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#### ABSTRACT

Since July 1971, the Educational Testing Service has planned and conducted a study of compensatory reading programs in United States public schools. This document, an addendum to the final report for phase two of the study, includes a discussion of the relationship of classroom observations and effectiveness in the phase two sample of noteworthy schools, a description of the study conducted in the summer of 1973, and an appendix containing questionnaires for administrators and teachers in the summer-program survey. Forty-six tables of findings are included. (JM)

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ADDENDUM I

TO THE

FINAL REPORT, VOLUME I

Contract No. OEC-0-71-3715

#### A DESCRIPTIVE AND ANALYTIC STUDY OF

COMPENSATORY READING PROGRAMS

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Educational Testing Service Princeton, N. J.

The research reported herein was performed pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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February 1976

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## Acknowledgment

The project is indebted to Dr. Thomas J. Quirk, who directed the development of the Student and Teacher

Observation Scales.

#### Chapter I: THE RELATIONSHIP OF CLASSROOM OBSERVATIONS AND EFFECTIVENESS IN THE "NOTEWORTHY" SAMPLE

Observational data were obtained from a group of schools supplementary to the 1972-1973 sample. The selection of these "noteworthy" schools is described in the Final Report, Volume I, pp. 34-35. The development and characteristics of the Student and Teacher Observation Scales are described in the Final Report, Volume I, pp. 26-31, and in three published monographs.<sup>1,2,3</sup>

The reading achievement and attitude toward reading measures administered to the entire 1972-1973 sample of schools were also administered to the "noteworthy" sample, which included 23 Title I funded schools out of a total of 34. Thus it was possible to obtain correlations, using the class mean as the unit of analysis, between the proportion of time spent in various teacher and student activity categories and the class achievement and attitude effectiveness indices. Although the classroom observers coded individual student (and teacher) behavior, it was on a time-sampling basis. Thus the smallest unit for which valid observational measurements were obtained was the class. It was, however, possible to classify each student within each class as either CR or NCR, thereby enabling the computation of correlations between obscrvational variables and both CR and NCR effectiveness. These correlations were obtained, separately for CR and NCR data, after removing the effects of the pretest and the pretest squared from both posttest and the observational variables.

For the Teacher Observations, correlations were obtained separately within each of the 330 cells of the following factorial design:

Quirk, Thomas J., Nalin, Katherine B., and Weinberg, Susan F. <u>The</u> <u>Development of a Teacher Observation Instrument for Reading Instruction</u> PR-73-39, ETS, June 1973.

<sup>2</sup>Quirk, Thomas J., Weinberg, Susan F., and Nalin, Katherine B. <u>The</u> <u>Development of a Student Observation Instrument for Reading Instruction</u>. PR-73-38, ETS, June 1973.

Quirk, Thomas J., Trismen, Donald A., Weinberg, Susan F., and Nalin, Katherine B. <u>The Classroom Behavior of Teachers and Students During</u> <u>Compensatory Reading Instruction</u>. PR-74-5, ETS, September 1973.

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Grade (2, 4, 6) Student status (CR/NCR)

Mode of Instruction (teacher-talk, other adult-talk, studenttalk, machine, and no-talk)<sup>1</sup>

Content of Instruction (comprehension, pronunciation and word recognition, language structure, reading silently, spelling, listening instruction, non-reading instruction, management instruction, positive feedback, negative feedback, extraneous)<sup>2</sup>

For the Student Observations, correlations were obtained separately within each of the 288 cells of the following factorial design:

Grade (2, 4, 6)

Student status (CR/NCR)

Group of Instruction (teacher, other adult, peer, alone)<sup>3</sup> Content of Instruction (comprehension, pronunciation and word recognition, language structure, reading silently, spelling, writing, listening instruction, non-reading instruction, management instruction, positive feedback, negative feedback, extraneous)<sup>4</sup>

Observer reliabilities for the student observational variables, as determined on the last day of training, were as follows:<sup>5</sup> reliabilities for the Group of instruction ranged from .81 to 1.0 with a median coefficient of .96; for the Content of instruction, the reliabilities ranged from .67 to .99 with a median coefficient of .90; for the Group-Content dimensions, the reliabilities ranged from .62 to .99 with a median coefficient of .86. Reliabilities for the Teacher observational variables were as follows:<sup>6</sup> reliabilities for the Mode of instruction ranged from .79 to .99 with a median coefficient of .94; for the Content of instruction, the reliabilities ranged from .54 to .98 with a median coefficient of .88; for the Mode-Content dimensions, the reliabilities ranged from .63 to .98 with a median coefficient of .85

<sup>1</sup>see Quirk et al., <u>The Classroom Behavior of Teachers and Students</u> <u>During Compensatory Reading Instruction</u>. PR-74-5, ETS, September 1973, pp. 5-6 for a description of Modes of Instruction <sup>2</sup>see Quirk et al., pp. 6-10 for a description of Content of Instruction <sup>3</sup>see Quirk et al., pp. 32-33 for a description of Group of Instruction <sup>4</sup>see Quirk et al., pp. 33-43 for a description of Content of Instruction <sup>5</sup>see Quirk et al., pp. 38-40 for a fuller explanation <sup>6</sup>see Quirk et al., pp. 12-15

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Analyses of variance were performed for the following comparisons, using as the dependent variables the correlation (transformed to Fisher's z coefficient) of (a) reading achievement effectiveness<sup>1</sup> and (b) attitude toward reading effectiveness<sup>1</sup> with the proportion of time spent in each of the activities defined by the above mentioned cells:

- 1. CR/NCR x teacher content of instruction, separately by grade
- CR/NCR x teacher mode of instruction, separately by grade

3. grade x teacher content of instruction, separately by CR/NCR

4. grade x teacher mode of instruction, separately by CR/NCR

5. CR/NCR x student content of instruction, separately by grade

- 6. CR/NCR x student group of instruction, separately by grade
- 7. grade x student content of instruction, separately by CR/NCR
- grade x student group of instruction, separately by CR/NCR

Table 1 shows the results of these analyses, in the order of the comparisons listed above.

<sup>1</sup>Effectiveness, for this analysis, was defined as posttest score, with the effects of pretest and pretest squared removed.

## <u>Table 1</u>

-4-

#### Analyses of Variance of the Correlation Between Observational Variables and Effectiveness in the "Noteworthy" Sample

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Prop. Total

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Grade 2

•••

Dependent Variable	Independent Variables	F	D.F.	Variance Ex- plained by Independent Variable
Correlation with Reading Achieve-	CR/NCR	NS	1	
ment Effectiveness	Teacher content( of instruction	IC) NS	10	
	CR/NCR x TC	NS	10	•
	CR/NCR	NS	1 1	
	Teacher mode (TM) of instruction	NS	4	
	CR/NCR x TM	6.4 <sup>3</sup>	4	.19
Grade 4	• ,			
Correlation with	CR/NCR	NS ·	1	
Reading Achieve- ment Effectiveness	TC	2.3 <sup>1</sup>	10	.19
ment Briedliveness	CR/NCR x TC	NS	. 10	
	CR/NCR	NS	1	алан алан алан алан алан алан алан алан
	ТМ	2.6 <sup>1</sup>	4	.09
	CR/NCR x TM	NS	4	
Grade 6		· .	•	
Correlation with	CR/NCR	NS	1 .	
Reading Achieve- ment Effectivenesc	TC	2.3 <sup>1</sup>	10 ,	.19
	CR/NCR x TC	2.2 <sup>1</sup>	10	.16
•	CR/NCR	NS	1	• •
· · · · ·	TM	NS	4	
	CR/NCR x TM	NS	4.	
CR Effectiveness		•		•
Correlation with	Grade	NS	2	•
Reading Achieve- ment Effectiveness	TC	2.9 <sup>2</sup>	10	.16
	Grade X TC	NS	20	· · ·



			·~			
Table 1 (cont.)			· •			
	Grade	NS	2		<b>.</b>	
	TM	NS	4	,	.*	•
· ·	Grade x TM	NS	8	~		
NCR Effectiveness	•					E.
Correlation with	Grade	NS	2			
Reading Achieve- ment Effectiveness	TC	NS	10			*****
	Grade x TC	1.9 <sup>2</sup>	20	.20		
	Grade	NS	2			•
, · · · ·	TM	NS	4			
	Grade x TM	2.8 <sup>2</sup>	8 *	.13		
<u>Grade 2</u>			<b>F</b>	•		4
Correlation with	CR/NCR	NS	1		-	11 - 14 
 Reading Achieve- ment Effectiveness	Student content of instruction	(SC) NS	11			1
	CR/NCR x SC	NS	11			•
	CR/NCR	4.1 <sup>1</sup>	1	.03		
	Student group ( of instruction		3	.31		· · · ·
	CR/NCR x SG	11.23	3	.18		
Grade 4				.10		
Correlation with	CR/NCR	NS	1			
Reading Achieve- ment Effectiveness	SC	NS	11			
ment Effectiveness	CR/NCR x SC	NS	11			•
	CR/NCR	NS	1			· .
и .	SG	12.8 <sup>3</sup>	3	. 29		•
	CR/NCR x SG	9.03	3	.17		
Grade 6				· /		
Correlation with	CR/NCR	NS	1			
Reading Achieve- ment Effectiveness	SC	NS	11 •		•	
ment Briedliveness	CR/NCR x SC	NS	11			•
	CR/NCR	NS	1			
х	SG	NS	3			
•	CR/NCR x SG	NS	3	•		
	•					10 - 1 10 - 1
					•	~ •

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	Table 1 (cont.)					· ·
	CR Effectiveness		• •	· ·	. •	.:
	Correlation with	Grade	NS	. 2		a
	Reading Achieve- ment Effectiveness	SC	2.2 <sup>3</sup>	11	.16 •	
		Grade x SC	NS	22		
		Grade	NS	2		
		SG	NS	3		•
	. · ·	Grade x SG	2.6 <sup>3</sup>	6	.10	
	NCR Effectiveness					4
	Correlation with	Grade	NS	2		
	Reading Achieve- ment Effectiveness	SC	NS .	11		· ·
		Grade x SC	NS	22		
		Grade	3.3 <sup>1</sup>	. 2	.04	
•		SG	7.63	3	.14	te de la companya de La companya de la comp
		Grade x SG	7.3 <sup>3</sup>	6	.21	•
• .	Grade 2	· ·				
	Correlation with Attitude Effective-	CR/NCR	NS	1		•
	ness	TC	NS	10	•,	
		CR/NCR x TC	NS	10		
		CR/NCR	NS	1		
		TM	4.9 <sup>3</sup>	4	.16	
		$CR/NCR \times TM$	2.5 <sup>1</sup>	4	.08	
	Grade 4		_			
	Correlation with	CR/NCR	4.4 <sup>1</sup>	1	.03	
	Attitude Effective- ness	TC	2.9 <sup>2</sup>	10	.21 ,	
		$CR/NCR \times TC$	NS	10		· · ·
		CR/NCR	NS	1		
		TM	NS	4	•	
	· .	CR/NCR x TM	NS	4		
	Grade 6					
	Correlation with	CR/NCR	NS	1		
	Attitude Effective- ness	TC	2.0 <sup>1</sup>	10	.17	
		$CR/NCR \times TC$	2.3 <sup>1</sup>	10	.17	

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			•		· · · · · · · · · · · · · · · · · · ·		· · ·
	•	25				N. A	ta set
	•					•	6
	Table 1 (cont.)			•			. *
	and the second	CR/NCR	NS	· 1 ··			· · ·
		ТМ	NS	. 4	· ·		• •
		CR/NCR x TM	NS	4	• •	н	
	CR Effectiveness						ı
	Correlation with	Grade	NS	2			· .
	Attitude Effective-	TC ·	NS	. 10			
	ness	Grade x TC	2.4 <sup>2</sup>	20	. 24		
		Grade	NS	2	• <b>•</b> •		
	•	ТМ	NS	. 4			
	: ·	Grade x TM	NS	8	•		
	NCR Effectiveness	Grade x In	142	0			
	Correlation with	Grade	NO	0		•	
	Attitude Effective-		NS 2.2 <sup>1</sup>	. 2			
	ness	TC		10	.15	i	
		Grade x TC	1.81	20	.18		·
*		Grade	NS	,			
** -		ТМ	NS				
		Grade x TM	NS				`
	Grade 2						
	Correlation with	CR/NCR	NS	1			
	Attitude Effective- ness	SC	NS	11			
		CR/NCR x SC	NS	11			•
		CR/NCR	NS	1			- <b>.</b>
		SG	2.8 <sup>1</sup>	3	.08	•	•
		CR/NCR x SG	NS	3			
	Grade 4						
	Correlation with	CR/NCR	NS	1			
	Attitude Effective-	SC	NS	11			
	ness	CR/NCR x SC	NS	1,1			
		CR/NCR	NS ,	1			
		SG	11.1 <sup>3</sup>	т З	70		
	۰. ۱	CR/NCR x SG	$3.5^{1}$	3	.27		
	Grade 6	ON HON X DG	ر . ر	J	.08		
	· · · · · · · · · · · · · · · · · · ·						
	Correlation with Attitude Effective-	CR/NCR	NS	1			
	ness	SC	NS	11			
							,



. .

