ED 423 514   CS 013 283

TITLE   Reading Recovery Program 1996-97 Evaluation Report. Pamphlet
                98-C-002.
INSTITUTION   Department of Defense Education Activity, Arlington, VA.
PUB DATE   1998-01-06
NOTE   25p.
PUB TYPE   Reports - Research (143)
EDRS PRICE   MF01/PC01 Plus Postage.
DESCRIPTORS   *Early Intervention; *Instructional Effectiveness; Primary
                Education; *Reading Achievement; *Reading Improvement;
                Reading Research; *Remedial Reading
IDENTIFIERS   *Dependents Schools; *Reading Recovery Projects; TerraNova
                Multiple Assessments

ABSTRACT
         A study examined the effectiveness of Reading Recovery
programs at 36 Department of Defense Schools (DoDDS). Annually, approximately
500 "below grade level" students are given the opportunity to become
independent readers through this program. Major findings are: (1) Reading
Recovery students significantly outperformed students not in Reading Recovery
in both the reading and language arts subtests of the TerraNova Multiple
Assessments; (2) on both subtests, significant differences were found between
Reading Recovery students and the control group students for the Black,
White, and Multiethnic student samples; (3) on average, Reading Recovery
students scored in Quartile 3 on the reading subtest, while those students
not in Reading Recovery scored in Quartile 2; (4) whether students
participated in Reading Recovery or not had a determining effect on reading
scores, while ethnicity and economic status did not; and (5) second grade
students discontinued from Reading Recovery in first grade maintained average
reading achievement in second grade. Recommendations include: continue and
expand the program; use Reading Recovery to narrow the achievement gap; and
implement a longitudinal study of the impacts of Reading Recovery on
students' reading achievement throughout elementary school. (Contains nine
tables and four figures of data; an appendix lists Reading Recovery and
control schools.) (RS)

Department Of Defense
Education Activity

Research & Evaluation
Branch

Reading Recovery Program
1996-97 Evaluation Report

Pamphlet 98-C-002

January 6, 1998

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READING RECOVERY PROGRAM
1996-97 EVALUATION REPORT
Executive Summary

Department of Defense Education Activity (DoDEA)
Research and Evaluation Branch

Program Description

Reading Recovery is a program designed to improve students' reading and writing ability. Delivered in the first grade for those students selected as "below grade level" (usually the lowest 20% of the class), students are pulled out of the regular classroom for 30-minute tutoring sessions by highly trained Reading Recovery teachers. These teachers work with the students for periods of 12 to 20 weeks, on average.

The Department of Defense Dependents Schools (DoDDS) first implemented the Reading Recovery Program during the 1993-94 school year at the DoDDS-Lakenheath, Okinawa, Mannheim and Kaiserslautern sites. During that school year, approximately fifty trained Reading Recovery teachers implemented the program. Implementation continues in Europe and the Pacific. Thirty-six elementary schools implemented Reading Recovery during the 1996-97 school year.

DoDDS currently has four teacher leaders who were trained by The Ohio State University and who monitor the program in Europe and the Pacific as well as train Reading Recovery teachers. Annually, approximately 500 DoDDS students are given the opportunity to become independent readers through this program.

Major Findings

I. Reading Recovery students significantly outperformed those not in Reading Recovery in both the reading and language arts subtests of the TerraNova Multiple Assessments.

II. On both the reading and language arts subtests of the TerraNova Multiple Assessments, significant differences were found between the Reading Recovery students and the control group students for the Black, White and Multi-ethnic student samples.

III. On average, Reading Recovery students score in Quartile 3 on the reading subtest of the TerraNova Multiple Assessments, while those students not in Reading Recovery scored in Quartile 2.

IV. Whether students participated in Reading Recovery or not, had a determining effect on reading scores. Ethnicity and economic status did not.

V. Second grade students discontinued from Reading Recovery in first grade maintained average reading achievement in second grade.

Recommendations

- Continue implementing the Reading Recovery Program.
- Expand the Reading Recovery Program into targeted schools.
- Use Reading Recovery as a strategy for narrowing the achievement gap.
- Form a task group to study expansion issues and plans.
- Replicate this study with a new cohort of Reading Recovery and control group students.
- Implement a longitudinal study of the impacts of Reading Recovery on students' reading achievement throughout elementary school.
- Ensure that all data collection techniques include an accurate Primary Key for each record in order to link multiple data files.

Annual Cost

The Reading Recovery Program is budgeted approximately $200,000 annually, an average per pupil expenditure of $400.

DoDEA
Reading Recovery
Evaluation Report
1996-97

Background

The Department of Defense Dependents Schools (DoDDS) first implemented the Reading Recovery Program during the 1993-94 school year at the DoDDS Lakenheath, Okinawa, Mannheim and Kaiserslautern sites. During that school year, approximately fifty trained Reading Recovery teachers implemented the program. Implementation continues in Europe and the Pacific. Thirty-six elementary schools implemented Reading Recovery during the 1996-97 school year. See Appendix A for a list of the schools.

