A study evaluated the effectiveness of the 1994-95 Reading Recovery program as implemented in the Columbus, Ohio, public schools. The program featured individualized one-on-one lessons provided by 69 specially trained teachers serving 546 pupils. Data included results of administration of Metropolitan Achievement Tests and Scott Foresman text reading level testing. The treatment group consisted of the 237 pupils who were either discontinued (161) or received 60 or more lessons but not discontinued (76). Results indicated that (1) of the 237 treatment group pupils, 218 (92%) displayed over time each of the 3 strategic processing behaviors (monitoring reading, constructing meaning, and integrating sources of information); (2) of the 237 pupils in the treatment group retention data were available for 232 pupils; of these 232 pupils, 220 (94.8%) were not retained (criterion was 75.0%); (3) of the treatment group of 237 pupils, 209 (88.2%) read 5 or more books at text reading level 8 or above (criterion was 50.0%); (4) 4.6% of the 219 Total Reading evaluation sample students were at grade level, while 90% were below the 37th percentile and still eligible for Chapter 1 services; (5) of the 221 Reading Comprehension evaluation sample pupils, 8.1% were at grade level, while 80.5% were below the 37th percentile; (6) the average normal curve equivalent (NCE) score for the 219 Total Reading evaluation sample pupils was 31.2 NCEs, and the average NCE score for the 221 Reading Comprehension sample on the posttest was 35.5 NCEs; and (7) 648 different parents or guardians were involved in some way with the program. Findings suggest continuation of the program with attention given to 7 recommendations. (Contains 13 figures of data.)
Elementary and Secondary Education Act - Chapter 1

FINAL EVALUATION REPORT
1994-95

READING RECOVERY PROGRAM

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Elementary and Secondary Education Act - Chapter 1

FINAL EVALUATION REPORT
READING RECOVERY™ PROGRAM
1994-95

Executive Summary

Program Description: During 1994-95, the Reading Recovery program served 546 grade 1 pupils. The program was a joint effort of educators in the Columbus Public Schools, the College of Education of The Ohio State University, and the Ohio Department of Education and was funded by Elementary and Secondary Education (ESEA) - Chapter 1 monies.

The purpose of the Reading Recovery program was to provide early intervention to underachieving first grade pupils who appeared unlikely to learn to read successfully without additional reading instruction. The program featured individualized one-on-one lessons provided by specially trained teachers. The lessons were based on observational tasks designed to provide a comprehensive assessment of the pupil's development of reading and writing strategies.

During 1994-95, 69 teachers (37.3 FTEs - Full Time Equivalents) served pupils in 43 schools.

Time Interval: For evaluation purposes, the program started on September 22, 1994 and continued through May 12, 1995. Pupils included in the final analyses for Desired Outcomes 1, 2, and 3 must have received 60 or more instructional lessons or have been successfully discontinued (completed) from the program. To be included in the analysis of standardized test achievement, pupils must have received 60 or more instructional lessons or have been successfully discontinued, been English-speaking, and have had a valid posttest score on a nationally standardized achievement test.

Activities: To help pupils develop reading strategies, daily 30-minute individualized lessons included a variety of instructional activities such as reading and re-reading books while the teacher recorded pupil strategies and errors, writing and reading pupil stories, letter identification, and sound analysis of words.

Desired Outcomes: The evaluation design included three desired outcomes: (1) at least 50 percent of the pupils who had received 60 or more lessons or who were discontinued would display at least once throughout the treatment period each of three reading strategic processing behaviors; (2) at least 75 percent of the pupils who had received 60 or more lessons or who were discontinued would not be retained; and (3) at least 50 percent of pupils who received 60 or more lessons or who were discontinued would read at least five books at text reading level 8 (appropriate Scott Foresman text reading level for promotion to grade 2) or above.

Evaluation Design: In addition to the three desired outcomes, a major part of the evaluation effort was to be accomplished through the administration of the Metropolitan Achievement Tests, Level Primer, Form L, 1992 (MAT7) for spring testing. Analyses of the standardized test data included percentiles and average NCE scores. Although not part of the evaluation design, parent involvement data were also collected by program teachers. Locally constructed instruments were used to collect enrollment/attendance and parent involvement data. District computer files were used for retention data.