	CR/NCR x SC	NS	· 11	
	CR/NCR	NS	1	
· .	SG	NS	3	
	CR/NCR 🕱 SG	NS	3	
CR Effectiveness				
Correlation with	Grade	NS	2	·
Attitude Effective- ness	SC	NS	11	
	Grade x SC	NS ·	22	
	Grade	3.4 <sup>1</sup>	2	.03
	SG	9.9 <sup>3</sup>	3	.17
	Grade x SG	2.2 <sup>1</sup>	6	.07
NCR Effectiveness	ч <sup>1</sup> . 	••••		
Correlation with	Grade	5.7 <sup>2</sup>	2	.07
Attitude Effective- ness	SC	NS	11	
	Grade x SC	NS	22 .	
	Grade	5.5 <sup>2</sup>	2	.07
· ,	SG	NS	3	
	Grade x SG	NS	6	

Examination of Table 1 reveals numerout significant relationships at both the main effect and interaction levels. In the discussion to follow, significant differences at the main effect level are interpreted only when the accompanying interaction is non-significant.

Cell Means For Statistically Significant Main Effects and Interactions

In grade 2, a significant interaction is shown between CR/NCR and teacher mode of instruction. Table 2 shows the CR/NCR x TM mean correlations (all analyses were performed on correlation coefficients transformed to Fisher's z coefficient; the means in the following tables have been retransformed into correlation coefficients).

-8-



	(A	Achievement	Effectiveness	5)	•
					· · ·
3	. 4	Talk	•	•	
	Talk	ц.	Ik	•	
	. ยี ม่จะเ	[ubA	t Tal	ບ	<u>.</u>
	iche	ler	ident	hin	Tall
	Tea	Oth	Stu	Mach	No
CR	04	. 09	02	.04	12
NCR	<b>13</b>	22	06	. 03	.16

Table 2	
Grade 2 CR/NCR x TM Interacti (Achievement Effectivene	

Figure 1 shows graphically the CR/NCR x TM interaction of Table 2. The interaction is represented by the differences among the five patterns of the paired histograms.

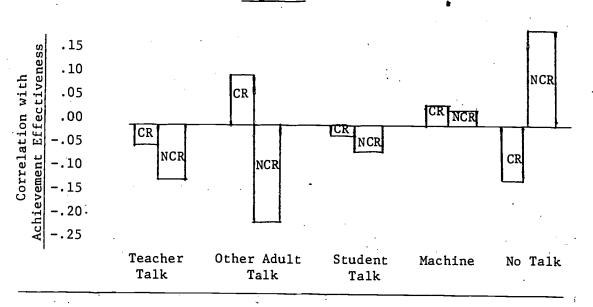


Figure 1

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<u>ند.</u> منهور Inspection of Figure 1 (and Table 2) shows that the difference between the "Other Adult Talk" and "No Talk" patterns (they are virtually opposites) is a major influence contributing to the CR/NCR x Teacher Mode of Instruction interaction. It seems that achievement of CR students is positively associated with talk by adults other than the teacher (e.g., teacher aides) and negatively associated with an absence of talk, while the reverse is true for NCR students.

Table 3 shows means for the Teacher Content of Instruction main effect in grade 4.

#### Table 3

Grade 4 TC Main Effect Means (Achievement Effectiveness)

Comprehension	.02
Pronunciation and Word Recognition	06
Language Structure	.14
Reading Silently	12
Spelling	.09
Listening Instruction	.06
Non-Reading Instruction	09
Management Instruction	05
Positive Feedback	04
Negative Feedback	07
Extraneous	.03

Reference to Table 3 shows the Teacher Content of Instruction categories of Language Structure and Spelling to have relatively large positive relationships to reading achievement effectiveness, and Reading Silently and Non-Reading Instruction to have relatively large negative relationships to reading achievement effectiveness.

Following are tables showing cell means for all the remaining significant interactions and all significant main effects unconfounded by significant interactions.

Table	4
	_

-11-

## Grade 6 CR/NCR x TC Interaction Means (Achievement Effectiveness)

	CR	NCR
Comprehension	.02	.29
Pronunciation and Word Recognition	11	18
Language Structure	.24	19
Reading Silently	02	.02
Spelling	27	14
Listening Instruction	18	04
Non-Reading Instruction	.07	17
Management Instruction	.08	.20
Positive Feedback	02	16
Negative Feedback	06	18_
Extraneous	12	.04

# <u>Table 5</u>

CR TC Main Effect Means (Achievement Effectiveness)

Comprehension	.05
Pronunciation and Word Recognition	15
Language Structure	.15
Reading Silently	01
Spelling	12
Listening Instruction	09
Non-Reading Instruction	10
Management Instruction	.03
Positive Feedback	.02
Negative Feedback	07
Extraneous	07

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## <u>Table 6</u>

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## NCR Grade x TC Interaction Means (Achievement Effectiveness)

· · · · · · · · · · · · · · · · · · ·	Grade 2	Grade 4	Grade 6
Comprehension	02	.02	.16
Pronunciation and Word Recognition	.01	06	15
Language Structure	.06	.14	.03
Reading Silently	00	12	00
Spelling	01	• 09	21
Listening Instruction	13	.06	11
Non-Reading Instruction	22	09	-:05
Management Instruction	.05	<b></b> 05	.14
Positive Feedback	.06	04	09
Negative Feedback	03	07	12
Extraneous	05	.03	04

## Table 7

1	NCR Grade x TM Intera (Achievement Effec		
Teacher Talk	G <u>rade 2</u> 09	$\frac{\text{Grade } 4}{02}$	<u>Grade 6</u> 05
Other Adult Talk	07	02 .06	09
Student Talk	04	.04	.02
Machine	.04	07	01
No-Talk	.02	06	06

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•	Grade 2 CR/NCR x SG Interaction Means (Achievement Effectiveness)	
	CR	NCR
Teacher	.16	25
Other Adult	.15	.70
Peer	21	06
Alone	18	.00

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### Table 9

-13-

# Grade 4 CR/NCR x SG Interaction Means (Achievement Effectiveness) • .

		<u>_CR</u>	NCR
Teacher	• •	.01	.05
Other Adult		.15	.84
Peer		08	44
Alone			14
		m.	/

## Table 10

CR SC Main Effect Means (Achievement Effectiveness)

Comprehension	.09
Pronunciation and Word Recognition	.34
Language Structure	07
Reading Silently	07
Spelling	00
Writing	.33
Listening Instruction	18
Non-Reading Instruction	02
Management Instruction	17
Positive Feedback	06
Negative Feedback	08
Extraneous	

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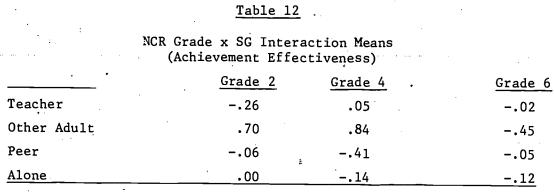
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•	(Achievement Effe		: :
<u> </u>	Grade 2	Grade 4	<u>Grade 6</u>
Teacher	16	.01	11
Other Adult	.15	.15	.01
Peer	21	08	.33
Alone	18	07	04

20

CR Grade x SG Interactio Mo 220





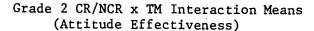
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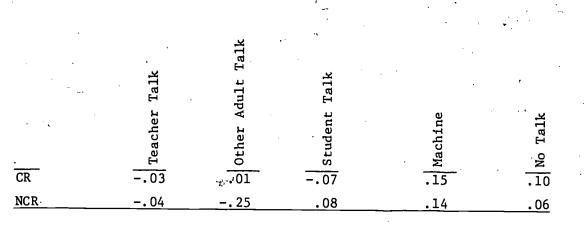
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Grade 4 CR/NCR Main Effect Means (Attitude Effectiveness)

CR	01	•
	and the second	
 NCR	.07	

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## Table 15

-15-

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Grade 4 TC Main Effect Means (Attitude Effectiveness)

Comprehension .	· · ·	.15
Pronunciation and Word Recognition		.11
Language Structure		01
Reading Silently	•	.07
Spelling		02
Listening Instruction	· · · · · · · · · · · · · · · · · · ·	.07
Non-Reading Instruction	·	.19
Management Instruction		.10
Positive Feedback	· ·	.05
Negative Feedback	. •	.00
Extraneous	<u> </u>	17

#### Table 16

Grade 6 CR/NCR x TC Interaction Means (Attitude Effectiveness)

· · · · · · · · · · · · · · · · · · ·	,	
	CR	NCR
Comprehension	01	.01
Pronunciation and Word Recognition	01	.10
Language.Structure	07	42
Reading Silently	.23	34
Spelling	•04	.27
Listening Instruction	12	.21
Non-Reading Instruction	.21	.09
Management Instruction	.01	09
Positive Feedback	30	03
Negative Feedback	.03	.16
Extraneous	11	30



· · · ·	Tab.	Le 17		
Grade	6 CR/NCR x 3 (Attitude 1	IM Intera Effective	ction Means ness)	· · · ·
••••••			• • • • • • • • • • • • • • • • • • •	
	ralk		4	•
Talk	ult .	<b>Talk</b>	·	•
her	r Adı	ent	Ine	Talk
ſeacl	)the	; Stude	fach:	No T <sub>é</sub>
07	06			
.00	06	05 .00	.09	10 .04
		Grade 6 CR/NCR x 7 (Attitude 1 Her Halk Junt	Attitude Effective Attitude Effective Attitude Lacker Student Talk Student Talk 000 000 100 100 000 100 100 10	Grade 6 CR/NCR x TM Interaction Means (Attitude Effectiveness)

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## Table 18

CR Grade x TC Interaction Means (Attitude Effectiveness)

Comprehension	<u>Grade 2</u> 08	Grade 4 .17	<u>Grade 6</u> 01
Prorunciation and Word Recognition	.03	.21	01
Language Structure	.01	16	07
Reading Silently	01	.02	.23
Spelling	00	17	.04
Listening Instruction	03	.08	12
Non-Reading Instruction	08	.03	21
Management Instruction	.19	10	.01
Positive Feedback	.01	.04	31
Negative Feedback	.07	03	.03
Extraneous		19	11

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Tab	le	19

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NCR Grade x TC Interaction Means (Attitude Effectiveness)

*** A set a strange of the set	· · · · · · · · · · · · · · · · · · ·		
	Grade 2	<u>Grade 4</u>	<u>Grade 6</u>
Comprehension	.23	.12	.01
Pronunciation and Word Recognition	29	.01	.10
Language structure	.04	.14	42
Reading silently	05	.12	34
Spelling	01	.14	.27
Listening Instruction	00	.06	.21
Non-Reading Instruction	.17	.33	.09
Management Instruction	.02	11	09
Positive Feedback	07	.06	03
Negative Feedback	11	.04	.16
Extraneous •	.02	15	30

#### Table 20

Grade 2 SG Main Effect Means (Attitude Effectiveness)

Teacher	.00
Other Adult	.17
Peer	01
Alone	04

#### Table 21

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Grade 4 CR/NCR x SG Interaction Means (Attitude Effectiveness)

	CR	NCR
Teacher	.40	.22
Other Adult	.14	.31
Peer	16	<del>-</del> .25
Alone	29	.10

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CR Grade x SG Interaction Means (Attitude Effectiveness)

	• • • • • • • • • • • • • • • • • • • •		
•	Grade 2	Grade 4	<u>Grade 6</u>
Teacher	.11	•40	.21
Other Adult	.21	.14	25
Peer	.06	16	26
Alone	13	29	22

#### Table 23

#### NCR Grade Main Effect Means (Attitude Effectiveness)

Grade	2.	00
Grade	4 · · ·	.10
Grade	6	29

#### Relationships to Achievement Effectiveness

In general, the foregoing achievement results are characterized by interaction effects. Relatively few main effects unconfounded by accompanying interaction effects were significant. In particular, the CR/NCR comparison showed no significant differences, but served to moderate relationships among Teacher Content of Instruction, Teacher Mode of Instruction, and Student Group of Instruction categories. Teacher Content and Teacher Mode both had several relationships to effectiveness, but of the two corresponding <u>student</u> variables, student <u>Group</u> showed by far the largest number of relationships. Examination of the relevant means tables suggests a greater effectiveness of the "Other Adults" group with NCR students in grade 4, and an increasingly beneficial effect of peer group interaction at the higher grade levels.

## Relationships to Attitude Effectiveness

As was pointed out with regard to achievement effectiveness, interactions are a prominent part of the entire picture of relationships to attitude effectiveness, either as effects by themselves or as confounding influences on main effects. Teacher Content of

Instruction seems to be a more frequent component of significant comparisons than does Teacher Mode of Instruction. As was the case with achievement effectiveness, Student Group of Instruction seems a more influential variable than does Student Content of Instruction. The CR/NCR distinction enters into relatively few significant comparisons, almost always as an interaction component. The trend noted with respect to achievement effectiveness of the beneficial effect of the "Other Adults" group with NCR students is also apparent in the attitude effectiveness data at grade 4.

The picture presented by the preceding tables and discussion is one of complexity, of interdependencies among what is being said, who is saying it, and in what social context it is being uttered. Because of this complexity, any generalization should be undertaken and considered only with great caution. Nevertheless, it does seem that relationships can be shown between observations of classroom activities and achievement and attitude effectiveness. Still more tentatively it appears that with respect to both achievement and attitude effectiveness, the composition of the group within which a student receives his instruction is more influential than is the content of that instruction. However, with respect to attitude effectiveness only, the content of instruction seems to be a more frequent influence than the source (teacher, "other adult," etc.) of that instruction.