DoDDS currently has four teacher leaders who were trained by The Ohio State University and who monitor the program in Europe and the Pacific as well as train Reading Recovery teachers. Annually, approximately 500 DoDDS students are given the opportunity to become independent readers through this program.

Program Description

Reading Recovery is an early intervention program designed to improve students' reading and writing ability. Delivered in the first grade for those students selected as "below grade level" (usually the lowest 20% of the class), students are pulled out of the regular classroom for daily, 30-minute one-on-one tutoring sessions by highly trained Reading Recovery teachers. These teachers work with the students for periods of 12 to 20 weeks, on average.

Each Reading Recovery lesson follows a standard lesson format that is individualized for each student. According to Pinnell, et. al., a Reading Recovery lesson resembles "a lap story in which the parent and the child are involved in a collaborative literacy activity focusing on meaning and learning detail in the process. The teacher and the child sit side by side, reading and writing collaboratively" (p. 283). Each lesson begins with the student reading a familiar story, one in which the student selects and has had success reading. The student then reads the text from the end of the previous day's lesson. During this reading, the teacher takes a "running record" of the child's reading, observing and noting self-corrections, substitutions, omissions, and insertions. When the child is finished, the teacher synthesizes the child's reading behaviors, hypothesizing about the child's use of strategies. S/he then decides which areas would be the most powerful learning experience for the child and begins there. In some instances the teacher works on letter/sound identification or writing activities. The lesson always ends with the student reading new material.

Reading Recovery teachers are extensively trained. Teacher leaders, who train RR teachers, are required to participate in a yearlong training program at The Ohio State University or at an accredited teacher leader training site. They must take a sabbatical leave from their current

position to attend this training. Depending upon the school system, most continue on the district's payroll at a percentage of their annual salary. When they finish the OSU program, they are certified to train other teachers in the Reading Recovery methodologies. To keep their certification current, teacher leaders are required to attend an annual Reading Recovery Conference and Teacher Leader Institute. The Reading Recovery Council of North America (RRCNA) is the governing body for certification and answers questions about Reading Recovery issues.

Teachers who wish to become Reading Recovery teachers must participate in a yearlong training program, which is held after hours, allowing them to continue teaching their regular schedule. Typically, the training program begins with a one-time, 30-hour workshop before the regular school year begins. They learn to administer and score the *Diagnostic Survey Test* (Clay, 1985), currently titled, *The Observation Survey*, which is the instrument used to select students for the Reading Recovery Program (Pinnell, et. al., 1990). Because this training is given before school starts in the fall, the teachers use the observation survey in their classrooms to identify students needing Reading Recovery services. The teachers in training then teach these students throughout the school year using Reading Recovery lessons. The teachers attend one 3-hour training session each week in the evenings. During these sessions they learn the basic components of a Reading Recovery lesson as well as experience "teaching behind the glass," a unique component of Reading Recovery. Three times throughout the training year, teachers are required to bring a student to their training session. These students participate in a Reading Recovery lesson with their teacher, in front of a one-way glass window. The other teachers in the class sit on the other side of the glass; they observe, discuss and problem solve throughout the lesson and then hold a discussion when the lesson is completed. Reading Recovery teachers who master this program are "certified." This certification is valid as long as they continue to teach 4 students daily in Reading Recovery and attend continuing contact sessions. Those who leave Reading Recovery can seek special permission to tutor one child in Reading Recovery. Teachers who leave Reading Recovery for more than 2 years must retake the yearlong training program to become recertified.

The success rate of Reading Recovery is about 80%. That is, 80% of the students selected into the program are "discontinued," which means the student is reading and writing independently at the first grade level. Of those who are not discontinued, many do not need additional support. However, some may be referred to other support services, such as compensatory education or special education programs.

Although each child is different, and the program has no specific time requirement, "previous experience and research indicated that 60 lessons comprise the <u>minimum</u> amount of time that could be considered a program in Reading Recovery. Some students will take longer than that period to achieve success (be discontinued); others will be discontinued within a shorter time; however, 60 lessons represents a good estimate of the average time needed for a program (Powell, 1996).

Methodology

Evaluation studies of this nature are typically designed to determine if there is a difference between students who enroll in a program versus those who do not. This study is no different; some additional areas of interest were included. The evaluation consisted of eight questions:

1) Is there a difference between the Reading Recovery and control group students' TerraNova Multiple Assessments reading and language arts scores?
2) Is there a difference between the TerraNova Multiple Assessments reading score distributions for the Reading Recovery and the control students?
3) What effect did ethnicity or economic status have on the Reading Recovery and the control group students' scores?
4) Is there a significant difference within each ethnic group between Reading Recovery and control group students' reading scores?
5) Is there a significant difference within each ethnic group between Reading Recovery and control group students' language arts scores?
6) What reading achievement gains do the Reading Recovery students exhibit in the classroom?
7) Do Reading Recovery students maintain their level of achievement through second grade?
8) What annual costs are involved in implementing the Reading Recovery Program?

