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ABSTRACT

The 1985-86 Chapter 1 Corrective Reading Program, which provides supplemental individualized instruction in reading and writing skills for eligible nonpublic school students in grades 1 through 12 in New York City, is the subject of this evaluation report. The background of the program, evaluative criteria, findings and recommendations are presented in an introductory summary. Section one presents the program's purpose and features, criteria for student eligibility, a profile of students served and program objectives and evaluation as well as the scope of the report. Program organization and funding, curriculum and staff development are outlined in section two. In section three attendance is discussed, and methodology and results in reading and writing achievement are tabulated. Section four presents conclusions and recommendations. An appendix briefly describes reimbursable 1985-1986 programs. (Six tables of data are also ncluded.) (NH)



Evaluation Section Report Robert Tobias, Administrator John Schoener, Senior Manager

October, 1987

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CHAPTER -CORRECTIVE READING PROGRAM 1985-86

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BUREAU OF NONPUBLIC SCHOOL REIMBURSABLE SERVICES CHAPTER I CORRECTIVE READING PROGRAM

Year of Operation: 1985-86

Number of Partipants: 11,546

Director: Margaret O. Weiss

Program Coordinator: Sharon Gross

SUMMARY 1985-86

BACKGROUND

The Chapter I Corrective Reading Program provides supplemental individualized instruction in reading and writing skills to Chapter I-eligible nonpublic school students who score below grade level in reading on standardized and state-mandated tests. The program's goal is to enable students to read and write at grade level and to improve their performance in their regular classrooms. The program uses a modified diagnostic-prescriptive approach in which each student's strengths and weaknesses are used in the design of individualized objectives.

During 1985-86, the program served 11,546 eligible students in grades one through twelve in 238 nonpublic schools in New York City. Program staff included one coordinator, three field supervisors, and 173 teachers who provided instruction to groups of between eight and ten students, who were instructed one to five times a week for 30 to 60 minutes per session. Chapter I funding totalled nearly \$8.6 million.

EVALUATION CRITERIA

Student achievement for the first grade was evaluated through a comparison of pretest and posttest scores on subtests of the Stanford Early Achievement Test (SESAT); for all other grades, pretest and posttest scores on the subtests of the California Achievement Test (CAT) were compared. The State-Education-Department-mandated criterion of improvement was a five-N.C.E. mean gain. In addition, tests for statistical significance and educational meaningfulness were performed to assist program staff in determining what reading and writing skills staff development should emphasize.

FINDINGS

The overall mean gain scores on the subtests of the SESAT and for each subtest of the CAT exceeded five N.C.E.s. On the subtests of the CAT, the average mean gain on the Reading Comprehension subtest was 10.4 N.C.E.s; on the Language Mechanics subtest, 7.9 N.C.E.s; and on the Language Expression subtest, 7.7 N.C.E.s. In general, mean gains were statistically significant. The effect sizes for the overall mean gains ranged from moderate to large. However, across the three CAT subtests, students in grades two through eight performed better than did students in grades nine through twelve.



RECOMMENDATIONS

Based on the evaluation findings and other information presented in this report, the following recommendations were made:

- Increase staff development aimed at improving first grade students' skills in the recognition of letters and sounds.
- To improve the performance of secondary school students, schedule students for more than two sessions a week.



ACKNOWLEDGEMENTS

The production of this document is a result of a collaborative effort of full-time staff and consultants. In addition to those whose names appear on the cover, Shelly Halpern drafted the report, and Randal Blank analyzed the data on which this evaluation is based. Jonathan Goodman copyedited the manuscript, and Dan Hunt and Aram Salzman typed and corrected the manuscript. The Unit could not have produced this report without their participation.



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V

I. INTRODUCTION

PROGRAM PURPOSE AND FEATURES

The Chapter I Corrective Reading Program provides supplemental reading and writing instruction to Chapter I-eligible students in grades one through twelve in nonpublic schools in New York City. The program's comprehensive goal is to enable students to reach grade level and to perform well in their regular classrooms. In addition to this general goal, the Corrective Reading Program has the following specific goals:

- To increase reading proficiency;
- To increase general school achievement and motivation for learning through improved reading proficiency;
- To encourage students to read independently for pleasure; and
- · To improve writing skills.