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#### Chapter II: THE SUMMER STUDY

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Preliminary screening questionnaires were sent in April 1973 to the 141 schools in the Phase II sample which had indicated in their Principal Questionnaire that they would or might have a summer reading program in 1973. The purpose of the screening questionnaire was to obtain a more recent determination of which schools were planning to have or participate in a summer program, and to obtain a small amount of program descriptive information from those that were. Two screening questionnaires were not returned. Of the 139 that were, 61 (44%) reported that they would not offer a summer program, 25 (18%) that they still did not know at that time whether they would offer a summer program, 9 (7%) that they would offer a summer program but did not wish to participate in the summer study, and 44 (32%) that they would offer a summer program and were willing to participate in the summer study. Of the 25 "do not know" schools, 13 eventually offered a summer program, but were too late to be included in the summer study. Of the 44 schools that were willing to participate in the summer study, 7 were eliminated because their program included too few students for meaningful analysis, and 10 were eliminated for miscellaneous reasons, leaving a total of 27 participants. All 27 returned summer study questionnaires, but 2 schools did not provide usable student achievement and attitude scores, and were therefore excluded from analyses of those data.

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<u>Summer Study Schools vs. all other Phase II Schools</u>. It is of interest to compare the 25 schools which participated in the summer study and produced usable, complete data with the 233 Phase II schools which, for a variety of reasons described above, did not. Table 24 shows mean values for each of the two groups for a variety of descriptive continuous variables measured during the 1972-1973 school year.

Table 24

Comparisons of Summer Study and Non-Summer Study Schools: Continuous Variables

		Grad	Grade 2			Grac	Grade 4			Gra	Grade 6	· •
	Summer	mer	Non-Summer	ummer	Sum	Summer	Non-S	Non-Summer	Sum	Summer	Non-Summer	ummer
	Study	dy	Study	dy	Study	dy	Scudy	dy	Study	dy	Study	dy
	(N=25	25)	(N=233)	33)	-N)	(N=25)	(N=233)	33)	=N)	N=25)	(N=233)	33)
Variable	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Phase II Achievement Effectiveness	0.11	5.08	0.03	4.53	-0.53	3.29	0.08	4.4	-0.28	3.57	-0.05	3.38
SES Index	0.18	1.56	0.17	1.20	0.18	1.56	0.17	0.17 1.20		1.56	0.18 1.56 0.17 1.20	1.20
Teacher Experience	0.26	0.78	0.06	0.67	-0.08	0.55	0.01	0.70		0.85	0.26 0.85 0.15 0.82	0.82
Teacher Satisfaction with Administration	0.74	0.99	0.18	0.83	0.24	0.97	0.20	96.0	0.50	0.50 0.83	-0,05 0.88	0.88
Teacher Attitude Toward Academic Capabilities of Disadvantaged Children	0.36	1.00	0.21	0.94	0.36	0.98	0.22	1.02	-0.05	0.66	0.02	0.97
% CR Students	.38	30	37	33	38	30	35	31	37	32	31	31

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Examination of the Summer Study/Non-Summer Study differences relative to their standard deviations shows that Teacher Experience in grade 2 and Teacher Satisfaction with the Administration in grades 2 and 6, all higher for Summer Study schools, are worthy of some note.

In addition, the two groups of schools were compared in terms of several categorical variables, also measured during the 1972-1973 school year. Table 25 shows the resulting response frequency distributions. These variables are descriptive of the school as a whole, and are therefore not shown separately by grade.

Examination of Table 25 shows few differences between summer study and non-summer study schools with respect to enrollment or percent white or Caucasian students. However, there seems to be a tendency for the summer study schools to be located more frequently (relative to non-summer study schools) in the suburbs and to be funded more frequently by Title I during the regular school year.

Another way of assessing the differences between the summer study and non-summer study schools is to compute 95% confidence intervals within which the summer study achievement means would fall if summer data had been available for the non-summer study schools. This kind of analysis has been described in the Phase I Report, pages 17-29, and the Final Report, Volume I, pages 37-41. Table 26 shows the obtained confidence intervals and bias estimates for each reading achievement score. Since all the obtained confidence intervals are relatively large, only the results for relatively small values of the subjective coefficients  $\theta_1$  and  $\theta_2$  ( $\theta_1 = \theta_2 = .10$ ) are given. ( $\theta_1$  is a subjective coefficient of variation representing the degree to which the regression coefficients of the non-summer study group differ from those of the summer study group.  $\theta_2$  is a subjective coefficient of variation representing the degree to which the summer study and nonsummer study reading achievement means would differ if their predictor variables distributions were identical. It is thus an index of the predictive importance of all unmeasured independent variables.) The predictor variables used were school SES, enrollment, and percent white or Caucasian.

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Comparisons of Summer Study and Non-Summer Study Schools: Categorical Variables

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	an a		mer		Summer
<u>Variable</u>	Categories	Freq.	Schools %	Freq.	
School en-	Less than 100	1	4 ·	7	3.1
rollment	100-299	2	8	45	19 <b>.</b> 8 <sup>.</sup>
	300-499	12	48	73	32.2
	500-699	6	24	68	30.0
	700–899	2	8	16	7.0
	900 or more	2	8	1.8	7.9
% White or	None	1	4	0	0.0
Caucasian Students	1-10%	1	4	13	5.7
	11-50%	2	8	23	10.0
	51-90%	6	24	66	28.8
	91-100%	15	60	127	55 <b>.</b> 5
Urbanicity	Large city, over 500K	0	0	. 3	1.6
	Large city, <b>2</b> 00-500K	0	0	12	6.5
• •	Suburb of a large city	4	21	20	10.8
	Rural area near a large city	1	5.3	24	12.9
	Middle-size city, 50-200K	0	0	13	7.0
	Suburb of a middle-size city	10	52.6	63	33.9
	Rural area near middle-size cit	y 0	0	8	4.3
	Small city or town, < 50K	1	5.3	12	6.5
· .	Rural area, not near city	3	15.8	31	16.7
Funding	Total Title I	10	40	78	33.8
•	Partial Title I	5	20	16	6.9
	Non-Title I	2	8	27	11.7
	NCR School	8	32	110	47.6



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Table 26

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Bias Analyses: Summer Study Schools vs. Non-Summer Study Schools

			Turd 4 - 4 - 4 - 4		DEW Confidence I	Latour Louis
	Readi	oummer otudy Reading Achievement Raw Score	rreutctors/ Criterion Multiple		Estimated Total Group Reading Achievement Mean	toence interval around ed Total Group Reading Achievement Mean
Grade	Test	Mean	Correlation	% Bias	Upper Limit	Lower Limit
2	Coop. Primary Reading	30.9	.56	06	43.2	18.5
	MAT Word Knowledge	29.9	.77	15	35.8	24.0
	MAT Sentences	10.3	.68	- 06	12.4	8.2
	MAT Stories	19.6	.58	11	27.0	12.1
	MAT Réading	29.9	.63	-,09	42.3	17.4
	MAT Total	59.8	.69	12	83.8	35.7
     	Battery Total			10	<u>151.0</u>	
4	Coop. Primary Reading	34.5	.56	18	44.9	24.0
	MAT Word Knowledge	. 31.1	.48	00	47.5	14.6
	MAT Reading	22.3	.41	+.25	37.2	7.6
	MAT Total	53.3	.45	+.10	107.1	-0.3*
, 1 1 1	Battery Total				<u>184</u> .1	8.5*
.9	STEP Reading	34.8	.49	44	56.5	12.9
	MAT Word Knowledge	39.9	.77	45	49.2	30.3
	MAT Reading	29.5	.68	49	41.4	17.4
	MAT Total	69.5	.73	47	102.9	35.4
	Battery Total	104.1	.64	45	204.3*	3.0
*Negat:	*Negative means or means above the	e possible score	range are a	possible p	product of this an	analysis.

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The entries in the "% Bias" column of Table 26 are relatively small. They are to be interpreted in the following manner: e.g., "for grade 2, we estimate that the Cooperative Primary Reading mean for the combined summer study/non-summer study group would have been .06% lower <u>if</u> the summer achievement data for the non-summer study group had been included."

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Examination of the obtained 95% confidence intervals shows them to be very large. From this result it can be concluded that, with respect to Summer 1973 reading achievement scores, the summer study schools are importantly different from the remainder of the Phase II sample. The predominantly negative sign of the various % bias estimates indicates that, in general, summer study schools have higher estimated achievement scores than do the other Phase II schools.

<u>Summer Study Schools vs. schools which refused to participate in</u> <u>the summer study and schools which were excluded because of too few</u> <u>participants</u>. Comparisons were made of the 25 summer study schools with the 9 schools which offered a summer program but refused to participate in the summer study, and with the 7 schools which were eliminated because their program included too few students for meaningful analysis. Table 27 shows mean values for each of these three groups for a variety of descriptive continuous variables measured during the 1972-1973 school year.

Comparing the summer study schools first to those schools which refused participation, examination of Table 27 shows the latter to be less effective at grade 2, but more effective at grade 6. The schools which refused also seemed to have higher proportions of CR students in grades 2 and 4, but a lower proportion in grade 6. The summer study schools were of lower socioeconomic status, and had more experienced teachers in grade 2. Teachers in the summer study schools expressed greater satisfaction with the administration in grade 2, and better attitudes toward the academic capabilities of disadvantaged children in grades 2 and 4.



	Comparisons of Summer Study'Schools, Schools Which Refused to Participate in The Summer Study, and	Schools Which Were Eliminated Because of Too Few Participants: Continuous Variables	
•	Ö		

	Pev	Students	1	S.D.	2.88	0.77	1.58		0.43			25
	Too Fev	Stud	(N=7)	Mean	1.90	0.77	0.73		0.26			45
Grade 6		sed	(6	S.D.	4 80	1.10	0.84	0.95	0.85			30
Gra		Refused	(6=N)	Mean	1.76	0.59	0.24		0.13			31
	Summer	dy	(N=25)	S.D.	3.57	1.56			0.66	•		32
	Sum	Study	=N)	Mean	-0.28	0.77 0.18	0.26		-0.05			37
	Few	Students	()	s.D.	3.17	0.77	0.87	1.24	0.64 -0.05	·		34
•	Too Few	Stud	(/=N)	Mean	0.59	0.77	0.58	0.45	0.61			29
Grade 4		sed	6	s.D.	3.45	1,10	0.60	0.66	0.39			36
Gra		Refused	(6=N)	Mean	3.29 -0.51	1.56 0.59	0.55 -0.18	0.97 0.08	0.12			50
	Summer	dy	25)	s.D.	3.29	1.56		0.97	0.98			30
	Sur	Study	(N=25	Mean	-0.53	1.10 0.77 0.77 0.18	0.25 -0.08	0.29 -0.18 0.42 0.24	0.36 0.98			38
	Too Few	Students	(7)	Mean S.D.	2.41 -0.10 3.97 -0.53	0.77	0.25	0.42	0.55			39
	Too	Stud	(l=1)	Mean	-0.10	0.77	0.64 0.50	-0-18	0.85 -0.02			38
tde 2	. •	Ised	<u>.</u> ز	S.D.	2.41	1.10	0.64	0.29	0.85	•		38
Grad		Refused	6=N)	Mean	-0.73	1.56 0.59	-0.34	0.42	-0.13	•		44
	Summer	Study	(N=25)	S.D.	0.11 5.08 -0.73	1.56	0.26 0.78 -0.34	0.99	0.36 1.00 -0.13			30
	Sun	Str	ž	Mean	0.11	0.18	0.26	0.74	0.36			38
				<u>Variable</u>	Phase II Achieve- ment Effectiveness	SES Index	Teacher Experience	Teacher Satisfaction 0.74 0.99 0.42 With Administration	Teacher Attitude Toward Academic	Capabilities of Disadvantaged	Children	I CR Students
					33				. <b>*</b>			

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Table 27

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Comparing the summer study schools to those schools eliminated because of too few students, we find that the latter are more effective in grades 4 and 6, and have a higher socioeconomic status. Summer study schools have teachers which are more experienced and have better attitudes toward the administration in grade 2. Teacher attitudes toward the academic capabilities of disadvantaged children tend to be higher in the summer study schools in grade 2, but lower in grades <u>4</u> and 6.

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In addition, the three groups of schools were compared in terms of several categorical variables, also measured during the 1972-1973 school year. Table 28 shows the resulting response frequency distributions. These variables are descriptive of the school as a whole, and are therefore not shown separately by grade.

Examination of Table 28 should be undertaken with more than the usual amount of caution, because of the small numbers of schools in the "refused" and "inadequate N" categories. It is of interest to note, however, an apparent relative tendency of large schools to refuse participation, and the concentration of schools with too few students in the 91-100% white or Caucasian category. The "inadequate N" schools also tend not to offer compensatory reading programs during the regular school year.

Bias analyses similar to the one previously reported for the Summer Study Schools/Non-Summer Study Schools comparison were performed to estimate the confidence intervals within which the various summer study achievement means would have fallen if summer achievement data had been available for the schools which refused to participate or for the schools which were eliminated because of too few students. Table 29 shows the obtained confidence intervals for the preceding analysis,  $\theta_1 = \theta_2 = .10$ ; and the predictor variables used were school SES, enrollment, and percent white or Caucasian.