To answer these questions, data were gathered from various sources. Achievement test scores for both reading and language arts were obtained through an administration of the TerraNova Multiple Assessments (CTBS McGraw-Hill) to first and second grade students. This assessment was chosen because it is the system-wide assessment for DoDDS at grades 4, 6, 8, and 10. Each year, the teacher leaders are required to submit data to The Ohio State University pertaining to each student enrolled in the Reading Recovery Program. These data were used to answer those questions pertaining to Reading Recovery students' classroom achievement. Financial information was obtained through the four teacher leaders and DoDEA Headquarters to obtain expenditures and budget information for implementing the Reading Recovery Program on a yearly basis. Demographic information was also obtained through the DoDDS data collection system, SIMS (Student Information Management System).

Two groups of students were compared in this study, those who participated in the Reading Recovery Program and those who did not (control group). During the 1996-97 school year, the Reading Recovery Program was implemented in 36 elementary schools throughout the DoDDS school system. The control group was taken from 22 DoDDS schools in which no known formal treatment was offered other than regular classroom reading instruction at the first grade. The control group schools were selected based on their demographics and populations which resembled as best as possible, the 36 Reading Recovery schools. See Appendix A for a list of the control schools. Once the 22 schools were identified, the first grade teachers were asked to select the lowest 20% of their students, which is comparable to the selection process used by the Reading Recovery teachers. In all, 407 first grade students, Reading Recovery and control group, were tested with the reading and the language arts TerraNova Multiple Assessments subtests.

Results

Evaluation Question 1: *Is there a difference between the Reading Recovery and control group students' TerraNova Multiple Assessments reading and language arts scores?*
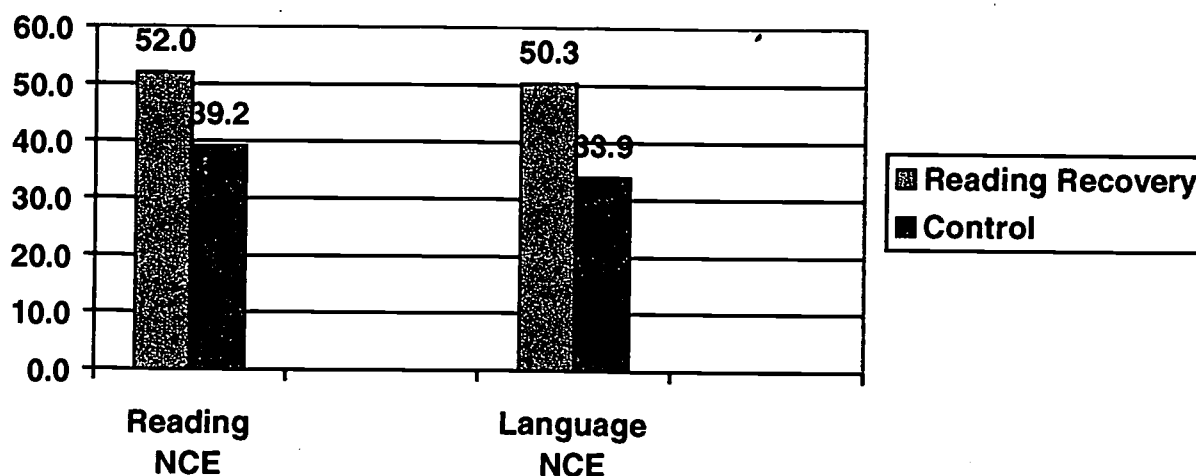
On average, Reading Recovery students scored higher than control group students in both reading and language arts.

Reading Recovery and control group students' mean NCE scores on the reading and language arts subtests of the TerraNova Multiple Assessments are shown in Table 1 and Figure 1. The Reading Recovery students' mean NCE score was 52.0, which is in Quartile 3. The control group students' score was in Quartile 2, with an NCE of 39.2. The difference between these two means, 12.8, was found to be statistically significant ($F=48.53$, $df=1$, 282, $p<.000$). On the language arts test a statistically significant difference was found as well ($F=85.66$, $df=1$, 282, $p<.000$).