The program uses a modified diagnostic-prescriptive approach to reading and writing instruction: corrective reading teachers analyze pupils' strengths and weaknesses through standardized and informal tests, and then set objectives for each student. The holistic approach of the instruction is designed to help students use their reading and writing skills to improve their overall performance. During 1985-86, the program focused on teaching skills in contexts meaningful to the students, emphasizing why each skill is needed, and helping students apply their reading and writing skills throughout the curriculum.



Students were seen in groups of eight to ten for 30 to 60 minutes, one to five times a week. Students with social or emotional problems that might have impeded their learning were referred to the Clinical and Guidance Program for diagnostic and counseling services.

ELIGIBILITY

Students were eligible for Corrective Reading Program
services if they lived in a targeted (low-income) attendance
area, attended nonpublic schools in New York City and scored
below a designated cut-off point on standardized reading tests.
Chapter I guidelines specify that students may be selected for
inclusion in Chapter I programs on the basis of classroom
performance, teacher judgement, achievement test data, or any
combination of these sources. In the Corrective Reading
Program, preliminary selection was based primarily on scores on
standardized tests administered as part of the nonpublic schools'
annual testing program, generally in April. Most schools used
either the Scott-Foresman Test or the Comprehensive Test of Basic
Skills.

Pupils were eligible for Chapter I services if they scored at or below the following grade equivalents:

| GRADES | CUT OFFS |
|--------|-----------------------------|
| 2 | 2.4 Grade Equivalent (G.E.) |

^{*}A G.E. is the grade placement (year and month) of students for whom a given score is typical. Grade equivalents are not directly comparable across different tests. Moreover, because G.E.s are not equally spaced, they cannot be used in arithmetic or statis-

| 3 | 3.1 |
|-------|---|
| 4 | 3.9 |
| 5 | 1.7 |
| 6 | 5.7 |
| 7 | 6.7 |
| 8 | 7.7 |
| 9 | 8.7 |
| 10-12 | Two or more years below grade level in reading. |

STUDENTS SERVED

In 1985-86, the Corrective Reading Program served 11,549 students. As Table 1 indicates, 78 percent of the students were in grades one through seven, with the greatest proportion of students in grades three and four (17 percent each). Grades two and five, with 13 percent and 14 percent, respectively, had the next highest percentages of students served. Nine percent of the students were in graces nine through twelve.

As Table 2 shows, 58 percent of the students participated in the program for the first time in 1985-86. Just over one-quarter of the students were participating for a second year, and 16 percent were attending for a third year or more. Over 95 percent of first- and ninth-graders were attending for the first time.

tical calculations. A G.E. represents the <u>level</u> of work a student is capable of doing. For example, a ninth-grade student who obtains a G.E. of 11.6 does not belong in the eleventh grade; rather, this score indicates that the student scored as well as a typical <u>eleventh-grader</u> would have scored on the <u>ninth-grade level</u> test. While this may indicate above-average achievement, it does not indicate that the ninth-grader is ready for eleventh-grade level work.

TABLE 1

Student Participation in the Cortective Reading Program, by Grade, 1985-86

| Grade | N | <u>Percent</u> |
|--------------------|--------|----------------|
| 1 | 433 | 4% |
| 2 | 1,788 | 15 |
| 3 | 1,977 | 17 |
| 4 | 2,005 | 17 |
| 5 | 1,604 | 14 |
| 6 | 1,247 | 11 |
| 7 | 922 | 8 |
| 8 | 539 | 5 |
| 9 | 616 | 5 |
| 10 | 222 | 2 |
| 11 | 134 | 1 |
| 12 | 59 | 1 |
| TOTAL ^a | 11,546 | 100 |

^aFor three students, data on grade placement were missing; therefore, the total number of students was 11,549.

- Nearly four-fifths of the students came from grades one through six; of those, most were from grades two through six.
- Grades nine through twelve account for approximately nine percent of the students served.



TABLE 2

Student Participation in the Corrective Reading Program, by Grade and Years in Programs, 1985-86