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Variable	Categories		Stu Sch	ools	Wh Ref	ools ich used		Few <u>ents</u>
School en-	Less than 100	;	rreq	• <u>%</u> 4	<u>rreq</u> 0	· <u>~</u> 0	<u>Freq</u> . 1	<u>~</u> 14.3
rollment	100-299		2	4 8	0	0	1	14.3
	300-499	· '	12	48	1	11.1	<u>т</u> З	42.9
	500-699		6	24	3	33.3	2	28.6
	700-899		2	8	2	22.2	0	0
	900 or more		2	8	_	33.3	0	0
% White or	None		1	4	0	0	0	0
Caucasian Students	1-10%		i	4	1	11.1	0	0
	11-50%		2	8	0	0	1	14.3
•	51-90%		6	24	2	22.2	0	0
• .	91–100%		15	60	6	66.7	6	85.7
Urbanicity	Large city, over 500K		0	0	0	0	0	0
•	Large city, 200-500K		0	0	0	0	0	0
	Suburb of large city		4	21	0	0	2	40
	Rural area near large city		1	5.3	1	20	· 0	0
	Middle-size city, 50-200K	•	0	0	1	20	0	0
	Suburb of middle-size city		10	52.6	2	40	2	40
	Rural area near middle-size	city	0	0	0.	0	0	0
	Small city or town, < 50K		1	5.3	1	20	0.	0
	Rural area, not near city		3	15.8	0	0	1	20
Funding	Total Title I		10	40	5	55.6	2	28.6
	Partial Title I		5	20	·2	22.2	0	<u>,</u> 0
~	Non-Title I	•	2	8	_ 1	11.1	0	0
	NCR School		8	32	1	11.1	. 5	71.4

## Table 28

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Comparisons of Summer Study Schools, Schools Which Refused to Participate in The Summer Study, and Schools Which Were Eliminated Because of Too Few Participants: Categorical Variables

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Bias Analyses: Summer Study Schools, Schools Which Refused to Participate in the Summer Study, and Schools Which Were Eliminated from The Summer Study Because of An Insufficient Number of Students

<i>*</i> .								-29										
itmated Total Mean	Students Lower Limit	24.7	27.8	9.5	15.8	23.5	47.7	59.4		22.8	14.8	25.7	38.0	23.7	35.8	23.5	52.1	51.1
ul Around Esti Achievement M	Too Few Upper Limit	36.3	31.4	10.8	22.7	35.3	70.4	119.7	38.7	38.9	29.6	80.2	136.0	45.4	43.0	34.8	85.0	153.9
Confidence Interval Around Estimated Group Reading Achievement Mean	ised Lower Limit	23.9	27.8	9.6	15.5	22.9	46.2	54.3		21.6	13.2	20.3	28.6		36.1	22.8	50.1	42.7
95% Confid Gr	Refu Upper Limit	38.2	32.2	11.2	24.0	37.4	74.0	128.1	 40.6	41.4	31.3	87.1	148.7	48.5	44.9	36.7	90.3	167.8
Bias	Too Few Students	-1.27	-1.08	-1.43	-1.66	-1.58	-1.33	-1.31	 -1,15	-0.75	-0.56	-0.68	-0.87	-0.91	-1.29	-1.37	-1.32	-1.19
% B]	Refused 5	+.54	+.23	+.59	+.33	+.75	+.49	+.51	+1.34	+1.44	-0.43	+0.68	+0.95	+1.00	+1.38	+0.73	+1.10	+1.08
Predictors/ Criterion	Mult. Correlation	.56	.77	.68	.58	.63	.69		.56	.48	.41	.45		.49	.77	.68	.73	.64
Summer Study Rdg. Achievement	Raw Score Mean	30.9	29.9	10.3	19.6	29.9	·59 <b>•</b> 8	90.7	34.5	31.1	22.3	53.3	87.8	34.8	39.9	29.5	69.5	104.1
	Test	Coop. Primary Rdg.	MAT Word Knowledge	MAT Sentences	MAT Stories	MAT Reading	MAT Total	Battery Total	Coop. Primary Rdg.	MAT Word Knowledge	MAT Reading	MAT Total	Battery Total	STEP Reading	MAT Word Knowledge	MAT Reading	MAT Total	Battery Total
	Grade	2						, , , ,	4				1 1 1	9				

Table 29

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Examination of Table 29 shows the percent bias estimates to be almost uniformly positive for the schools which refused to participate, indicating that the addition of these schools to the summer study group would have the effect of raising reading achievement means for the combined group. The percent bias estimates for the schools with too few students were uniformly negative, indicating that the addition of these schools to the summer study group would lower reading achievement means for the combined group. The 95% confidence intervals shown in Table 29 are all very large, indicating that the addition of either group of schools to the summer study group could have made a substantial difference in terms of summer program achievement means.

Questionnaires (see Appendix) similar to the ones used in the Phase II study, but designed specially for summer programs, were sent to participants in the 27 schools. Testing of the students was conducted once, during the next-to-the-last week of each summer school. Test administrators were instructed that only those students who had participated in one or both of the 1972-1973 school year test administrations need be tested, since planned analyses would only include those students.

Descriptions of the summer programs. Questionnaire descriptions of different facets of the 27 summer programs were obtained. According to the principals (or administrators) of the summer program, 33% of the schools had summer enrollments of 50-99 students. Thirty percent had enrollments of 100-199 students, 22% had less than 50 students, 7% had 200-299, and 7% had 300 or more.

All but one of the 27 schools had a shorter summer school day than the regular school year day. (The remaining school had the same length day.) Forty-eight percent of the schools had a six week summer program, 30% had a five week summer program, 18% had a four week program, and 4% had an eight week program.

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The principals also estimated what percent of the students in the summer program came from culturally, linguistically, and/or economically deprived backgrounds. Seven schools responded 11-50%, five schools did not respond, four schools answered between 91-100%, four schools between 51-90%, four schools between 1-10%, two schools answered "none," and one did not know.

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The basis for determining pupil participation in the summer reading program, according to principals was: 24% depressed reading levels, 24% teacher (or staff) recommendation, 21% parent request, 10% all students participating in the summer program, 9% membership in one or • more target groups (i.e., migrants, etc.), 6% volunteer, 4% other, and 2% did not respond.

In 85% of the schools, the compensatory reading instruction in the summer program was funded totally or in part by funds supplementary to the regular on-going school budget. The category of level of funding most frequently checked was total funding by ESEA Title I, followed by partial funding at the local level, partial funding at the state level, and partial funding by ESEA Title I. Forty-six percent of the schools are funded totally or partially by ESEA Title I.

In response to the question, "What are the total funds allocated for compensatory reading in your summer program?", 59% of the principals (or administrators of a summer study) replied that they did not know or did not respond. For those who did answer the question, the range of the funds was from \$2,200-\$613,917. The median funding was \$11,548, and the mean was \$71,208.

Similarly, 59% of the responses to per pupil expenditure and cost per pupil of compensatory reading in the summer program were don't knows or no response. Of the remaining responses: (1) Cost per pupil in the summer program ranged from \$24-\$475, the median cost was \$100, and the mean cost was \$126. (2) Cost per compensatory reading pupil in the summer program ranged from \$10-\$350, the median cost was \$62, and the mean cost was \$97.

Sixty-two percent of the teachers in the summer programs taught during the regular year at the school which presented the summer program. Thirty-five percent were regular school teachers from another school. One percent responded "summer employee only," and 1% responded "other."

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The major classroom approach to reading used by the teachers was a combination of linguistic-phonetic and language experience (63%). Use of solely linguistic-phonetic approach (11%), and of an eclectic approach (11%) followed. Nine percent of the teachers used language experience approach and 6% checked the "other" category.

In response to what the teachers thought were the most outstanding features of their summer program, 17% had an individualized program. The next highest response (15%) was that the teachers met with small groups and could work with the students on a one-to-one basis. Using a particular approach (such as language experience, a diagnostic approach, integration of reading into the language arts) was the third most frequent response (15%). Two responses were mentioned as the fourth highest frequenty (9% each); having a variety of good materials, and having a relaxed, flexible, unstructured atmosphere.

Other responses mentioned, in descending order of frequency, were: making reading fun and enjoyable (5%), student choice in aspects of the program (4%), naving high interest reading books (3%), having welltrained teachers and good administration (3%), not giving grades (3%), the use of learning games (3%), having a variety of activities and experiences (2%), improving self-image of the student (2%), student cooperation (2%), developing a better attitude toward reading (2%), relating reading to the real world (1%), having a variety of approaches (1%), and increasing vocabulary (1%). Four percent of the teachers did not respond to this question.

Differences between summer reading programs and reading programs during the regular school year. Several of the questionnaire items dealt with the differences, noted by teachers and principals, between aspects of summer reading programs and regular school year reading programs.



When answering how the instruction during the summer program differed from that during the regular year, the teachers most frequently responded that, in the summer, they worked with smaller groups of students (21%) and used more individualized instruction (22%). The next most frequent response concerned the emphasis of the summer program. Several teachers (9%) reported that skills such as comprehension, word attack, story saquence, were emphasized more in the summer than during the regular year. Others (6%) noted that there was more emphasis on activities, projects, and games during the summer. Other differences noted in the summer program, in descending order of frequency of response, were: no basic or basal text was used (7%), less structure (6%), more student choice in instruction (3%), more intense instruction (3%), more emphasis on reading (2%), slower rate of instruction (2%), reading for enjoyment (2%), team teaching used (2%), more supervision and instruction needed (2%), easier materials used (1%), no grades given (1%), and changing the students' self-image (1%).

Administrators or principals also responded to the question, "How does the summer program differ from the regular year with respect to student population, location, instructional organization, staff, philosophy (goals) and instruction?" The two most frequent responses were that there were fewer students in the summer (50%), and that the summer students were either remedial students, students which needed special help, or only Title I eligible students (33%). Other responses given were: the students came from all parts of town (10%), students were not required to attend summer school (3%), and the students were the same as the regular year students (3%). Three percent did not respond.

With respect to the location of the summer program, the administrators reported that the summer program was held either in the school building which was used throughout the school year (48%), or at another building(s) with a centralized position in their community (48%).

Responses to how instructional organization in the summer differed from the regular year centered around the grouping of students.

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The most frequent response to this item was that the grouping or instructional organization was more flexible in the summer than during the regular year (26%). Other responses, in descending order of frequency, were: students were grouped by grade level (19%), students were placed in smaller groups than during the regular school year (15%), students were in an ungraded situation, unlike the regular year (15%), students were grouped by ability (11%), students were grouped by age (7%), and students were grouped by needs (4%).

According to administrators, the main ways in which the summer staff of a school's program differed from the regular staff were that only specific area/subject teachers (i.e., reading, math) taught in the summer (24%), or that the teaching staff was chosen from all the teachers in the district (19%). Another frequent response was that the teaching staff for the summer and the regular year was the same (19%). Other responses were that the summer staff was smaller (14%), more specially trained (10%), more experienced (10%), and was made up of volunteers (4%).

Regarding the philosophy or goals of the summer program differing from those of the regular year, the two most frequent responses were that the summer program was more concerned with remediation (38%) and enrichment (31%). Other responses, in descending order of frequency, were: the maintenance of skills (13%), developing good attitudes (10%), and catching the students up to grade level (7%).

With respect to instruction, the responses showed that the summer programs are more individualized (34%), more flexible (22%), have small skill groups (19%), and use more and different materials (16%) than during the regular school year.

<u>Comparison of Title I and Non-Title I summer study schools</u>. Principals and teachers of schools in the summer study responded to questionnaire items regarding classroom emphases in reading instruction, length of the summer program, estimated proportions of summer students in various ethnic categories, teacher attitude toward the school administration, teacher attitude toward the academic capabilities of disadvantaged children, and source of funding for the

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summer school program. Analyses of variance were performed, comparing the schools whose summer programs were funded by Title I to those which were not. The school mean was the unit of analysis. Table 30 shows the results.

Examination of Table 30 shows only one significant difference between Title I and Non-Title I funded summer programs, with respect to time spent improving motor abilities related to reading.

Table 30

# Comparisons Between Title I and Non-Title I Funded Summer Programs Direction of <u>Variable</u> <u>t</u> D.F. Difference Time spent by a typical summer reading class pupil in: Improving motor abilities related to

Improving motor abilities related to			
reading	3.1	21	T > NT
Increasing attention span	NS	21	: *
Developing visual discrimination	NS	21	
Matching letters or words	NS	21	
Learning letter forms	NS	21	
Developing a sight vocabulary	NS	21	
Learning word meanings	NS	21	
Phonic and/or structural analysis	NS	21	
Length of summer program	NS		
Percentage of summer program students who	•		
are Caucasian or White	NS	22	
Teacher attitude toward administration	NS	21	
Teacher attitude toward academic capabilities		•	
of disadvantaged children	NS	21	

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<u>Characteristics of summer program students</u>. It was of interest to describe students who attended summer reading programs with respect to their ethnicity, sex, socioeconomic status, and previous experience in compensatory reading programs, and to compare them in these respects to other CR and NCR students in their own schools. Table 31 shows these data.