Major Findings: The Reading Recovery program served 546 pupils in 1994-95, with average pupil enrollment (days scheduled) of 60.9 days. Average pupil attendance (days served) was 53.8 days and the average number of instructional lessons was 43.3. The treatment group consisted of the 237 pupils (43.4% of those served) who were either discontinued (161) or received 60 or more lessons but not discontinued (76). Program developers have estimated that most pupils need approximately 60 lessons to complete the program. The number of lessons pupils received ranged from zero to 118. Of the treatment group pupils, 219 had valid MAT7 Total Reading scores, were English-speaking, and were included in the Total Reading evaluation sample and 221 had valid MAT7 Reading Comprehension scores, were English-speaking, and were included in the Reading Comprehension evaluation sample.
The three desired outcomes for the 1994-95 Reading Recovery program were met. Of the 237 treatment group pupils, 218 (92.0%) displayed over time each of the three reading strategic processing behaviors, including monitoring reading, constructing meaning, and integrating sources of information (criterion was 50.0%). Of the 237 pupils in the treatment group, retention data were available for 232 pupils. Of these 232 pupils, 220 (94.8%) were not retained (criterion was 75.0%). Of the 237 treatment group pupils, 209 (88.2%) read five or more books at text reading level 8 or above (criterion was 50.0%).

The percentages of the 219 Total Reading evaluation sample pupils who were at various percentile levels on the posttest were as follows: (a) 4.6% (10) were at the 50thile or above (grade level); and (b) 90.0% (197) were below the 37thile and still eligible for Chapter 1 services. Of the 10 pupils who reached the 50thile in Total Reading, eight (80.0%) were discontinued pupils and of the 197 pupils below the 37thile, 130 (66.0%) were discontinued pupils. Of the 221 Reading Comprehension evaluation sample pupils, 8.1% (18) were at the 50thile or above and 80.5% (178) were below the 37thile. Of the 18 pupils who reached the 50thile in Reading Comprehension, 12 (66.7%) were discontinued pupils and of the 178 pupils below the 37thile, 121 (68.0%) were discontinued pupils. The average NCE score for the 219 Total Reading evaluation sample pupils on the posttest was 31.2 NCEs, with discontinued pupils (148) having an average score of 32.6 NCEs and not discontinued pupils (71) having an average score of 28.3 NCEs. The average NCE score for the 221 Reading Comprehension evaluation sample pupils on the posttest was 35.5 NCEs, with discontinued pupils (149) having an average score of 35.7 NCEs and not discontinued pupils (72) having an average score of 35.1 NCEs.

Records of parent contacts and activities maintained by program teachers for the 546 pupils served indicated 648 different parents or guardians were involved in some way with the program. These 648 individuals made a total of 1790 contacts with program teachers. The 237 treatment group pupils represented 43.4% of the 546 pupils served, but represented 56.3% (1008) of the total number of contacts and 48.8% (316) of the individual parents or guardians involved in the program.
Recommendations

The Reading Recovery program has been continued during the 1995-96 school year, and it is recommended that it continue. With that in mind, the following recommendations are presented:

1. The process by which pupils with less than 60 lessons are transferred from the Reading Recovery program to the Early Literacy program needs to be closely monitored. During 1994-95, 43.4% (237) of the 546 pupils served were included in the treatment group. The small percentage of pupils included in the treatment group is directly related to transferring pupils from Reading Recovery to Early Literacy before the pupils received 60 lessons, which is the number of lessons needed to be included in the treatment group. If pupils are making progress in literacy acquisition, program teachers should make every effort to continue to serve them beyond 60 lessons.

2. Efforts should continue for exploring ways to minimize the amount of time needed to collect data on pupils served. Much teacher frustration exists because of the volume of record keeping required for the program. Teachers maintain records for both Columbus Public Schools and The Ohio State University College of Education. If both institutions used the same set of data, reporting by both institutions would be consistent and the amount of paperwork required of teachers reduced.