| | | Years in Program 1 2 3 | | | | | | |
|--------------------|-------|------------------------|-------|----|-------|--------------------|--|--|
| Grade | Ň | & | N | 2 | N | 3 _{&} | | |
| 1 | 421 | 97 | 11 | 3 | 1 | 0 | | |
| 2 | 1,475 | 82 | 301 | 17 | 9 | 1 | | |
| 3 | 1,160 | 59 | 658 | 33 | 150 | 8 | | |
| 4 | 1,004 | 50 | 668 | 33 | 332 | 17 | | |
| 5 | 632 | 40 | 530 | 33 | 439 | 27 | | |
| 6 | 521 | 42 | 327 | 26 | 398 | 32 | | |
| 7 | 448 | 49 | 225 | 25 | 239 | 26 | | |
| 8 | 244 | 45 | 130 | 24 | 165 | 31 | | |
| 9 (| 591 | 96 | 16 | 3 | 9 | 1 | | |
| 10 | 94 | 42 | 127 | 57 | 1 | 1 | | |
| 11 | 86 | 64 | 23 | 17 | 25 | 19 | | |
| 12 | 34 | 58 | 15 | 25 | 10 | 17 | | |
| Total ^a | 6,710 | 58 | 3,031 | 26 | 1,778 | 16 | | |

^aFor 30 students, information on grade or number of years in the program was missing. The total number of students in the program was 11,549.

- Three-fifths of the students were in their first year in the program.
- Second-year students comprised one-quarter of the population. One-sixth of the students were in their third year.
- At least half of the Corrective Reading Program students in grades four through eight had been in the program for two or more years.



In 1985-86, 6,287 of students in the Corrective Reading
Program also participated in the Clinical and Guidance Program.

Some students also participated in the Corrective Mathematics
Program, and 144 students participated in Instrumental Enrichment, a supplement to the Program.*

PROGRAM OBJECTIVES

The objectives for the 1985-86 Corrective Reading Program were:

- Students in grade one were expected to make average mean gains of at least five Normal Curve Equivalents (N.C.E.s)** from pretest to posttest on the Environment, Letters and Sounds, and Aural Comprehension subtests of the Stanford Early School Achievement Test (SESAT).
- Students in grades two through twelve were expected to make average mean gains of at least five N.C.E.S from pretest to posttest on the Reading Comprehension, Language Expression, and Language Mechanics subtests of the California Achievement Test (CAT).

PROGRAM EVALUATION

The purpose of the 1985-86 evaluation by the Office of Educational Assessment/Instructional Support Evaluation Unit (O.E.A/I.S.E.U.) was to describe the Corrective Reading Program



^{*}For a description of the Instrumental Enrichment, Corrective Mathematics, and Clinical and Guidance Programs, see Appendix A.

^{**}Normal Curve Equivalent scores are similar to percentile ranks, but, unlike percentiles, are based on an equal-interval scale ranging from 1 to 99, with a mean of 50 and a standard deviation of 21. Because N.C.E. scores are equally spaced, arithmetic and statistical calculations such as averages are meaningful; in addition, comparisons of N.C.E. scores may be made across different achievement tests.

and to assess the program's impact on student achievement in reading and writing. The following methods were used to conduct this evaluation.

- Interviews with program staff and review of documents. The document reviews and interviews focused on describing: the program organization and funding; the curriculum used; and the staff development activities.
- Analysis of data retrieval forms to report information about grade placement; number of years in the program; frequency of contact time; participation in the Instructional Enrichment (I.E.) program; and referral to the Clinical and Guidance Program.
- Analysis of students' scores on standardized reading tests.

SCOPE OF THIS REPORT

5

The first chapter of this report describes the program and its goals; discusses student eligibility criteria; provides information on the students served; and describes evaluation methods. Chapter II discusses program organization; Chapter III presents student outcome data; and Chapter IV offers conclusions and recommendations for program improvement. A description of 1985-86 Chapter I Reimbursable Programs is included as Appendix A.



II. PROGRAM ORGANIZATION

PROGRAM ORGANIZATION AND FUNDING

During 1985-86, 173 Corrective Reading Program teachers worked at 238 schools and served 11,549 students. Program staff also included one coordinator and three field supervisors. Chapter I funds totaled nearly \$6 million.

Corrective Reading Program teachers provided instruction to groups of eight to ten students one to five times a week for the entire school year. Sessions were held apart from the regular classroom and ranged from 30 to 50 minutes.

CURRICULUM

The curriculum's focus in the Corrective Reading Program varied according to grade level. The readiness program of the first grade emphasized language concepts, oral vocabulary, letter recognition, sound-symbol relationships, and auditory discrimination. First-grade Corrective Reading Program teachers made wide use of teacher-made materials, real objects, stories, and tapes.

Instruction for students in grades two through eight focused on enriching language concepts; developing skills in decoding, word attack, and comprehension; improving functional and creative writing; and applying reading skills to schoolwork. To make writing activities relevant and interesting to students, creative and functional writing skills were taught in "real life" contexts such as letter writing.