Looking first at the characteristics of summer students, they are seen to be predominantly Caucasian or white, and of relatively high socioeconomic status. They are approximately evenly divided with respect to sex and previous CR experience. Compared to regular year CR and NCR students, the summer student population proportions for many categories fall between those of CR and NCR. Thus it seems that the most extreme within group differences during the regular year, whether they be in CR or NCR groups, are moderated in the summer program student population.

Achievement test results. As mentioned previously, students were tested once, during the next-to-last week of each summer school. Only those students who had participated in the 1972-1973 test administrations were tested. The same test battery administered in Fall 1972 was used, in order to avoid administering the same test forms in successive (Spring-Summer) administrations. Because summer school program enrollments were, of course, considerably smaller than those of the regular school year, and because the analysis presented is restricted to those students having both Spring and Summer achievement data, the number of usable cases is very small. Table 32 shows Fall 1972, Spring 1973, and Summer 1973 data for students in summer programs of all the 25 schools which produced usable achievement data.

Examination of Table 32 shows the differences between Spring and Summer means for all tests at all grade levels to be small compared to the corresponding Fall-Spring differences. None of the Spring-Summer differences was statistically significant. It should be noted that the Fall 1972 and Summer 1973 data reported in Table 32 are derived from identical test forms, but that the Spring 1973 data are derived from parallel forms. Although corresponding raw scores of

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# <u>Table 31</u>

Characteristics of Summer, Regular Year CR and NCR Students, all in Summer Study Schools

•• ···

· ·		mer lents		Regu Year	lar <u>CR</u>	Regu Year	lar NCR
Ethnicity	N	%		N	%	N	%
Caucasian or white Negro or black Spanish surnamed Oriental American Indian Other	231 34 13 2 3 3	80.8 11.9 4.5 0.7 1.0 1.0		990 409 154 0 9 2	63.3 26.2 9.8 0.0 0.6 0.1	2374 225 51 18 10 5	88.5 8.4 1.9 0.7 6.4 0.2
Sex							
Male Female	154 139	52.6 47.4		941 714	56.9 43.1	1401 1476	~ 48.7 51.3
Socio-Economic Status*				•			
Low High Unclassified	100 185 0	35.1 64.9 0.0	•	768 774 10	49.5 49.9 0.6	712 1915 10	27.0 72.6 0.4
Previous CR Experience					ŕ.		
Yes No Unclassifiable	136 138 10	47.9 48.6 3.5		956 509 82	61.8 32.9 5.3	358 2201 123	13.3 82.1 4.6

\* As indicated by participation/non-participation in federal school lunch program



Table 32

Summer Study Achievement Data

5 Grade

<u>Grade 2</u>					· ·				•
		Fall 1972	72		Spring 1973	973		Summer 1973	1973
Test	· 2	Raw Score Mean	Raw Score . s D	2	Raw Score Mean	Raw Score c D	2	Raw Score	Raw Score
MAT Word Knowledge	136	22 9	7 9		20 K			, , , , , , , , , , , , , , , , , , ,	
			۲ <b>۰</b>			7 T 0 0		C• 67	C•0
MAL Sentences	L34	د./	J.L	140	8°01	2.1	150	10.2	3.1
MAT Stories	134	11.7	6.0	146	20.4	6.7	150	19.4	7
MAT Reading	134	19.0	8.6	146	31.1	. 8•8	150	29.6	10.2
MÁT Total	134	41.8	14.8	146	60.6	14.4	150	59.1	15.6
Cooperative Rdg.	137	20.9	8.6	147	30.8	8.6	150	31.0	6 <b>°</b> 6
MAT Total + Coop.	134	62.7	21.8	146	91.3	21.8	150	0.06	24.5
	•								
Grade 4					-				
MAT Word Knowledge	17	24.4	10.8	83	31.2	6.9	82	31.2	10.1
MAT Reading	77	19.0	7.9	82	24.2	8.4	83	23.0	<b>8.</b> 4
MAT Total	77	43.3	17.7	82	55.3	17.6	82	54.2	17.5
Cooperative Rdg.	77	29.0	8.5	83	37.1	7.1	84	34.6	7.6
MAT Total + Coop.	77	72.4	25.4	82	92.4	23.7	82	88.8	24.2
<u>Grade 6</u>	•								
MAT Word Knowledge	57	35.2	9.5	58	38.9	9.1	58	38.7	9.6
MAT Reading	57	26.2	<b>.</b> 9.3	58	29.5	8.8	58	28.2	9.6
MAT Total	57	61.5	17.7	58	68.4	16.6	58	67.0	18.3
STEP Reading	57	29.6	10.9	59	33.7	9.7	58	34.2	10.4
MAT Total + STEP	57	91.1	27.5	57	102.3	24.5	57	101.0	28.0
			,						

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parallel test forms are not necessarily equivalent, investigation shows negligible differences between the raw score scales of the parallel test forms reported in Table 32. In the only instance where raw score differences between parallel forms amounted to more than one raw score point in any part of the score range (grade 4, Cooperative Reading), the differences served to make the non-significant Spring-Summer difference look larger than it really was, and thus did not affect the above conclusions. From the data of this study, it is impossible to decide whether the summer programs investigated produced negligible effects on student achievement, or were successful in counteracting achievement losses possibly typical of the summer recess. In order to test these hypotheses, summer achievement scores would have to be obtained for students <u>not</u> attending summer programs, a procedure which was judged infeasible for this study.

It was also of interest to compare summer students to other regular year CR and NCR students, for Title I and non-Title I schools, in terms of Fall 1972 and Spring 1973 data. Two-way analyses of variance (student group x funding category) were performed separately by grade, test, and test administration. The unit of analysis was the school, and the data were for students in the summer study schools only. The following student group comparisons were tested jointly:

1. summer students vs. other regular year CR students

2. summer students vs. other regular year NCR students Students were also classified by the funding category of their school; summer students by the summer classification, and regular year students by the regular year classification. The following funding category comparisons were tested jointly:

1. Title I vs. Non-Title I

2. Title I vs. the average of Non-Title I and Unclassifiable Table 33 shows the results of the analyses.

Reference to Table 33 reveals that none of the Funding x Student Group interactions was significant. It is therefore appropriate to interpret all significant main effects. Looking first at the "Student Group" comparisons in grade 2, it is of interest to note that for Cooperative Primary Reading, MAT Word Knowledge, and MAT Total, summer students exceed CR students for the Fall data, but have fallen behind them by the Spring administration. This suggests that lack of progress in these skills in the second grade may be one reason for student participation in summer programs. For pretest and posttest achievement scores in grades 4 and 6, all summer student means exceed those for regular year CR students.

Funding category significant achievement main effects are less frequent than are those for Student Group, and account for considerably smaller proportions of criterion variance where they do occur. Their direction is completely consistent across tests, administrations, and grade levels, with students in non-Title I schools exceeding those in Title I schools, and the average of non-Title I and unclassifiable schools exceeding Title I schools.

With respect to attitude toward reading scores, significant effects in grades 4 and 6 were predominantly in the same direction, with summer student scores exceeding those of both CR and NCR students. This is somewhat different from the most common achievement test result, where summer student scores fell between those of CR and NCR students.

Analyses parallel to those described above were performed, but comparing summer students to other regular year CR and NCR students in all the Phase II schools. Table 34 shows the results.

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Table 33

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Student Group x Funding Category Differences in Summer Study Schools: Fall 1972 and Spring 1973 Data

			Direction	Variable F <sup>5</sup> D.F. Difference <sup>6</sup>	Coop. Primary Reading NS (2,62)	$17.1^3$ (2,62) $\frac{S > CR}{S < NCR}$	,	MAT Word Knowledge 4.0 <sup>1</sup> (2,62) NT > T NT/DK >	23.5 <sup>3</sup> (2,62) S > CR	NS (4,58) S < NCR	MAT Sentences $3.4^{1}$ (2,62) $NT > T$	$20.6^3$ (2,62) S > CR	NS (4,58) <sup>S</sup> < NCR	(2,62)	$22.8^3$ (2,62) $\frac{5}{5} < \frac{CR}{CR}$	,		23.6 <sup>3</sup> (2,62) <sup>S</sup> < CR S < NCR	MAT Total 3.5 <sup>1</sup> (2,62) NT > T 3.5 <sup>1</sup> (2,62) NT > T	26.8 <sup>3</sup> (2,62) S > CR	NS (4,58) <sup>S</sup> < NCR	Ccop. + MAT Total NS (2,62)	23.5 <sup>3</sup> (2,62) S > CR S < NCR	,
, Fall	Dron	var.Ex-		nce <sup>6</sup> Compar.		.36		т. .11		~	г .10 ^ .10		~ `		. 42			.43	. 10				.43	
1972				Raw Score Means' 1 2 3	21.6 23.9 24.6	20.1 19.4 29.1		23.7 25.3 27.3	22.8 22.3 29.7		7:6 8.5 9.0	7.2 6.9 10.2		13.1 14.2 15.7	11.3 11.7 19.1		20.7 22.7 24.7	18.5 18.6 29.3	44.4 48.0 52.1	41.4 41.0 59.0		66.1 72.3 76.7	61.6 60.3 88.1	
		Sample D		Score S.D. U1		•		)     	•	·	3.6 -(						-0-11		18.1 -0	1		,, 10 − 0 2 − 0		
	1_7 1_3	р С		S.D. S.D. Units Units	-0.22 -0.28	0.07 -0.85		-0.19 -0.44	0.06 -0.84		-0.25 -0.39	0.08 -0.83		-0.14 -0.32	0.05 -0.97	•	-0.18 -0.36	-0.01 -0.98	-0.20 -0.42	0.02 -0.97	•	-0.22 -0.38	0.05 -0.96	

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Grade 2

(cont.)	
Table 33	Grade 2

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Spring 1973

1-3 Diff.	in	S.D.	Units	-0.44	-1.03		-0.37	-0,65	<b>.</b>	-0.76	-0.64		-0.42	-0.81		-0.42	-0.80		-0.42	-0.77		-0.45	-0.92	
1-2 Diff.	in	S.D.	Units	-0.32	-0.10		-0.49	-0.02		-0.44	0.00		-0.45	00.00		-0.47	00.0		0.57	-0.01	-	-0.44	-0.05	
Study Sample	Raw	Score	.G.S	6.6			5.7			2.5	) 		6.9			0.6			14.1	 		23.1	-	
	ŗ	leans'	m	36.4	40.2		32.1	33.4	•	11.8	12.4	1.000 × 1.000	23.9	25.9		35.7	38.3	, , <del>.</del>	67.8	71.6	•• •••	104.2	111.9	
		Raw Score Means'	2	35.2	30.9	•	32.8	29.8		12.0	10.8		24.1	20.3		36.1	31.1	,	68.9	61.0		93.9 104.1 104.2	90.7 91.9	
		Raw S		32.0	29.9		30.0	29.7		10.9	10.8		21.0	20.3		31.9	31.1		61.9	60.8		93.9	90.7	
Prop. Var.Ex-	plained	, by	Compar.	.16	.48		.16	.26		.15	.27		.15	.35		.16	.34		.17	.32		.18	.41	
	Direction	of ,	Difference	NT > T NT/DK > T	< CR	S < NCR	NT > T NT/DK > T		S < NCR	NT > T NT/DK > T		S < NCR	NT > T NT/DK > T		S < NCR	NT > T NT/DK > T		s < ncr	NT > T NT/DK > T		S < NCR	NT > T NT/DK > T		S < NCR
			D.F.	(2,62)	(2,62)	(4,58)	(2,62)	(2,62)	(4,58)	(2,62)	(2,62)	(4,58)	(2,62)	(2,62)	(4,58)	(2,62)	(2,62)	(4,58)	(2,62)	(2,62)	(4,58)	(2,62)	(2,62)	(4,58)
	,	L	0 <sup>r</sup>	5.8 <sup>2</sup>	28.9 <sup>3</sup>	ŚN	5.8 <sup>2</sup>	10.8 <sup>3</sup>	SN	5.3	11.3 <sup>3</sup>	NS	5.6 <sup>2</sup>	16.4 <sup>3</sup>	NS	$6.0^{2}$	16.2 <sup>3</sup>	SN	6.2 <sup>2</sup>	14.6 <sup>3</sup>	SN	6.6 <sup>2</sup>	21.9 <sup>3</sup>	NS
			<u>Variable</u>	Coop. Primary Reading		•	MAT Word Knowledge			MAT Sentences			MAT Stories			MAT Reading		-	MAT Tot.al			Coop. + MAT Total		·
		-	Comparisons <sup>4</sup>	ing	Student Group	SG	ing	Student Group	SG	íng	Student Group	SG	ing	Student Group	SG	ing	Student Group	SG	ing	ent Group	SG	ing.	Student Group	SG
			Comp	Funding	Stud	F x SG	Funding	Stud	F x SG	Buipun <u>1</u>		F x SG	Funding	Stud	F x SG	Funding	Stud	F x SG	Funding	Student	F x. SG	Funding	Stud	F x SG