3. As increased parent involvement is regarded as one of the indicators of effective schools, every effort must be undertaken to promote parental involvement in the program, especially in the areas of planning, operation, and evaluation.

4. The earliest possible identification of pupils needing special education instruction should be emphasized. Pupils with special needs can be better served by teachers with expertise in specific special education areas. Reading Recovery is not a special education program. If pupils with special education are not identified early, they remain in the Reading Recovery program too long, creating frustration for both pupils and teachers.

5. The whole language instructional strategies and techniques used by program teachers need to be shared with and enhanced by the regular classroom teacher. The instruction provided by the program teacher and by the regular classroom teacher must complement each other. The academic achievement of pupils will suffer if they receive mixed messages in their reading and writing instruction. Opportunities must be made available for program teachers and regular classroom teachers to develop a consistent whole language based approach to instruction.

6. Inservice meetings should be continued to provide program teachers the opportunity to enhance their instructional intervention skills, to share instructional ideas with one another, and to clarify any concerns or misconceptions they may have about the total Reading Recovery program.

7. An on-going process of site visitations by the program evaluator needs to be continued. These visits provide invaluable information for the program evaluator in the areas of content and instruction and provide program teachers the opportunity to clarify questions they may have about evaluation requirements and record keeping. These visitations also help build a rapport between the program teacher and program evaluator.
FIGURE 1

Treatment group includes pupils who received 60 or more lessons or who were discontinued.
PERCENT OF PUPILS SERVED BY GENDER

<table>
<thead>
<tr>
<th></th>
<th>ALL PUPILS SERVED</th>
<th>TREATMENT GROUP</th>
<th>DISCONTINUED PUPILS</th>
</tr>
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<tr>
<td>FEMALES</td>
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<td>104</td>
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<td>MALES</td>
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<tr>
<td>% MALES</td>
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<td>56.1</td>
<td>55.9</td>
</tr>
<tr>
<td>TOTALS</td>
<td>546</td>
<td>237</td>
<td>161</td>
</tr>
</tbody>
</table>

**FIGURE 2**

Treatment group includes pupils who received 60 or more lessons or who were discontinued.
Nonblack includes Asian, Hispanic, Native American and White pupils. Treatment group includes pupils who received 60 or more lessons or who were discontinued.
Nonblack includes Asian, Hispanic, Native American and White pupils.

Treatment group includes pupils who received 60 or more lessons or who were discontinued.
PERCENTS OF PUPILS SERVED BY FREE OR REDUCED PRICE LUNCH STATUS

FIGURE 6
Treatment group includes pupils who received 60 or more lessons or who were discontinued.
The 161 discontinued pupils plus the 76 not discontinued pupils with 60 or more lessons comprise the treatment group.
FIGURE 8

The 161 discontinued pupils plus the 76 other pupils with 60 or more lessons comprise the treatment group.
Desired Outcome 1: At least 50 percent of the pupils who had received 60 or more lessons or who were discontinued will display evidence of each strategic processing behavior at least once during the treatment period when reading appropriate instructional text to the satisfaction of the Chapter 1 teacher.

Desired Outcome 2: At least 75 percent of the pupils who had received 60 or more lessons or who were discontinued will demonstrate satisfactory progress in the regular classroom as demonstrated by promotion to grade 2.

Desired Outcome 3: At least 50 percent of the pupils who had received 60 or more lessons or who were discontinued will read at least five books at text reading level 8 or above as certified by the Chapter 1 teacher.

The following chart (Figure 9) presents the analyses of the number and percent of treatment group pupils who met the performance criterion for Desired Outcomes 1, 2, and 3. The chart indicates the number of pupils in each treatment group, number of pupils meeting the performance criterion, and the percent of pupils meeting the performance criterion for each desired outcome.

Summary statements for pupils served in the Reading Recovery program:

> Of the 546 pupils served, 237 (43.4%) met a criterion to be included in the Desired Outcome 1 treatment group.
> Of the 237 Desired Outcome 1 treatment group pupils, 218 (92.0%) met the performance criterion for Desired Outcome 1, indicating the desired outcome was achieved.