At the secondary school level, priority was given to reading and writing in subject areas. When necessary, basic word-attack and comprehension skills were also taught. Writing instruction at the secondary level focused on techniques of organization.

The holistic approach used in Corrective Reading classes emphasized helping students to understand why they were learning specific skills and to apply their reading and writing skills in other subject areas. This approach used methods encouraging student-initiated questions and discussions of the assigned reading. In addition, to encourage students to read for pleasure, on their own, periods of independent "recreational" reading were included.

STAFF DEVELOPMENT

All members of the Corrective Reading Program staff, including teachers, field supervisors, and the program coordinator, participated in pre-service and in-service training. During 1985-86. program coordinators led 15 training sessions; these sessions focused on providing individual assistance to teachers and demonstrating new teaching techniques. Some sessions were attended by all the teachers; other sessions were attended by teachers in particular geographic areas, or were selected by individual teachers because of interest or perceived need.

During 1985-86, the Corrective Reading Program focused on using literature as the instructional base for reading and writing. Staff development activities also focused on using literature as an instructional tool. Additional staff develop-

ment activities provided continued support for moving from an instructional program focusing on specific skills to a holistically based program.

Among the topics of the staff development sessions were:

- Word Games That Work
- The Connecting Link of the English Language/Language Arts Curriculum
- Using Literature as a Foundation for the Teaching of Reading
- Analytic Thinking and Cognitive Development

III. STUDENT OUTCOMES

ATTENDANCE

Average attendance of all children involved in the program was 94 percent.* This high rate of attendance suggests that the students scheduled into the program were positively involved with it.

Students in the Corrective Reading Program attended 30- to 60-minute sessions from one to five times a week. Fifty-five percent of the students met for sessions of one hour, twenty-eight percent met for 45-minute sessions, and fewer than eight percent met for sessions of 40 minutes or less.

Nearly three-fifths of the students (58 percent) met for two sessions each week; another fifth (21 percent) met for three sessions each week. Nearly 14 percent met four or more times a week; only seven percent met for just one session a week.

METHODOLOGY

The effect of the Corrective Reading Program on student achievement was determined by examining the change in participating students' reading performance between Fall, 1985, and Spring, 1986. First-grade students were administered the reading readiness subtests of the Stanford Early School Achievement Test (SESAT). Students in grades two through twelve took three reading subtests of the California Achievement Test (CAT).



^{*}Aggregate attendance information was provided by program administration to O.E.A.

According to the State Education Department, reading and writing improvement was operationally defined as an average mean gain of five N.C.E.s in students' reading and writing scores. In addition, correlated <u>t</u>-tests were used to determine whether the reading scores of students were statistically significantly higher in the spring than in the fall. In addition, the effect size (E.S.)* was determined to assist the program staff in finding out what staff development should emphasize. The E.S. is reported for each comparison to indicate the educational meaningfulness of each average mean difference.

RESULTS IN READING AND WRITING ACHIEVEMENT

The following two sections present the results in reading and writing achievement. The analyses of the achievement of first-grade students on the subtests of the SESAT are presented first, followed by the analyses of the achievement of students in grades two through twelve on the CAT.

First Grade: Stanford Early School Achievement Test

Table 3 shows average mean gains in reading scores of tests taken in the Fall, 1985, and Spring, 1986, of Corrective Reading



^{*}The E.S., developed by Jacob Cohen, is the ratio of the mean gain to the standard deviation of the gain. This ratio provides an index of improvement in standard deviation units irrespective of the size of the sample. According to Cohen, .2 is a small E.S., .5 is a moderate E.S., and .8 is considered a large E.S. Only E.S.s of .8 and above are considered educationally meaningful, reflecting the importance of the gains to the students' educational development.

TABLE 3

Mean N.C.E. Scores of First-Grade Students on the SESAT, 1985-86

| Subtest | N | | hest S.D. | | test S.D. | | rence ^a S.D. | Effect Size |
|---------------------|-----|------|--------------|------|--------------|-----|----------------------------|----------------|
| The Environment | 382 | 12.3 | 12.4 | 20.5 | 15.8 | 8.2 | 13.8 | .6 |
| Letters and Sounds | 382 | 18.6 | 13.7 | 21.9 | 16.2 | 3.3 | 16.0 | .2 |
| Aural Comprehension | 381 | 16.4 | 13.3 | 24.8 | 17.4 | 8.4 | 14.1 | .6 |

^aAll mean differences were statistically significant at p≤.05.