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				1-3 Diff.	in Lo	Units	-0.08	-0.15			-0.63	-1.00		-0.67	-0.97		-0.60	-1.06		-0.66	-1.05	·	-0.67	-1.06		0.22	0.77	برمی در جان h	
				l-2 Diff.	in U	Units	-0.08	-0.08			-0.06	0.14		-0.28	0.14		-0.07	0.05		-0.19	0.10		-0, 16	0.12	     	-0.22	0.20		
				Study Sample	Raw	S.D.	۲ ۲	• •		· ·	C			1 2 6	C • 4 T		0	0.6		3 L C	C • T 3		30.7	7 • OC		۔ د	7•7		
				•	~	11	2.6	2.7			35.4	37.8		33.5	36.5		25.8	28.6		59.3	65.1		94.8	103.0		2 -0.96	-1.25		
•			. 7		Raw Srore Means	2	2.5 2.6	5 2.4			4 30.0	3 27.0		1 28.6	4 22.7		9 20.6	2 17.7.		0 49.2	6 40.4		4 79.2	9 67.4		-0.69 -0.42 -0.96	33 -0.57		
· · · · · 4	<u>بتر</u>		Fall 1972	• ×		•1	2.	2.5			29.4	28.3		25.1	24.4		19.9	18.2		45,0	42.6		74.4	70.9		-0.0	-0.33		
•			<u>ب</u>	Prop. Var.Ex-	plained hv	Compar	·				.13	.47			.48		.15	.55		.18	.53		.16	.52			.47		
					Direction	Difference <sup>6</sup>					NT > T NT/DK > T	<ul><li>CR</li></ul>	s < ncr		S > CR S < NCR		NT > T NT/DK > T	2 2 2 2 2 3	S < NCR	NT > T NT/DK > T		v .	NT > T NT/DK > T		S < NCR		S > CR S > NCR		
						D.F.	(2,62)	(2,62)	(4,58)		(5,49)	(5,49)	(4,45)	(5,49)	(5,49)	(4,45)	(5,49)	(2,49)	(4,45)	(2,49)	(2,49)	(4,45)	(2,49)	(3,49)	(4,45)	(2,49)	(5,49)	(4,45)	
						μ	NS	NS	NS		3.6 <sup>1</sup>	22.1 <sup>3</sup>	NS	SN	22.9 <sup>3</sup>	NS	$4.2^{1}$	30.5 <sup>3</sup>	NS	5.4 <sup>2</sup>	27.5 <sup>3</sup>	NS	4.8 <sup>2</sup>	26.3 <sup>3</sup>	NS	]SN	21.7 <sup>3</sup>	NS	
	t.)					Variable	Atritude				Coop. Primary Reading			MAT Word Knowledge			MAT Reading	~ 1	۰ ۲	MAT Total			Coop. + MAT Total			Attitude		·.	
RIC	Table 33 (cont.)	. Grade 2				<u>Comparisons<sup>4</sup></u>	Funding	Student Group	F x SG .	Grade 4	Funding	Student Group	· F x SG	Funding	O Student Group	F x SG	Funding	Student Group	F x SG	Funding	Student Group	F x SG	Funding	Student Group	F x SG	Funding	Student Group	F x SG	

ER

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	<u>Iable 33</u> (cont.) Grade 2	÷	<u>-</u>									
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $						Prop.	C/6T 8			Study	1-2	1-3
				·	Direction	Var.Ex- plained	C F			Sample Raw	in .	in .
Attitude         NS $(2,62)$ $2.7$ $2.7$ $2.5$ $1.3$ $0.01$ NS $(4,58)$ NS $(4,58)$ NT > T $2.8$ $2.4$ $2.7$ $2.7$ $2.7$ $2.1$ $0.031$ P         NS $(4,58)$ NT > T $2.2$ $3.2$ $4.9$ NT > T $0.31$ $0.03$ $-0.51$ $-0.51$ $-0.31$ $0.33$ $-0.51$ $-0.51$ $-0.51$ $-0.51$ $-0.51$ $-0.51$ $-0.51$ $-0.51$ $-0.51$ $-0.51$ $-0.51$ $-0.51$ $-0.51$ $-0.51$ $-0.51$ $-0.51$ $-0.51$ $-0.51$ $-0.51$ $-0.52$ $-0.51$ $-0.51$ $-0.51$ $-0.51$ $-0.52$ $-0.51$ $-0.52$ $-0.51$ $-0.52$ $-0.51$ $-0.52$ $-0.51$ $-0.52$ $-0.51$ $-0.52$ $-0.52$ $-0.52$ $-0.52$ $-0.52$ $-0.52$ $-0.52$ $-0.52$ $-0.52$ $-0.52$ $-0.52$ $-0.54$ $-0.52$ $-0.54$	parisons <sup>4</sup>	Variable	۲ <sub>5</sub>	D.F.	of Difference <sup>6</sup>	by Compar.	LI N	2 2	ans 3	score S.D.	s.U. Units	v.v. Units
$ \begin{array}{c} {\rm f \ Coup} \\ {\rm f \ Coup} \\ {\rm \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	ding	Attitude	NS	(2,62)			2.7	2.7	2.5	1.3	00.00	0.15
$\frac{4}{6}$ NS         (4,58)         NT > T         .25         36.0         40.2         41.0         82         -0.51           t Group         Thmary Reading         8.0 <sup>3</sup> (2,49)         S < KR	dent Group		NS	(2,62)			2.8	2.4	2.7	1	0.31	0.08
	· SG ·		NS	(4,58)								:
gCoop. Primary Reading8.0 <sup>3</sup> $(2,49)$ $WT/DK > T$ 0.53t GroupNS $(4,45)$ NT ( $T > T$ $17$ $37.2$ $34.1$ $42.6$ $0.38$ gMAT Word Knowledge $4.8^2$ $(2,49)$ $WT/DK > T$ $16$ $31.1$ $34.7$ $38.1$ $11.3$ gMAT Word Knowledge $4.8^2$ $(2,49)$ $WT > T$ $16$ $31.1$ $28.5$ $40.9$ $11.3$ gMAT Word Knowledge $4.8^2$ $(2,49)$ $WT > T$ $16$ $31.1$ $28.5$ $40.9$ $11.3$ gMAT Reading $8.7^3$ $(2,49)$ $WT > T$ $16$ $31.1$ $28.5$ $40.9$ $0.23$ gMAT Reading $8.7^3$ $(2,49)$ $WT > T$ $25$ $23.7$ $23.0$ $33.0$ $0.246$ gMAT Reading $8.7^3$ $(2,49)$ $WT > T$ $25$ $23.7$ $23.0$ $33.0$ $0.17$ gMAT Reading $8.7^3$ $(2,49)$ $WT > T$ $25$ $23.7$ $23.0$ $33.0$ $0.17$ gMAT Total $6.6^2$ $(2,49)$ $WT > T$ $226$ $23.8$ $28.1$ $30.7$ $9.8$ $0.24$ gMAT Total $6.6^2$ $(2,49)$ $WT > T$ $21$ $24.6$ $90.8$ $10.7$ $0.24$ gMAT Total $7.2^2$ $24.9$ $8.77$ $24.9$ $8.77$ $24.9$ $9.8$ $0.14$ gfcroup $\frac{1}{6}$ $10.7$	ide 4	· ·										
t Group Total Knowledge $4.8^{\circ}$ (2,49) $5 \times CR$ .47 37.2 34.1 42.6 0.38 NS (4,45) $5 \times NCR$ .47 37.2 34.1 42.6 0.32 t Group MAT Word Knowledge $4.8^{\circ}$ (2,49) $NT \times T$ .16 31.1 28.5 40.9 0.23 NS (4,45) $NT \times T$ .16 31.1 28.5 40.9 0.23 NS (4,45) $NT \times T$ .26 23.8 28.1 30.7 9.8 0.17 t Group MAT Reading $8.7^{\circ}_{\circ}$ (2,49) $NT \times T$ .26 23.8 28.1 30.7 9.8 0.17 NS (4,45) $NT \times T$ .26 23.8 28.1 30.7 9.8 0.17 K $1 \times 26.7^{\circ}_{\circ}$ (2,49) $NT \times T$ .26 23.8 28.1 30.7 9.8 0.17 NS (4,45) $NT \times T$ .26 23.8 28.1 30.7 9.8 0.17 K $1 \times 26.7^{\circ}_{\circ}$ (2,49) $NT \times T$ .21 54.8 62.8 68.7 0.17 K $1 \times 26.7^{\circ}_{\circ}$ (2,49) $NT \times T$ .21 54.8 62.8 68.7 0.17 K $1 \times 24.3^{\circ}_{\circ}$ (2,49) $NT \times T$ .21 54.8 62.8 68.7 0.19 K $1 \times 10^{\circ}_{\circ}$ NS (4,45) $NT \times T$ .21 54.8 62.8 68.7 0.10 K $1 \times 10^{\circ}_{\circ}$ (4,45) $NT \times T$ .21 54.8 62.8 68.7 0.10 K $1 \times 10^{\circ}_{\circ}$ (4,45) $NT \times T$ .21 54.8 61.6 50.5 74.0 $1^{\circ}_{\circ}$ 0.24 K $1 \times 10^{\circ}_{\circ}$ (4,45) $NT \times T$ .21 54.8 61.3 10.10 8 27.9 0.24 K $1 \times 10^{\circ}_{\circ}$ (4,45) $NT \times T$ .21 20.18 84.5 116.7 $1^{\circ}_{\circ}$ 0.24 K $1 \times 10^{\circ}_{\circ}$ (4,45) $NT \times T$ .21 20.10 9.8 27.9 0.24 K $1 \times 10^{\circ}_{\circ}$ (4,45) $NT \times T$ .21 20.13 10.28 $27.9$ 0.24 K $1 \times 10^{\circ}_{\circ}$ (4,45) $NT \times T$ .21 20.13 10.28 $27.9$ 0.24 K $1 \times 10^{\circ}_{\circ}$ (4,45) $NT \times T$ .21 20.13 10.28 $1^{\circ}_{\circ}$ 0.24 K $1 \times 10^{\circ}_{\circ}$ (4,45) $NT \times T$ .20 20.14 0.13 10.28 $1^{\circ}_{\circ}$ 0.24 K $1 \times 10^{\circ}_{\circ}$ (4,45) $NT \times 10^{\circ}_{\circ}$ (4,45) $NT \times 10^{\circ}_{\circ}$ (4,46) $NT $	lding	Coop. Primary Reading	8.0 <sup>3</sup>	(5,49)	^ т ЪК ∨	.25	36.0	40.2	41.0	6.8	-0.51	-0.61
B         MAT Word Knowledge         NS         (4,45)         NT > NC         .16         31.1         34.7         38.1         11.3         -0.32           t Group         MAT Word Knowledge         4.8         C1,49)         NT > T         .16         31.1         24.7         8.1         0.23           t Group         MAT Reading         8.7 <sup>3</sup> (2,49)         S < NR         .45         31.1         28.5         40.9         11.3         0.23           t Group         MAT Reading         8.7 <sup>3</sup> (2,49)         NT > T         .26         23.8         28.1         30.7         9.8         -0.44           t Group         MAT Total         6.6 <sup>2</sup> (2,49)         NT > T         .26         23.8         28.1         30.7         9.8         -0.44           t Group         MAT Total         6.6 <sup>2</sup> (2,49)         NT > T         .21         54.6         50.5         74.0         0.17           g         MAT Total $7.2^2$ (2,49)         S < NC         .52         23.7         20.9         9.8         -0.44           g         Group $1$ $1$ $1$ $2$ $1$ $1$ <	ident Group		22.0 <sup>3</sup>	(5,49)	۲ ۲ ۲	.47	37.2	34.1	42.6	1	0.38	-0.66
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	s SG		SN	(4,45)	S < NCR							
t Group t Group $1.2^{2}$ (2,49) $5 \times CR$ .45 31.1 28.5 40.9 0.23 (2,49) $11^{2} \times 1$ .26 23.8 28.1 30.7 9.8 -0.44 $12^{2} \times 1$ t Group $12^{2}$ (2,49) $11^{2} \times 1$ .26 23.8 28.1 30.7 9.8 -0.17 $12^{2} \times 1$ $12^{2} \times 1$ 26.7 $12^{2} \times 1$ 21.0 33.0 $12^{2} \times 1$ 21.0 20 $12^{2} \times 1$ 21.0 20 $12^{2} \times 1$ 21.0 $12^{2} \times 1$ 22.0 $12^{2} \times$	ding	MAT Word Knowledge	4.8 <sup>2</sup>	(5,49)		.16	31.1	34.7	38.1		-0.32	-0.62
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	dent Group		20,2 <sup>3</sup>	(2,49)		.45	31.1	28.5	40.9	•	0.23	0.87
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	SG		NS	(4,45)	S < NCR					~		·
t Group t Group t Group t Group t Group t Group $26.7^3$ $(2,49)$ S > CR $.52$ $23.7$ $22.0$ $33.0$ 0.17 NS $(4,45)$ S < NCR $.52$ $23.7$ $22.0$ $33.0$ 0.19 $.13$ t Group $\frac{1}{2}$ $10.20$ $\frac{1}{2}$ $10.20$ $10.10$ $10.20$ $\frac{1}{2}$	ding	MAT Reading	8.7 <sup>3</sup>	.(2,49)		•26	23.8	28.1	30.7	9,8	-0.44	-0.70
	dent Group		26.7 <sup>3</sup>	(5,49)	<ul><li>CR</li></ul>	.52	23.7	22.0	33.0	•	0.17	-0.95
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	SG		NS	(4,45)	S < NCR							
t Group $\frac{1}{8}$ NS (2,49) S > CR .50 54.6 50.5 74.0 $\frac{1}{10}$ 0.20 g Coop. + MAT Total 7.2 <sup>2</sup> (2,49) NT > T .23 90.8 103.0 109.8 $_{27.9}$ -0.44 t Group 24.4 <sup>3</sup> (2,49) S > CR .50 91.8 84.5 116.7 0.26 NS (4,45) S > NCR .50 91.8 84.5 116.7 0.26 h = 0.74 -0.33 -1.23 1.3 0.31 t Group 10.0 <sup>3</sup> (2,49) T > NT/DK .11 -0.74 -0.33 -1.23 1.3 0.13 h = 0.74 -0.61 -1.36 1.3 0.13 NS (4,45) S > NCR .29 -0.44 -0.61 -1.36 0.13 h = 0.13 0.13	ding	MAT Total	6.6 <sup>2</sup>	(5,49)		.21	54.8	62.8	68.7	20.4	-0.39	-0.68
	dent Group		24.3 <sup>3</sup>	(2,49)		.50	54.6	50.5	74.0		0.20	-0.95
g $Coop. + MAT Total 7.2^2$ $(2,49)$ $\frac{NT > T}{NT/DK > T}$ .23 90.8 103.0 109.8 $_{27.9}$ -0.44 t $Group$ k $Group$ NS $(4,45)$ $S > CR$ .50 91.8 84.5 116.7 0.26 NS $(4,45)$ $S > NCR$ t $Group$ t $Group$ NT $T > NT/DK$ 11 -0.74 -0.33 -1.23 1.3 -0.31 NS $(4,45)$ $S > NT > T$ NS $(4,45)$ $S > NCR$ 0.12 -0.44 -0.61 -1.36 0.13 NS $(4,45)$ $S > NCR$	SG	EG L	SN	(4,45)	S < NCR							
t Group t Group $24.4^3$ (2,49) $5 > CR$ .50 91.8 84.5 116.7 0.26 - NS (4,45) $5 < NCR$ .51 91.8 84.5 116.7 0.26 0.26 - S $(4,45)$ $1 > 1 < 11 - 0.74 - 0.33 - 1.23$ 1.3 -0.31 t Group 10.0 <sup>3</sup> (2,49) $5 > CR$ .29 -0.44 -0.61 -1.36 0.13 NS (4,45) $5 > NCR$	ding	Coop. + MAT Total	7.2 <sup>2</sup>	(2,49)	~Т /DK ~	.23			09.8	27.9	-0.44	-0.69
g Attitude NS (4,45) ${}^{S \ < NCR}$ t Group t Group NS (4,45) ${}^{S \ < NCR}$ ${}^{NT \ > T}$ 11 -0.74 -0.33 -1.23 1.3 -0.31 10.0 <sup>3</sup> (2,49) ${}^{S \ > CR}$ 29 -0.44 -0.61 -1.36 0.13 NS (4,45) ${}^{S \ > NCR}$ 29 -0.44 -0.61 -1.36 0.13	dent Group		24.4 <sup>3</sup>	(5,49)	~	.50	91.8		16.7	• • •	0.26	-0.89
g Attitude $3.2^{1}$ (2,49) $\frac{NT > T}{T > NT/DK}$ .11 $-0.74 -0.33 -1.23$ $_{1.3}$ $-0.31$ t Group $10.0^{3}$ (2,49) S > CR .29 $-0.44 -0.61 -1.36$ $0.13$ NS (4,45) S > NCR	SG		SN	(4,45)	v							
t Group 10.0 <sup>3</sup> (2,49) S > CR .29 -0.44 -0.61 -1.36 0.13 NS (4,45) <sup>S</sup> > NCR	ding	Attitude	$3.2^{1}$	(2,49)	^ ^	.11			-1.23	1.3	-0.31	0.38
NS (4,45) <sup>3 &gt;</sup>	dent Group	• •	10.0 <sup>3</sup>	(2,49)	Λ	.29	-0.44		-1.36	•••	0.13	0.71
	SG		SN	(4,45)	^					· •		