> Of the 237 pupils who met a criterion to be included in the Desired Outcome 2 treatment group, 232 had available retention data. Of these 232 pupils, 220 (94.8%) were promoted to grade 2, indicating the desired outcome was achieved.

> Of the 237 pupils who met a criterion to be included in the Desired Outcome 3 treatment group, 209 (88.2%) met the performance criterion for Desired Outcome 3, indicating the desired outcome was achieved.

> All 161 discontinued pupils achieved Desired Outcome 1; of the 158 discontinued pupils with available retention data, 157 (99.4%) were promoted to grade 2; and 160 (99.4%) of the 161 discontinued pupils achieved Desired Outcome 3.
Of the 237 treatment group pupils, retention data (Desired Outcome 2) was available for 232 pupils.
Reading Recovery Program

Standardized Test Results

- Analyses of spring standardized test data (Metropolitan Achievement Tests, (MAT7) Level Primer, Form L, 1992) includes percentiles and average Normal Curve Equivalent (NCE) scores. In grade 1, pretesting does not occur but posttesting does. Therefore, no Total Reading or Reading Comprehension pretest-posttest change scores can be determined for grade 1 pupils.

- The following charts (Figures 10, 11, and 12) present standardized test results for grade 1 pupils served by the Reading Recovery program.

  > In Basic Skills (Total Reading), 10.1% (22) of the 219 evaluation sample pupils reached the 37%ile on the posttest, including 18 (12.2%) discontinued pupils and 4 (5.6%) not discontinued pupils.

  > In Advanced Skills (Reading Comprehension), 19.5% (43) of the 221 evaluation sample pupils reached the 37%ile on the posttest, including 28 (18.8%) discontinued pupils and 15 (20.8%) not discontinued pupils.

  > In Basic Skills (Total Reading), 4.6% (10) of the 219 evaluation sample pupils reached the 50%ile on the posttest, including 8 (5.4%) discontinued pupils and 2 (2.8%) not discontinued pupils.

  > Advanced Skills (Reading Comprehension), 8.1% (18) of the 221 evaluation sample pupils reached the 50%ile on the posttest, including 12 (8.1%) discontinued pupils and 6 (8.3%) not discontinued pupils.
The average NCE score for the 219 Total Reading evaluation sample pupils on the posttest was 31.2 NCEs, with discontinued pupils (148) having an average score of 32.6 NCEs and not discontinued pupils (71) having an average score of 28.3 NCEs.

The average NCE score for the 221 Reading Comprehension evaluation sample pupils on the posttest was 35.5 NCEs, with discontinued pupils (149) having an average score of 35.7 NCEs and not discontinued pupils (72) having an average score of 35.1 NCEs.
FIGURE 10

All (All Evaluation Sample Pupils); Disc (Discontinued Pupils in Evaluation Sample); Not Disc (Not Discontinued Pupils in Evaluation Sample).
FIGURE 11

All (All Evaluation Sample Pupils); Disc (Discontinued Pupils in Evaluation Sample); Not Disc (Not Discontinued Pupils in Evaluation Sample).
FIGURE 12

All (All Evaluation Sample Pupils); Disc (Discontinued Pupils in Evaluation Sample); Not Disc (Not Discontinued Pupils in Evaluation Sample).
Reading Recovery Program

Parent Involvement Information

- Records of parent contacts and activities were maintained by program teachers. The following chart (Figure 13) presents parent involvement information for all pupils served by the Reading Recovery program.
  > A total of 648 different individuals (parents, guardians) were involved with the Reading Recovery program.
  > Individuals involved in conferences (605) accounted for the greatest number of persons involved with the program.
  > The smallest number of individuals were involved with planning (16) and home visits (45).
  > A total of 1790 contacts were made with the 648 individuals involved with the Reading Recovery program.
  > Contacts involving individual conferences (1427) accounted for the greatest number of contacts with the program.
  > The smallest number of contacts with the program included planning (12) and home visits (70).
FIGURE 13

Total individuals is not additive across all activities as each individual may be involved in more than one activity.