- First-grade students obtained mean gains above eight N.C.E.s on the Environment and Aural Comprehension subtests.
- First-grade students obtained mean gains of 3.3 N.C.E.s on the Letters and Sounds subtest.
- Moderate E.S.s were shown for the Environment and Aural Comprehension subtests.



Program students in first grade. This table shows that mean gains for the Environment subtest, the Aural Comprehension subtest, and the Letters and Sounds subtests were 8.2, 8.4, and 3.3 N.C.E.s, respectively. All these mean gains were statistically significant. Mean gains in the Environment and Aural Comprehension subtest surpassed the five-N.C.E. gain used as the criterion for project success. These two mean gains represented a moderate E.S., while the changes in the Letters and Sounds subtest represented a small E.S.

Grades Two Through Twelve: California Achievement Test

Tables 4, 5, and 6 present a comparison of average mean gains in reading and writing scores between the Fall, 1985, and Spring,

1986 semesters. Corrective Reading Program students in grades two through twelve took the tests. As shown in these tables:

- There was an overall mean gain of ten N.C.E.s on the Reading Comprehension subtest. This mean gain was statistically significant and educationally meaningful. Mean differences ranged from 7.0 N.C.E.s to 15.2 N.C.E.s. They were statistically significant and represented moderate to large E.S.s.
- There was an overall mean gain of 7.9 N.C.E.s on the Language Mechanics subtest. This mean gain was statistically significant and represented a moderate E.S. Mean differences ranged from 2.2 N.C.E.s to 13.4 N.C.E.s. With the exception of grade eleven, they were all statistically significant. These mean gains represented small to moderate E.S.s.
- There was an overall mean gain of 7.7 N.C.E.s on the Language Expression subtest. This mean gain was statistically significant and represented a moderate E.S. Mean differences ranged from 3.6 N.C.E.s to 9.6? J.E.s. All the mean gains were statistically significant and, generally, represented moderate E.S.s.



TABLE 4

Mean N.C.E. Scores of Students in Grades Two Through
Twelve on the Reading Comprehension Subtest of the CAT,
by Grade, 1985-86

| Diffe | rence a | | Effec | Pretest | | Postte | st | |
|---------------|----------|------|-------|---------|-------|--------|------|------|
| Grade Size | <u> </u> | | Mean | s.D. | Mean | S.D. | Mean | s.D. |
| 2 | 1,615 | 27.8 | 15.7 | 43.0 | 14.1 | 15.2 | 18.5 | . 8 |
| 3 | 1,798 | 32.4 | 12.9 | 41.1 | 13.8 | 8.7 | 13.1 | .7 |
| 4 | 1,817 | 30.1 | 14.0 | 40.9 | 12.0 | 10.8 | 14.7 | .7 |
| 5 | 1,473 | 30.9 | 13.5 | 39.1 | 12.9 | 8.2 | 12.7 | .6 |
| 6 | 1,100 | 32.1 | 13.1 | 41.0 | 12.1 | 8.9 | 12.2 | .7 |
| 7 | 812 | 35.0 | 12.9 | 44.4 | 1.2.0 | 9.4 | 13.1 | .7 |
| 8 | 480 | 36.1 | 13.1 | 45.2 | 11.5 | 9.1 | 13.2 | .7 |
| 9 | 571 | 40.2 | 10.6 | 49.4 | 11.0 | 9.2 | 11.3 | .8 |
| 10 | 206 | 37.7 | 13.0 | 45.9 | 10.6 | 8.2 | 11.8 | .7 |
| 11 | 119 | 39.4 | 15.7 | 46.4 | 13.1 | 7.0 | 13.4 | •5 |
| 12 | 54 | 23.9 | 17.3 | 33.6 | 15.4 | 9.7 | 10.5 | •9 |
| TOTAL | 10,045 | 31.3 | 14.4 | 41.3 | 13.7 | 10.0 | 14.3 | .7 |

^aAll mean differences were significant at $p \le .05$.

- All mean differences exceeded eight N.C.E.s.
- Effect sizes show that all mean gains were moderate or large.