Table 33 (cont.)

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		1-3	Diff.	in	S.D.	Units	-0.21	-0.82		-0.33	-0.67	•	-0.33	-0.80		-0.30	-0.76							, , ,
		1-2	Diff.	in	S.D.	Units	-0.18	0.14		-0.21	0.14		-0.16	0.02		-0.19	0.09					•		
		Study	Sample	Raw	Score	S.D.	10 1	+ • •	•	2 01			, ,	ע. עי		2 U F	0.61		6	31.0			۲ <b>۰</b> ۲	
	•			7	leans'	-	35.6	41.0		39.6	43.1		31.8	34.6		71.4	77.6		107.0	118.6		-1.01	-1.30	
·					Raw Score Means	2	35.3	29.1		39.3	34.5		30.1	26.5		69.4	61.0		98.6 104.7	90.2		-0.75 -1.01	-0.63 -0.59 -1.30	:
	1 1972		•		Raw		33.0	30.8		37.1	36.0		28.5	26.7		65.6	62.7		98.6	93.5		-0.87	-0.63	
	Fall	Prop.	Var.Ex-	plained	Ъу	Compar.		.47			05.			.37			.39			.44		•	.20	
	•		•	Direction	of 6	Difference		S > CR	/	-2,	S > CR	,		S > CR s < MCB	<b>'</b> .		S > CR c < NCB	,		S > CR			S < CR	•
					 	D.F.	(2,39)	(2,39)	(4,35)	(2,39)	(2,39)	(4,35)	(2,39)	(2,39)	(4,35)	(2,39)	(2,39)	(4,35)	(2,39)	(2,39)	(4,35)	(2,39)	(2,39)	(4,35)
	Î				<u> </u>	F	NS	17.5 <sup>3</sup>	NS	NS	12.9 <sup>3</sup>	NS	NS	11.4 <sup>3</sup>	SN	SN	12.5 <sup>3</sup>	NS	NS	15.2 <sup>3</sup>	NS	NS	4.3 <sup>2</sup>	NS
						Variable	STEP II Reading			MAT Word Knowledge			MAT Reading			MAT Total			STEP + MAT Total			Attitude.		·
Grade 6					4	COMPACTSONS	Funding	Student Group	F x SG	Funding	Student Group	F x SG	Funding	l Student Group	F x SG	Funding	Student Group	F x SG	Funding	Student Group	F x SG	Funding	Student Group	F x SG

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Table 33 (cont.)

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<u>Table 33</u> Grade 6

					Prop.				Study	1-2	1-3
					Var.Ex-				Sample	Diff.	Diff.
		•		Direction	plained			٢	Raw	in	in
~		L		of ,	by	Raw Sc	Raw Score Means		Score	S.D.	S.D.
Comparisons <sup>4</sup>	Variable	Ъ.	D.F.	Difference <sup>0</sup>	Compar.		2	m	S.D.	Units	Units
Funding	STEP II Reading	NS	(2,39)			35.7	39.4 3	38.6	9 11	-0.31	-0.24
Student Group		$10.3^{3}$	(2,39)	S > CR S < NCR	.35	35.4	32.7 4	42.7		0.23	-0.61
F x SG		NS	(4,35)								
Funding	MAT Word Knowledge	, NS	(2,39)			40.0	43.3 4	41.9	9,4	-0.35	-0.20
Student Group		9.0 <sup>3</sup>	(2,39)	s > CR s < NCR	.32	40.7	37.5 4	44.8	-	0.34	-0.44
F x SG		SN .	(4,35)								
<b>W</b> Funding	MAT Reading	5.0 <sup>2</sup>	(2,39)	NT > T NT/DK > T	. 20	30.8	35.8 3	32.9	9,3	-0.54	-0.23
Student Group		8.7 <sup>3</sup>	(2,39)	<ul><li>CR</li></ul>	.31	31.8	29.2 3	35.9		0.28	-0.44
F x SG		SŇ	(4,35)	S < NCR							
Funding	MAT Total	3.6 <sup>2</sup>	(2,39)	NT > T NT/DV > T	.15	70.9	79.1 7	74.8	17 0	-0.45	-0.22
Student Group		9.2 <sup>3</sup>	(2,39)		.32	72.4	66.8 8	80.7		0.31	-0.46
F x SG		SN	(4,35)	s < NCR							
Funding	STEP + MAT Total	3.5 <sup>1</sup>	(2,39)	NT > T NT/DK > T	. 15	106.6 119.3		113.6	78.7	-0.44	-0.24
Student Group		10.2 <sup>3</sup>	(2,39)		.34	108.4	99.7 12	123.4		0.30	-0.52
F x SG		SN	(4,35)	S < NCR							
Funding	Attitude	NS	(2,39)			-0.80	-0.80 -0.74 -0.76	0.76	۲ ۲	-0.46	-0.31
Student Group		6.3 <sup>2</sup>	(2,39)	S > CR S > NCR	. 24	-0.41 -0.53		-1.25		0.09	0.62
F x SG		NS	(4,35)	•					• •		
<mark>l</mark> Significant at	t .05 level	2	<sup>2</sup> Significant	ant at .01 level	vel		33	Significant	lcant at	001 level	evel
4 <sub>T</sub> he compariso comparisons)	<sup>4</sup> The comparisons indicated are those described comparisons)	describ	ed in the	e preceding text		funding	(two funding comparisons	isons	and two	o student	it group

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Table 33 (cont.)

 $^5\mathrm{The}$  F values given are for the joint test of the two funding comparisons or the two student group comparisons. Q

summer students II S

CR = other regular year compensatory reading students in summer study schools NCR = other regular year non-compensatory reading students in summer study schools

= students in Title I funded schools н

NT = students in non-Title I funded schools

NT/DK = average of non-Title I funded and "don't know" (unclassifiable) schools

<sup>7</sup>In each of the "Funding" rows, raw score means 1, 2, and 3 correspond to Title I, non-Title I, and Unclassifiable groups, respectively.

In each of the "Student Group" rows, raw score means 1, 2, and 3 correspond to Summer, CR, and NCR students, respectively. Table 34

Student Group x Funding Category Differences in The Phase II Schools: Fall 1972 and Spring 1973 Data

Grade 2

Grade 2	•				Fall	1972					
•					Prop.				Study	1-2	1-3
					Var.Ex-	•			Sample	Diff.	Diff.
				Direction	plained			2	Raw	in	in
		ע		of ƙ	bу	Raw S	Score Means	- 1	Score	S.D.	S.D.
Comparisons <sup>4</sup>	<u>Variable</u>		D.F.	Difference	Compar.	리	2	m	S.D.	Units	Units
Funding	Coop. Primary Reading		(2,378)	NT > T NT/DK > T	.03	22.9	25.6	24.7	10.6	-0.25	-0 - 1.7
Student Group		140.6 <sup>3</sup>	(2,378)		.43	20.1	19.7	25.0	1	0.04	-0.84
F x SG		2.4 <sup>1</sup>	(4,374)	s < NCR	•03						
Funding	MAT Word Knowledge	$10.0^{3}$	(2,378)	NT > T NT/DK > T	.05	23.7	26.3	25.7	8.2	-0.32	-0.24
Student Group		107.43	(2,378)		.36	22.8	21.5	28.6		0.16	-0.71
F x SG		SN	(4,374)	v							
CI Funding	MAT Sentences	6.9 <sup>3</sup>	(2,378)	NT > T NT/DK > T	.03	7.9	8.7	8•5	3,6	-0.22	-0.17
Student Group		150.8 <sup>3</sup>	(2,378)	~	.44	7.2	0 8	6 <b>.</b> 6		TI O.	-0,75
F x SG		SN	(4,374)	S < NCR							
Funding	MAT Stories	6 <b>.</b> 5 <sup>2</sup>	(2,378)	NT > T NT/DK > T	• 03	14.1	15.7	15.6	8.0	-0.20	-0.19
Student Group		151.2 <sup>3</sup>	(2,378)		.44	11.3	11.7	18.7	1	0.05	-0.92
F x SG		NS.	(4,374)	S < NCR							
Funding	MAT Reading	7.0 <sup>3</sup>	(2,378)	NT > T NT/DK > T	•04	21.9	24.5	24.1	0.11	-0.24	-0.20
Student Group		159.1 <sup>3</sup>	(2,378)	~	.46	18.5	18.5	28.6		0.00	-0.92
F x SG		NS	(4,374)	2 V							
Funding	MAT Total	8 <sup>•</sup> 9 <sup>3</sup>	(2,378)	NT > T NT/DK > T	• 04	45.7	50.8	49.8	18.1	-0.28	-0.23
Student Group	•	145.4 <sup>3</sup>	(2,378)	~	.43	41.4	40.1	57.2		0.07	-0.87
F x SG		NS	(4,374)								
Funding	Coop. + MAT fotal	8°33	(2,378)	NT > T NT/DK > T	•04	68.7	76.5	74.5	27.5	-0.28	-0.21
Student Group		149.9 <sup>3</sup>	(2,378)		.44	61.6	59.8	86.1		0.07	-0.89
F x SG		NS	(4,374)	S < NCR							
2 <sup>7</sup> 	•		<b>,</b>								