Table 1
Mean NCE Scores for Reading Recovery and Control Group Students
Reading and Language Arts

	Reading Recovery (N=164)	Control (N=120)	Difference
Reading NCE	52.0	39.2	12.8
Language Arts NCE	50.3	33.9	16.4

Figure 1
Mean NCE Scores for Reading Recovery and Control Group Students
Reading and Language Arts

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Evaluation Question 2: *Is there a difference between the TerraNova Multiple Assessments reading score distributions for the Reading Recovery and the control students?*

On average, Reading Recovery students score in Quartile 3, while control group students score in Quartile 2.

The numbers in Table 2 show the quartile distributions of the Reading Recovery and the control group students as they scored on the reading test. Also provided in the table are the expected frequencies, that is, the number of students who should have scored in each quartile had no treatment been given. Note that a larger proportion of Reading Recovery students scored in Quartiles 3 and 4 than was expected by chance, while a smaller proportion scored in Quartiles 1 and 2. The reverse was true for the control group students; a larger proportion of students scored in Quartiles 1 and 2 and a smaller proportion scored in Quartiles 3 and 4 than would have been expected by chance. A Chi-square analysis determined that the distribution of scores for the two groups was significantly different than would have been expected given chance or no treatment (X^2=42.2, df=1, 3, $p<$ .000).

Table 2
Numbers of Students Scoring in Each Quartile
Reading Recovery and Control Group Students
TerraNova Multiple Assessments Reading Subtest

Quartile	Reading Recovery		Control Group	
	Observed	Expected	Observed	Expected
4	9	6	1	4
3	81	59	21	43
2	65	81	76	60
1	9	18	22	13

Note.   Quartile 1 equals NCE scores ranging from 1-25.
Quartile 2 equals NCE scores ranging from 26-50.
Quartile 3 equals NCE scores ranging from 51-75,
Quartile 4 equals NCE scores ranging from 76 to 99.

Evaluation Question 3: *What effect did ethnicity or economic status have on the Reading Recovery and the control students' scores?*

Whether students participated in Reading Recovery or not, had a determining effect on reading scores. Ethnicity and economic status did not.

By adding ethnicity and economic status (as measured by sponsor rank) into the regression equation, the results indicated that neither of these factors had a significant effect on the results of the reading test; only program membership had a significant effect. These results are shown in Table 3. Further analyses are needed to determine whether other factors had an effect on the difference between the Reading Recovery and control students' mean scores.

Table 3
Regression Results for Reading NCE Scores

	Sum of Squares	Df	Mean Square	F	Significance
Reading Recovery	11550.05	1	11550.05	48.53	.000
Residual	67116.13	282	238		
Total	78666.18	283			

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Evaluation Question 4: *Is there a significant difference within each ethnic group between Reading Recovery and control students' reading scores?*
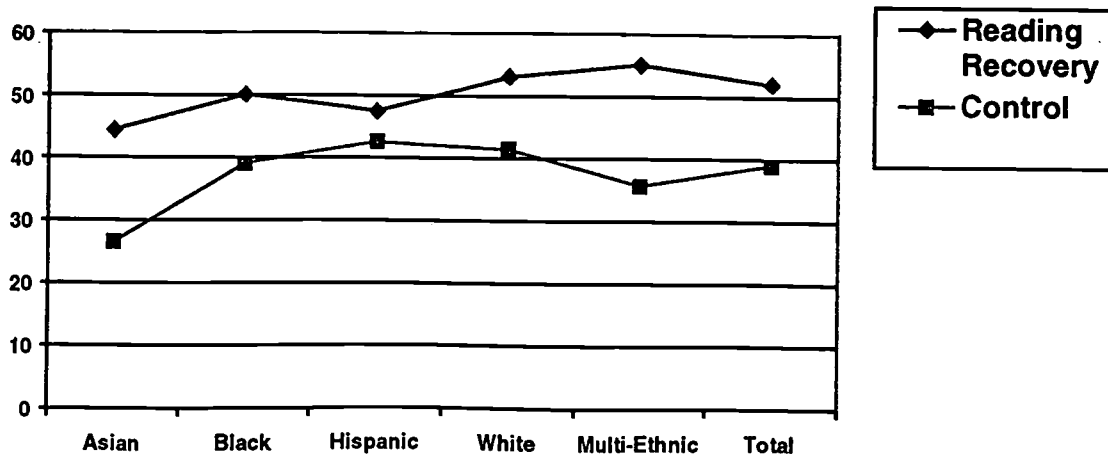
Reading Recovery students scored higher than control students within each ethnic group on the reading test.

Table 4 shows the mean reading NCE scores for each ethnic group. Note that the means were higher for the Reading Recovery students than for the control students within each ethnic group. Figure 2 shows the means across ethnic groups for the two programs. The lines are nearly parallel; the Reading Recovery students' line was higher at each point. Statistical tests between the two programs within each ethnic group resulted in significance for Blacks ($F=4.38$, $df=1, 4$), Whites ($F=14.76$, $df=1, 4$) and Multi-ethnic students ($F=14.04$, $df=1, 4$). No significant difference was found between the Reading Recovery and control students for the Asian and Hispanic ethnic groups. This outcome may have been a result of small group size.