TABLE 5

Mean N.C.E. Scores of Students in Grades Two Through Twelve on the Language Mechanics Subtest of the CAT, by Grade, 1985-86

| | | | | _ | | | | |
|----------|-------|--------|-------------|---------------------|--------------|------------------------|------------------|----------------|
| Grade | | Pret | est S.D. | <u>Post</u> Mean | test S.D. | <u>Differe</u> Mean | nce ^a | Effect Size |
| <u> </u> | | 110411 | 5.5. | 110411 | | 110411 | <u> </u> | 0120 |
| 2 | 1,621 | 32.4 | 18.5 | 45.8 | 16.8 | 13.4 | 19.0 | .7 |
| 3 | 1,792 | 36.3 | 15.9 | 46.3 | 16.0 | 10.0 | 16.0 | .6 |
| 4 | 1,798 | 40.2 | 17.1 | 48.5 | 16.9 | 8.3 | 16.0 | .5 |
| 5 | 1,442 | 42.9 | 15.9 | 48.4 | 16.7 | 5.5 | 15.3 | . 4 |
| , | 1,080 | 42.2 | 15.9 | 48.5 | 15.9 | 6.3 | 13.2 | .5 |
| , | 810 | 43.8 | 14.7 | 49.1 | 14.1 | 5.3 | 12.4 | .4 |
| 8 | 476 | 48.0 | 15.4 | 53.0 | 14.2 | 5.0 | 12.5 | . 4 |
| 9 | 570 | 49.3 | 15.6 | 54.2 | 15.5 | 4.9 | 13.5 | . 4 |
| 10 | 205 | 43.8 | 12.7 | 48.0 | 12.4 | 4.2 | 10.1 | . 4 |
| 11 | 119 | 46.5 | 17.7 | 48.7 | 16.5 | 2.2 | 12.8 | .2 |
| 12 | 54 | 33.6 | 21.0 | 40.9 | 16.2 | 7.3 | 14.8 | .5 |
| TOTAL | 9,967 | 39.3 | 17.5 | 47.2 | 16.9 | 7.9 | 15.8 | .5 |

aWith the exception of grade eleven, all mean differences were significant at p<.05.

- The mean differences for grades two and three were the highest of all the grades.
- All of the mean gains, except grade eleven, represented increases of four N.C.E.s or more.
- All mean gains represented small to moderate E.S.s.



TABLE 6

Mean N.C.E. Scores of Students in Grades Two Through Twelve on the Language Expression Subtest of the CAT, by Grade, 1985-86

| | | Pret | est. | Post | test | Differ | ence ^a | Effect |
|-------|--------|-------|--------------|------|--------|--------|-------------------|--------|
| Grade | N | Mean | s.D. | Mean | S.D. | Mean | S.D. | Size |
| 2 | 09ت, 1 | 30.9 | 16.2 | 40.5 | د . 14 | 9.6 | 18.7 | .5 |
| 3 | 1,792 | 32.1 | 14.4 | 39.9 | 14.3 | 7.8 | 15.1 | • 5 |
| 4 | 1,804 | 31.4 | 14.8 | 40.2 | 16.3 | 8.8 | 14.7 | .6 |
| 5 | 1,470 | 34.2 | 15.4 | 41.1 | 17.1 | 6.9 | 14.6 | • 5 |
| 6 | 1,095 | 36.4 | 15.6 | 44.7 | 15.0 | 8.3 | 13.8 | .6 |
| 7 | 811 | 37.4 | 14.5 | 43.0 | 13.4 | 5.6 | 13.1 | . 4 |
| 8 | 476 | 39.1 | 13.3 | 44.4 | 12.2 | 5.3 | 12.9 | . 4 |
| 9 | 570 | 42.0 | 12.4 | 46.7 | 13.0 | 4.7 | 12.2 | . 4 |
| 10 | 205 | 39.4 | 13.5 | 43.0 | 12.5 | 3.6 | 10.6 | .3 |
| 11 | 119 | 40.3 | ⊥7. 6 | 45.1 | 17.0 | 4.8 | 15.7 | .3 |
| 12 | 54 | 26.5 | 19.1 | 34.0 | 14.1 | 7.5 | 10.9 | .7 |
| TOTAL | 10,005 | .33.4 | 15.6 | 41.1 | 15.6 | 7.7 | 15.0 | •5 |

^aAll mean differences were significant at $p \le .05$.

- The overall mean gain was 7.7 N.C.E.s.
- With the exception of grade ten, mean gains for all grade levels were approximately five N.C.E.s or above.
- The E.S.s of the mean gains were small and moderate.



 In general, and across all three CAT subtests, the mean gains of students in grades two through eight were higher than those of students in grades nine through twelve.



