardozo Project illustrates how clusters of educationally related programs can function together effectively. It is divided into four parts: supervised internship, seminars, development of curricula materials, and after-school contact with students and community.
In order to make the interns acquainted with the social, developmental, and learning problems of the disadvantaged, the Program encourages them to find out more about their students and the community. For example, for a two-month orientation period, trainees are assigned to each of the three Neighborhood Centers in the Cardozo area. The centers' staffs include specialists in housing, legal services, social service, community organization, employment, and consumer information. Neighborhood workers, members of the community, and the United Planning Organization (the agency that operates the centers and coordinates Washington's anti-poverty efforts) organize block clubs and, in general, act in a liaison capacity between the center and the people of the community.

Interns meet with the staff of each center, attend block club and advisory council meetings and generally familiarize themselves with what has been happening in the Cardozo area. The trainees also make visits to the homes and meet families of their students.

Home visits early in the training are often a first step in providing a trainee whose prior experience has been limited to middle-class children and middle-class values with a realistic contact with her pupils. After the two-month orientation, interns concentrate on working with students before and after school, and make more frequent visits to homes. Thus, by becoming increasingly aware of who their students are and some of the problem situations, interns function as a link between school and community, referring students to proper agencies for jobs or services.

The major emphasis in the teaching program is academic. The project director thinks that disadvantaged children profit little from the "whipped-cream" extras of field trips and other cultured activities. They benefit most from serious and high quality teaching efforts. Remedial and compensatory work, especially in English and mathematics are effective; he believes that the Language Arts Program is outstanding in its improvement of pupil's abilities to communicate and would like it instituted in every school.

Each intern teaches two classes a day in the junior or senior high school, or a half-day at the elementary level, under the close supervision of curriculum specialists or "master teachers," who also teach. The specialist is responsible for helping trainees and regular teachers with classroom management, instructional skills, and any other needed assistance in planning and conducting class-work. The success of the project depends largely upon the curriculum specialist. He must have had extensive classroom experience, familiarity with current curricular innovations, and a firm grounding in subject matter and teaching methodology.

The Project employs a team-teaching approach, which not only promotes greater understanding but also helps trainees to acquire the specific skills, the techniques, and the coping strategies for dealing with disadvantaged children—who often do not respond to traditional teaching methods. The trainees are, in effect, getting continuous in-service training; their work is observed; there are frequent faculty
conferences where they are given advice and tips from experienced teachers on methods that have worked in the classroom.

The English "team" at Cardozo, for example, has a specialist, one "affiliate" (or regular teacher), and five interns. At the elementary level, where supervision is more concentrated, a specialist teams up with an "affiliate" teacher to train two interns at each grade level. (The "affiliate" teacher spends part of his time working with parents and students.) Combining trainees and less experienced regular teachers on a team headed by a master teacher permits the trainees and regular teachers to benefit from the competence and guidance of the specialist.

In the seminar phase of the Project, the specialist (or "master teacher") also teaches the history, English, or elementary methods seminar, which introduces theoretical approaches to discipline, testing, questioning, and general methods of teaching. There are, in addition, after-school seminars (in cooperation with Howard University, interns, project staff, and interested faculty members meet several afternoons a week at the high school.) on, for example, sociology or urban life, the psychological disciplines, methods of teaching English, history, and elementary subjects.

The emphasis in the Project on development of new curricular materials that are personally relevant to Negro children, is also a very strong element of the Program. The classroom becomes a virtual experimental laboratory as trainees and teachers try out imaginative curricular innovations. There is a real commitment to the development of instructional materials and methods that are conducive to success in academic and social learning for disadvantaged children.

It has been observed that perhaps one of the most productive approaches for changing teacher behavior and attitudes in depressed-area schools is providing teachers with new and improved instructional materials and tools. In view of the importance of new instruments and methods that work in achieving attitude changes in teachers (who may succumb to defeat or indifference when they see little results from their efforts to teach disadvantaged children), the Cardozo Project Director is discouraged that the innovations developed by the Project are not widely dispersed. The Cardozo methods are good; they are not widely enough used; they encounter hostility and resistance from among the entrenched "hangers-on" who resent any efforts to change traditional methods.
Project No. 17

Team Teaching Project
South Norwalk, Connecticut

The Norwalk Plan of Team Teaching is part of the comprehensive Norwalk School Improvement Program. It started in 1958 with four teams involving 302 children and 11 teachers in only two elementary grades of four schools. Its primary purpose is to provide pupils a better education without increasing overall school costs. The project effectively redeployed funds and staff and radically rearranged classes and facilities to achieve its purpose. (Most noteworthy is the flexible classrooms set up for team teaching.)