Table 4
Mean Reading NCE Scores by Ethnicity

	Reading Recovery		Control		Difference
Asian	44.4	n=5	26.5	n=4	17.9
Black	50.1	n=34	39.1	n=25	11.0
Hispanic	47.5	n=14	42.6	n=14	4.9
White	53.1	n=79	41.5	n=48	11.6
Multi-Ethnic	55.1	n=22	35.7	n=23	19.4

Figure 2
Mean Reading NCE Scores by Ethnicity
Reading Recovery and Control Group Students

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Evaluation Question 5: *Is there a significant difference within each ethnic group between Reading Recovery and control students' language arts scores?*
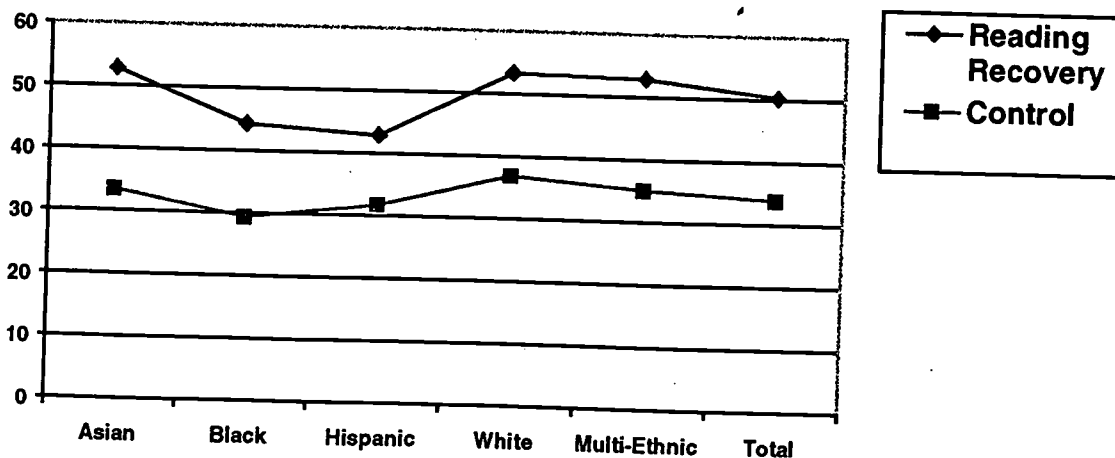
Reading Recovery students scored higher than control students within each ethnic group on the language arts test.

In Table 5, the language arts mean NCE scores are shown by ethnicity. Again, the Reading Recovery students scored higher than did the control students for each ethnic group. Figure 3 shows the differences between the two programs across the ethnic groups on the language arts subtlest. The lines are nearly parallel, with the Reading Recovery students' line higher across all ethnic groups.

Table 5
Mean Language Arts NCE Scores by Ethnicity

	Reading Recovery		Control		Difference
Asian	52.8	N=5	33.5	n=4	19.3
Black	44.3	n=34	29.4	n=25	14.9
Hispanic	42.9	n=14	31.7	n=14	11.2
White	53.3	n=79	36.9	n=48	16.4
Multi-Ethnic	52.9	n=22	35.1	n=23	17.8

Figure 3
Mean Language Arts NCE Scores
Ethnicity for Reading Recovery and Control Group Students

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Evaluation Question 6: *What reading achievement gains do the Reading Recovery students exhibit in the classroom?*

By the end of the school year, 93% of the discontinued students moved into a higher reading group in their classroom.

During the 1996-97 school year, 508 students participated in the Reading Recovery Program in DoDDS. Of the 508 students enrolled in Reading Recovery during the 1996-97 school year, 313 students (62%) had participated in sixty-lessons, the other 195 students had not yet participated in sixty lessons. Of these 313 students, 88% were discontinued. In other words, 275 students were reading and writing independently at the first grade level even though they were previously considered "low ability, at-risk readers." The other 12% were either placed in special education, moved or withdrew.

The classroom effect of this program is shown in Table 6. Students who were discontinued went back into their classrooms and continued to participate in the classroom reading groups without additional support from Reading Recovery. Two hundred forty-five students had information pertaining to their reading group status at both the beginning and end of the year. Ninety-three percent of these students were moved into a higher reading group by the end of the school year than their original placement at the beginning of the year.

Table 6
Reading Group Placement of Discontinued Reading Recovery Students

Beginning of Year	End of Year				
	Low	Lower Middle	Upper Middle	High	TOTAL
Low	14	90	75	37	216
Lower Middle	1	12	15	0	28
Upper Middle	0	3	0	0	3

Evaluation Question 7: *Do Reading Recovery students maintain their level of achievement?*

Reading Recovery students in all ethnic groups who were discontinued from Reading Recovery in first grade have maintained an average level of reading and language arts achievement.