IV. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The Chapter I Corrective Reading Program was designed to provide supplemental reading and writing instruction to students with scores below grade level on standardized achievement tests. The program, which served 11,546 students in grades one through twelve in 238 nonpublic schools in New York City, used a diagnostic-prescriptive approach in which activities were designed to meet the needs of individual students. The main goal of the program was to help students achieve grade-level scores on standardized tests and perform well in their classes.

The instruction provided to Corrective Reading Program students varied according to grade level. The first-grade curriculum emphasized a reading readiness program. Instruction in grades two through eight focused on enriching language concepts and developing skills in decoding; word attack; and comprehension. At the secondary level, priority was given to reading and writing in the subject areas.

All members of the Corrective Reading Program staff participated in pre-service and in-service training. During 1985-86, staff development activities focused on using literature as the instructional base for reading and writing.

The purpose of this evaluation was to describe the implementation of the Corrective Reading Program and to assess the program's impact upon student achievement in reading. The



findings for 1985-85 summarized below show that the Corrective Reading Program was successful in improving the reading and writing performance of its participants.

The main conclusions of the evaluation are as follows:

- First-grade students made statistically significant mean gains on the Environment, Letters and Sounds, and Aural Comprehension subtests on the SESAT. Two of these mean gains met the program's criterion for success. The average mean gain for the Letters and Sounds subtest was below the criterion for program success and represented a small E.S.
- Overall, participating students in grades two through twelve made statistically significant mean gains in the Reading Comprehension, Language Mechanics, and Language Expression subtests of the CAT. In general, these mean gains were close to or met the criterion for program success.
- Across the three CAT subtests, students in grades two through eight performed better than did students in grades nine through twelve.

RECOMMENDATIONS

Based on these findings and other information presented in this report, the following recommendations are made:

- To improve first-grade students' skills in the recognition of letters and sounds, increase staff development in this area.
- To improve the performance of secondary school students, they should be scheduled for more than two sessions a week.



Brief Description of Chapter I Nonpublic School Reimbursable 1985-86 Programs

CORRECTIVE READING PROGRAM

The Chapter I Corrective Reading Program provides supplemental individualized instruction in reading and writing skills to Chapter I-eligible students who score below grade level in reading on standardized tests. The program's goal is to enable students to reach grade level and to perform well in their regular classrooms. The program uses a modified diagnostic-prescriptive approach. During 1985-86, program staff included one coordinator, two field supervisors, and 173 teachers who worked with 10,832 students in grades one through twelve at 238 schools.

READING SKILLS CENTER PROGRAM

The Chapter I Reading Skills Center Program provides supplemental individualized instruction in reading and writing skills to Chapter I-eligible students who score below grade level in reading on standardized tests. The program's goal is to enable students to reach grade level and to perform well in their regular classrooms. The program uses a modified diagnostic-prescriptive approach. One coordinator and 16 teachers worked with 510 students at nine schools.

CORRECTIVE MATHEMATICS PROGRAM

The Chapter I Corrective Mathematics Program provides remedial mathematics instruction to Chapter I students in grades one through twelve with diagnosed deficiencies in mathematics. The main goals of the program are to alleviate deficiencies in mathematical concepts, computation, and problem solving and to assist students in applying these concepts and skills in everyday life. One coordinator, two field supervisors, and 129 teachers served 8,825 students in 186 nonpublic schools.

ENGLISH AS A SECOND LANGUAGE (E.S.L.) PROGRAM

The Chapter I E.S.L. Program provides intensive English language instruction to Chapter I students whose first language is not English. The main goal of the program is to provide students with opportunities to use oral and written English in



APPENDIX A (Cont'd)

situations similar to those they might encounter in everyday life. The program in 1985-86 was staffed with one coordinator, two field supervisors, and 80 teachers. They provided services to 4,305 students in 111 nonpublic schools.

CLINICAL AND GUIDANCE PROGRAM

The Chapter I Clinical and Guidance Program consists of diagnostic services and counseling support for nonpublic school students enrolled in Chapter I remedial programs. Chapter I teachers refer students who show signs of social or emotional problems thought to inhibit academic performance. The Clinical and Guidance Program is seen as a service helping students to overcome obstacles standing in the way of better academic achievement. Program staff consisted of two coordinators, three field supervisors, 123 guidance counselors, 57 clinicians, and 23 social workers serving 10,533 students in 201 schools.