Students, teachers, and parents are reported to have highly positive reactions to team teaching and to believe it allows much better use of available space and staff resources. The plan has grown rapidly. By the 1962-63 school year, it had been expanded to include 3,574 students in 14 different schools; currently 25 teacher teams are used in all elementary, 7th, 8th, 10th, and 11th grades in the Norwalk Schools, and a team is used to teach mentally retarded children.

When the project started, there was a three-member team organization. Each team consisted of two fully qualified teachers (called team leader and cooperating teacher) and a non-professional teacher aide, and provided for the education of a group of 75-90 pupils in space at least equal to three regular classrooms. The team organization has now evolved to variable-sized teams of three to eight members. The average group consists of one team leader (master teacher), four other teachers and one aide—six adults for about 150 children.

The project claims to have had exceptional success in attracting and retaining good teachers. The original impetus for the team teaching arrangement was to save the good teachers for teaching rather than having them transfer to administration or counseling, where the pay was better. The creation of the master-teacher positions in the team-teaching framework has made teaching more attractive. In comparison with regular classroom teachers in Norwalk, team teachers receive larger salaries, have greater status and prestige, can cooperatively plan and share ideas, and are able to devote most of their time to professional duties, specifically concentrating their energies in areas of greatest competency and interest.

The budget for the Project shows costs reallocated, rather than increased, to provide additional stipends for team leaders, $25,000; cooperating teachers, $30,250; teacher aides, $82,500; and part-time help, $36,412. The higher salaries (about $1,000 a year additional for the team leader and $500 additional for the cooperating teachers) were paid from the savings that resulted from using teacher aides to perform many of the tasks formerly done by regular teachers; there was, thus, an actual reduction in the number of professional teachers required. Applications for team-teaching positions increased from 11 in 1958 to 174 for 1963-64.
Some school administrators applied for positions as team leaders, but none were selected because project staff believed that the flexible methods they encourage are better spread among the peer group—i.e., teachers teaching teachers. Thus, they see the team leader as a teacher of other teachers. Most of the master teachers are men, they provide continuous in-service training and conduct intensive summer workshops.

Different selection criteria are used for elementary and secondary school teams. At the elementary level, the leader (for the team of five professional teachers and an aide who performs non-professional duties) is usually a teacher with exceptional strength in a specific subject—for example, mathematics or music. The concept of the leader's function is somewhat different at the secondary level, which is departmentalized. One team leader may have particular competence in large-group instruction, another in producing visual aids and instructional materials, another in social studies, or special language arts facility. Some of the teams cross grade lines.

They employ apparently successful methods of ungraded instruction at the 7th grade level and above. The faculty also participates in writing much of the curricula used in the Norwalk schools. Project staff cite the science curricula as an exemplary model, which used already prepared materials written in small units to fit the local school situation. About half their curricula are locally written, and strong emphasis is put upon designing and revising curriculum materials especially for various class groups, including slow-learning classes.

Among advantages noted by evaluators of the team teaching project are:

- More effective use of teacher strengths, talents, and interests;
- Reduced turnover of teaching staff;
- Greater flexibility in class organization, providing for more individual instruction and attention to student needs;
- Attracting candidates for teaching positions which offer increased status and higher pay at no increase in overall cost;
- Redistribution of time, permitting teachers to give full attention to professional tasks, with aides taking over routine clerical and housekeeping aspects of the job;
- A teaching environment which encourages cooperative planning and sharing of ideas for improving student performance and which stimulates the use of audio-visual equipment, innovative instructional materials, and methods for improved teaching;
- Exploitation of the team-teaching situation for putting educational innovations into widespread use;
- More efficient use of space, equipment, and staff;
- Achievement test results and other indications of accomplishment show that pupils learn at least as much as they do in the more traditionally organized classes.
The evaluation of the Norwalk Plan of Team Teaching includes achievement levels of pupils, using:

1. standardized achievement tests administered each fall and spring since 1958,
2. locally constructed science spelling tests,
3. pupil, parent, principal and teacher questionnaires.

The assessment also includes the adjustment of pupils, using:

1. personality inventories,
2. pupil and parent questionnaires,
3. personality inventories and pupil questionnaires in a follow-up study of elementary children who had moved on to junior high school,
4. projective techniques, parent questionnaires, and teacher check lists in semi-structured individual interviews. The study was conducted by a Columbia University research team.

Evaluation also covered the attitudes of team members by use of:

1. a diary study conducted by a Harvard University team, and
2. a structured interview conducted by Harvard University consultants.

It assessed the attitudes of regular classroom teachers using:

1. a questionnaire, and
2. written observations of members of Teacher Visiting Committees.

Research consultants from New York University conducted a comprehensive questionnaire analysis of the classroom advantages of team teaching.
Appendix B

SUMMARY OF PRE-TITLE I COMPENSATORY EDUCATION PROJECTS SURVEYED