Students in the second grade who were discontinued from Reading Recovery in the first grade were tested using the TerraNova Multiple Assessments. These students' NCE scores for the reading and language arts subtest are given in Table 7. Although no comparisons can be made as no control group was tested, the data show that the Reading Recovery students have maintained an average level of reading and language arts achievement.

Table 7
Mean NCE Scores for Second Grade Discontinued Reading Recovery Students
Reading and Language Arts

	Reading Recovery (N=147)
Reading NCE	48.4
Language Arts NCE	46.7

Table 8 shows the second grade students' data broken out by ethnic group. The mean scores for each ethnic group are average; all groups scored above 40.0 on both the reading and language arts subtests.

Table 8
Mean NCE Scores for Reading and Language Arts
Discontinued Reading Recovery Second Grade Students

|	Reading		Language Arts	
Asian	51.2	n=4	53.7	n=4
Black	47.0	n=29	45.3	n=29
Hispanic	49.2	n=8	40.2	n=8
White	48.8	n=72	46.1	n=72
Multi-Ethnic	49.5	n=24	50.2	n=24

Evaluation Question 8: *What annual costs are involved in implementing the Reading Recovery Program?*

Annually the Reading Recovery Program costs approximately $200,000. The average cost per pupil is $400.

The cost of the Reading Recovery Program is very complex. Because the cost of implementing the program evolves over the years, it is difficult to analyze the direct costs of the program. Because start-up costs are not usually considered as recurring costs of the program they will not be included in this report. The recurring, maintenance costs of the Reading Recovery Program are those associated with certification of the teacher leaders, materials and supplies for training new Reading Recovery teachers and implementing the program with students, and continuing contact hours for teachers.

During the 1996-97 school year, the four teacher leaders' expenses totaled approximately $200,000 of which 100% is DoDEA directed money. The school districts incur small costs if any. The largest expenditure for this program during the 1996-97 school year was the area conference held in Wiesbaden, Germany as part of the continuing contact that the teachers are required to have each year. The conference held in 1996-97 is not an annual event. However, money would be needed for either the conference or additional Temporary Duty Travel (TDY) to meet the requirements for continuing contact hours. With the high cost of travel throughout the DoDDS districts and areas, the teacher leaders spend a large portion of the Reading Recovery funds covering their continuing contact hours with teachers. Figure 4 shows how this money was divided during 1996-97. Table 9 provides specific dollar amounts.

Figure 4
1996-97 Reading Recovery Expenditures
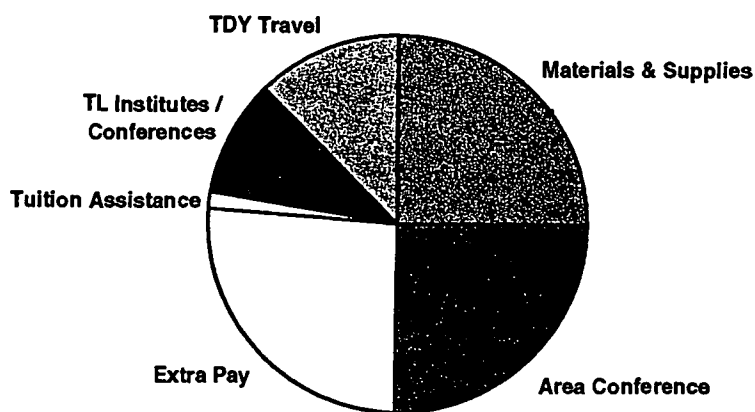
Table 9
1996-97 Reading Recovery Expenditures

	Money Spent	
Materials & Supplies	$50,000	25%
Area Conference	$50,000	25%
Early Return to Work*	$36,000	18%
TDY Travel for Continuing Contacts	$25,000	13%
TL Institutes	$20,000	10%
Extracurricular Pay*	$16,000	8%
Tuition Assistance	$3,000	2%
TOTAL	$200,000	100%

*Combined in Figure 4 as "Extra Pay."

The DoDDS Reading Recovery Program serves about 500 students, a number that has remained steady for more than two years. Based on the above figure for the program, the per pupil cost of Reading Recovery is approximately $400. Another way to look at the expenditures of the Reading Recovery Program is that the typical Reading Recovery student had 15 weeks of instruction in 1996-97 before s/he was discontinued. This means that each child spends approximately 40 hours in Reading Recovery.

Implications

The results shown here indicate that the Reading Recovery Program has a positive effect on first grade students' reading achievement. The difference between the Reading Recovery and control groups' mean scores clearly demonstrates that the Reading Recovery Program teaches low-ability readers to read at the first grade level. The Program is non-ethnic group sensitive, i.e., each ethnic group benefits from Reading Recovery, as evidenced by the spanning of these results across ethnic groups.

The high language arts scores show clear evidence that the Reading Recovery Program is a reading *and* writing program. This additional impact might be a crucial factor when making decisions to use either Reading Recovery or a remedial reading intervention with fewer budgetary demands.

The results shown here for the second grade students imply that those students who are discontinued from the Reading Recovery Program are able to maintain an average level of reading and language arts achievement. This spans over all ethnic groups.

The cost of an ongoing Reading Recovery Program is about $400 per student. When compared to the high cost of serving one child in special education or a remedial reading program for 6 to 12 years, these Reading Recovery dollars are negligible. These Reading Recovery dollars are also quite small when considering the effect of teaching a child a life-long skill in the time equivalent of one adult work-week.

Limitations of the Study

Even though the results reported here are positive, a few considerations should be taken. First, the number of students included in the analyses was not the total number of students associated with the Reading Recovery Program or the control group. Due to mismatches between databases, a loss of approximately 150 students occurred. The effect on the results of losing these students is unclear.

Furthermore, the conclusions drawn from this study were further reduced by the inability to relate the Reading Recovery students' standardized test scores with their data collected by The Ohio State University. Thus, important information pertaining to the Reading Recovery Program, i.e. number of lessons received or number of weeks enrolled, could not be associated with the test data. This limits the relationships that can be made, thus limiting conclusions that could be drawn. Studies such as this require accurate source data that have unique records with a common Primary Key for easy merging. Stronger conclusions can then be drawn.

Summary and Recommendations

In the DoDEA Community Strategic Plan, Goal 3, Benchmark 1 states, "By the year 2000, student learning in reading [and] language arts ... will increase across all levels of achievement." Results reported throughout this study make the Reading Recovery Program a viable and valid strategy in reaching this goal. The differences reported in this study between students in Reading Recovery and those not in the program are significant, both educationally and statistically, while extending from the whole group to each ethnic group in both reading and language arts. In addition to improving standardized test scores, the Reading Recovery Program impacts placements in classroom reading groups as well.

Benchmark 4 of Goal 3 states, "By the year 2000, the achievement gap between racial/ethnic/gender groups and the DoDEA total student group will be narrowed by 50%.... in Reading [and] Language Arts...". Figures 2 and 3 show that the difference between reading and language arts scores for the Reading Recovery and control students is consistent across ethnic groups. These findings indicate that Reading Recovery is an educationally sound methodology for reaching this benchmark.

Based on the results of this study, the following recommendations should be taken into consideration.

⇨ **Continue implementing the Reading Recovery Program.** Those schools and districts that currently implement the program should continue to implement it. Clearly, the results shown here validate the Program's role in teaching low-ability readers to improve their reading and writing skills and become independent readers.

⇨ **Expand the Reading Recovery Program into targeted schools.** Due to the simultaneous impact in language arts that Reading Recovery has on students, the expansion of this program into other schools within DoDEA would serve multiple purposes, including, but not limited to, achieving Goals 3.1 and 4.3 of the DoDEA Community Strategic Plan.

⇨ **Use Reading Recovery as a strategy for narrowing the achievement gap.** Ethnic group differences between those in Reading Recovery and those not in the program are significant.

⇨ **Form a task group to study expansion issues and plans.** Because of the many issues involved in expanding this program, a well-thought out design is needed to further enhance the benefits that can be derived from the program.

⇨ **Replicate this study with a new cohort of Reading Recovery and control group students.**

⇨ **Implement a longitudinal study of the impacts of Reading Recovery on students' reading achievement throughout elementary school.**

⇨ **Ensure that all data collection techniques include an accurate Primary Key for each record in order to link multiple data files.** This safeguard will allow all data sources to be merged without the loss of data or records. Relationships can then be made which will contribute to stronger conclusions.

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Appendix A

Reading Recovery Schools
1996-97

Alconbury Elementary School
Aukamm Elementary School
Babenhausen Elementary School
Bad Kissengen Elementary School
Bad Kreuznach Elementary School
Bamberg Elementary School
Bob Hope Elementary School
Butzbach Elementary School
Darmstadt Elementary School
Edward C. Killin Elementary School
Feltwell Elementary School
Hainerberg Elementary School
Halvorsen Tunner Elem/Middle School
Illeshiem Elem/Middle School
Kadena Elementary School
Kaiserslautern Elementary School
Kinser Elementary School
Lakenheath Elementary School
Landstuhl Elementary School
Mannheim Elementary School
Mark Twain Elementary School
Naples Elementary School
Neubreucke Elementary School
Patrick Henry Elementary School
Ramstien Elementary School
Rota Elementary School
Schweinfurt Elementary School
Sembach Elem/Middle School
Sigonella Elementary School
Shape Elementary School
Stearley Heights Elementary School
Vogelweh Elementary School
William C. Bechtel Elementary School
Wuerzberg Elementary School
Zukeran Elementary School

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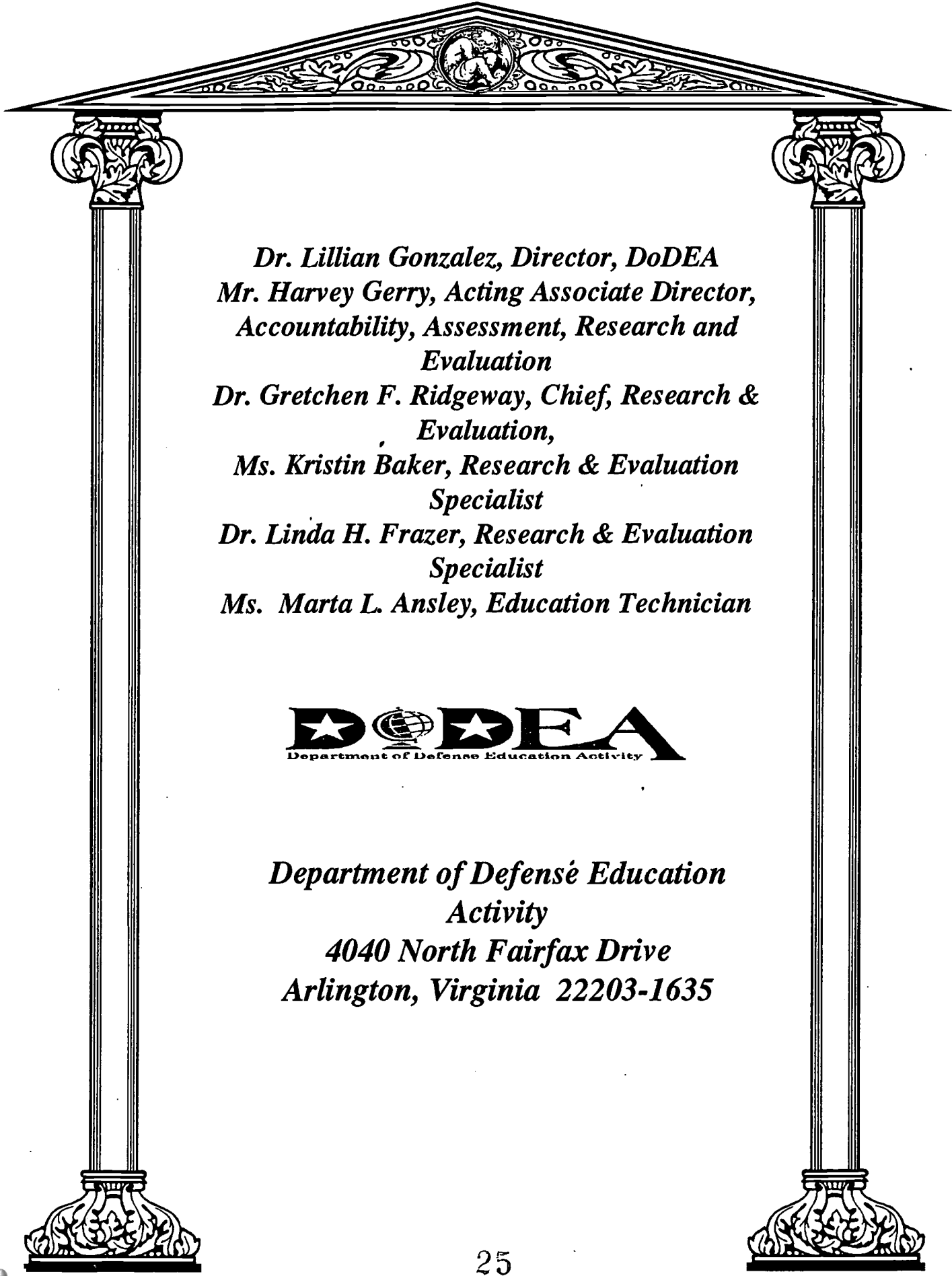
Control Schools
1996-97

AFCENT Elementary School
Argonner Elementary School
Arnn Elementary School
Aviano Elementary School
Balboa Elementary School
Bitburg Elementary School
Byrd Elementary School
Cummings Elementary School
Curundu Elementary School
Gelnhausen Elementary School
Gaeta Elementary School
Hohenfels Elementary School
Lajes Elementary School
La Maddalena Elementary School
A. T. Mahan Elementary School
Pirmasens Elementary School
Seoul Elementary School
Taegu Elementary School
West Ruislip Elementary School
Wetzel Elementary School
Worms Elementary School

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Appendix B

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Dr. Lillian Gonzalez, Director, DoDEA
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