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		1-3 Diff. in	S.D. Units	-0.08	-0.08			-0.20	-0.92		-0.23	-0.86		-0.19	-0.92		-0.22	-0.92		-0.23	-0.94		0.07	0.74	
		1-2 Diff. in	S.D. Units	-0.15	0.15			-0.22	0.14		-0.27	. 0.23		-0.20	-0.09		-0.26	0.18		-0.25	0.17		0.02	0.10	·
		Study Sample Raw	Score S.D.	1.3	     •			9.5	•		12.5			9.8			21.5			30.2			1.2		
		r	Means' 3	2.50	2.61	,		32.6	37.0		29.3	35.1		22.8	27.2		52.1	62.3		84.8	99.3		-0.85	-1.22	
·			Score M	2.57	2.34			32.8	27:0		29.8	21.5		22.9	17.3		52.8	38.8		85.5	65.9		5 -0.78	3 -0.45	
	1 1972	I I	Raw	2.42	2.52			30.7	28.3	-	26.4	24.4		20.9	18.2		47.3	42.6		78.0	70.9	·	-0.76	-0.33	
	Fall	Prop. Var.Ex- plained	by Compar.		•05			.04	.55		.05	.54		.04	.56		.04	.56	•	•04	.56			.47	•
· _		Direction	of Difference <sup>6</sup>		S > CR S < NCR			NT > T NT/DK > T			NT > T NT/DK > T	س	~	NT > T NT/DK > T	`~ {	s < NCK	NT > T NT/DK > T	S > CR		NT > T	~	S < NCK		S > CK S > NCR	
d			D.F.	(2,371)	(2,371)	(4,367)		(2,340)	(2,340)	(4,336)	(2,340)	(2,340)	(4,336)	(2,340)	(2,340)	(4,336)	(2,340)	(2,340)	(4,336)	(2,340)	(2,340)	(4,336)	(2,337)		(4,333)
			F5	SN	9.9 <sup>3</sup>	SN	1.	6.2 <sup>2</sup>	207.6 <sup>3</sup>	SN	8.4 <sup>3</sup>	199.4 <sup>3</sup>	NS	6.62	220.4 <sup>3</sup>	NS	7.8 <sup>3</sup>	216.0 <sup>3</sup>	NS	7.53	219,7 <sup>3</sup>	NS	NS .	146.9 <sup>3</sup>	NS
			Variable	Attitude				Coop. Primary Reading			MAT Word Knowledge			MAT Reading	• •		MAT Total			Coop. + MAT Total			Attitude		
Table 34 (cont.)	Grade 2		Comparísons <sup>4</sup>	Funding	Student Group	F x SG	. Grade 4	Funding	•	F x SG		Student Group	F x SG	Funding	Student Group	F x SG	Funding	Student Group	F x SG	Funding	Student Group	F x SG	Funding	Student Group	F x SG
										57	(														

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: 1-3 . Diff.			4 -0.04	6 -0.05	·		3 -0.22	8 -0.55		1 -0.23	20.79		1 -0.21	-0 <b>.</b> 86		3 -0.24	3 -0.86		3 -0.23	5 -0.79	••	3 0.13	0.75	
		Unit	0.0-	-0.1			-0.2	-0.3		-0.2	-0.2		-0.2	0.1		-0.2	0.18	,	-0.23	0.25		-0.0	-0.14	
Stud) Sample	Raw	Score S.D.	יז. ד				6.8			11 3	•		с С	•		20.4	•	•	0 70			1	) • •	
	7	deans 3	2.61	2.70			38.7	41.7		35.4	40.0		28.0	32.1		63.4	72.2	·· ".	102.1	113.9		-1.09	-1.41	
	:	score	2.61	2.55	•		38.8	34.1		35.2	28.6		28.0	22.3		63.2	50.9		102.0	84.9	•			
q			2.66	2.76			36.9	37.2		32.8	31.1		25.9	23.7		58.6	54.6		95.6	91.8		-0.92	-0.44	
Prop. Var.Ex-	plained	: 뇌		• 03			• 03	.47		• 03	.49		• 04	.52		•03	.51		.04	.51			.46	.07
	Direction	or Difference <sup>6</sup>		^ ^			. ^		v	^ т ∕ ЪК _	<ul> <li>CR</li> </ul>	v	<u>ہ</u> ^	<ul> <li>CR</li> </ul>	v	~Т /DK >		s < NCR			v		S > CR S > NCR	
		D.F.	(2,266)	(2,266)	(4,262)		(2,256)	(2,256)	(4,252)	(2,256)	(2,256)	(4,252)	(2,256)	(2,256)	(4,252)	(2,256)	(2,256)	(4,252)	(2,256)	(2,256)	(4,252)	(2,256)	(2,256)	(4,252)
		ч Ч	NS	$3.9^{1}$	SN		4.5 <sup>2</sup>	112.4 <sup>3</sup>	SN	$4.3^{1}$	124.5 <sup>3</sup>	NS	4.7 <sup>2</sup>	138.4 <sup>3</sup>	NS	4.6 <sup>2</sup>	134.5 <sup>3</sup>	NS	4.8 <sup>2</sup>	131.0 <sup>3</sup>	NS	NS	110.8 <sup>3</sup>	4.7 <sup>3</sup>
		Variable	Attitude				Coop. Primary Reading			MAT Word Knowledge			MAT Reading			MAT Total			Coop. + MAT Total			Attitude		•
•		Comparisons <sup>4</sup>	Funding	Student Group	F x SG	Grade 4	Funding	Student Group	F x SG	Funding	Student Group	F x SG	🕅 Funding	Student Group	F x SG	Funding	Student Group	F x SG	Funding	Student Group	F x SG	Funding	Student Group	F x SG <sup>8</sup>
	Study 1-2 Sample Diff. D	Prop. Study 1-2 Var.Ex- Sample Diff. D plained 7 Raw in	Prop.     Prop.     Study 1-2       Var.Ex-     Sample Diff.       Direction     plained       aw     Score Means       F5     D.F.       Difference     Compar.       1     2       S.D.     Units	$\frac{Prop.}{Var.Ex} = \frac{Prop.}{Var.Ex} = \frac{Prop.}{Sample} = \frac{Study 1-2}{Sample}$ $\frac{Var.Ex}{Var.Ex} = \frac{Var.Ex}{Sample} = \frac{Sample}{Sample} = Sa$	$\frac{Prop.}{Var.Ex} = \frac{Prop.}{Var.Ex} = \frac{Prop.}{Sample} = \frac{Study 1-2}{Sample} = \frac{Var.Ex}{Sample} = Va$	$\frac{Prop.}{Var.Ex} \xrightarrow{Prop.} Study 1-2 \\ \frac{Var.Ex}{Var.Ex} \xrightarrow{Direction} plained \\ \frac{Var.Ex}{1 & 2 & 3} \\ Attitude \\ NS & (2,266) \\ NS & (4,262) \\ NS & (4,262$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \frac{Prop.}{Var.Ex-} = \frac{Prop.}{Var.Ex-} = \frac{Prop.}{Sample} = \frac{Study}{Sample} = \frac{1-2}{Sample} = \frac{Var.Ex-}{Sample} = \frac{Var.Ex-}{Sampl$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \frac{4}{\text{var:Ex-}} \frac{\text{Prop.}}{\text{var:Ex-}} \frac{\text{Prop.}}{\text{var:Ex-}} \frac{\text{Prop.}}{\text{sample Diff.}} \frac{\text{Study 1-2}}{\text{sample Diff.}} \\ \frac{1}{\text{variable}} \frac{\text{F}_{\text{S}}}{\text{Attitude}} \frac{\text{D.F.}}{\text{NS}} \frac{\text{Difference}}{2.266} \frac{\text{of}}{\text{by}} \frac{\text{Maw Score Means}}{1} \frac{\text{Score Means}}{\text{Score S.D.}} \frac{\text{Score S.D.}}{\text{Units}} \\ \frac{1}{2.66} \frac{1.3}{2.61} \frac{1.3}{2.01} \frac{-0.04}{1.3} \frac{-0.04}{-0.16} \frac{-0.04}$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c} \mbox{first} \\ \mbox{first} $	$ \begin{array}{c} \mbox{frop.} \\ \mbox{frintle} \\ \mbox{frindle} \\ \mbox{froup} \\ \mbox{frindle} \\ \mbox{frindle} \\ \mbox{froup} \\ \mbox{frindle} \\ \mbox{frindle} \\ \mbox{frop.} \\ \mbox{frindle} \\ \mbox{frindle} \\ \mbox{frop.} \\ \mbox{frindle} \\ \mbox{frindle} \\ \mbox{frop} \\ \mbox{frop} \\ \mbox{frop} \\ \mbox{frop} \\ \mbox{from} \\ \mbox{frop} \\ \mbox{from} \\ \mbox{frop} \\ \mbox{from} \\ \mbox{frop} \\ \mbox{from} \\ \mbox{from} \\ \mbox{from} \\ \mbox{from} \\ \mbox{frop} \\ \mbox{frop} \\ \mbox{frop} \\ \mbox{frop} \\ \mbox{from} \\ \mbox{frop} \\ \mbox{from} \\ \$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$					

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Table 34 (cont.)

	o ane o					Fall Prop.	1972			Study	1-2	1-3
			, e			Var.Ex-			·	Sample	Diff.	Diff.
			• • • •		Direction	plained			7	Raw	in	in
incari	Comparisons	Variahle	۲ ۲	D. F.	of Difference	by Comnari.	Raw S	Score Me	Means' 3	Score S.D.	S.D. Units	S.D. Units
Funding		STEP II Reading	NS	(2,247)			33.3	35.1	35.0		-0.15	-0.14
tudent	Student Group	•	131.8 <sup>3</sup>	(2,247)	S > CR S < NCR	.52	30.8		40.8	12.4	0:23	-0.81
F x SG			NS	(4,243)	· .	• .						
Funding	50	MAT Word Knowledge	3.7 <sup>1</sup>	(2,247)	NT > T NT/DK > T	.03	37.0	38.9	39.1	9.01	-0.18	-0.20
tuden	Student Group		91.9 <sup>3</sup>	(2,247)	<ul><li>CR</li></ul>	.43	36.0	33.3	43.0	) • •	0.25	-0.66
F x SG	•		SN	(4,243)	S < NCR			,				
Funding	50	MAT Reading	$3.3^{1}$	(2,247)	NT > T NT/DK > T	.03	28.7	30.3	30.5	с С	-0.16	-0.18
nden	Student Group		118,2 <sup>3</sup>	(2,247)		.49	26.7	24.9	34.6		0.18	-0.80
F x SG			NS	(4,243)	S < NCR	•						
Funding	60	MAT Total	3.6 <sup>1</sup>	(2,247)	NT > T NT/DK > T	.03	65.6	. 69.2	69.6	19 6	-0.18	-0.20
tudent	Student Group		108.5 <sup>3</sup>	(2,247)		.48	62.7	58.2	77.6	2	0.23	-0.76
F x SG			NS	(4,243)	S < NCR							
Funding	60	STEP + MAT Total	$3.2^{\mathrm{L}}$	(2,247)	NT > T NT/DK > T	.02	98.9	104.4 1	104.7	31_0	-0.17	-0.19
tuden	Student Group		120.6 <sup>3</sup>	(2,247)		.49	,93.5	86.2 1	118.3		0.24	-0.80
F x SG			NS	(4,243)	S < NCR							
Funding	60	Attitude	NS	(2,246)			-0.82	-0.860.88	-0.88	1.3	0.03	0.05
tuden	Student Group		81.6 <sup>3</sup>	(2,246)	S < CR S > NCR	.40	-0.63	-0.46 -1.26	-1.26		-0.13	0.48
F x SG			NS	(4,242)								

Table 34 (cont.) Grade 6

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					Prop.				Study	1-2	1-3
·			·	Direction	var, cx- plained				оатрие Кам	Jurr.	ini
				of	hu t	Dour C	Score Meane	7	Cocco		
Comparisons <sup>4</sup>	Variable	ч Ч	D.F.	Difference <sup>6</sup>	uy Compar.	I I	2	3	score S.D.	Units	Units
Funding	STEP II Reading	4.2 <sup>2</sup>	(2,246)	T > TN NT/TN - T	.03	36.2	38.5	38.3		-0.19	-0.18
Student Group	:	123.7 <sup>3</sup>	(2,246)		50	35 /	31 6	6 64	<b>ч</b> тт	0 33	77 U-
			(01-16-10)	v		+•••		40.4		70.0	
F x SG		SN	(4,242)	,							
Funding	MAT Word Knowledge	NS	(2,246)			39.9	41.4	41.6	7 0	-0.16	-0.18
Student Group		75.6 <sup>3</sup>	(2,246)	S > CR s > MCB	.38	40.7	36.9	44.6	и, т	0.40	-0.41
F x SG		NS	(4,242)	, ·			•				
Funding	MAT Reading	4.7 <sup>2</sup>	(2,246)	T > T NT / JU > T	°04	31.3	33.5	32.8	ې م	-0.24	-0.16
Student Group		106.1 <sup>3</sup>	(2,246)		.46	31.8	28.1	36.3	ע. י_י	0.40	-0.48
<b>0</b> F x SG		NS	(4,242)	S < NCR							
Funding	MAT Total	3.6 <sup>1</sup>	(2,246)	NT > T NT/DV > T	.03	71.3	75.0	74.4	c r	-0.21	-0.17
Student Group		94.4 <sup>3</sup>	(2,246)		.43	72.4	65.0	80.9	т.,	0.41	-0.47
F x SG		NS	(4,242)	S < NCR						 ,	•
Funding	STEP + MAT Total	$4.1^{1}$	(2,246)	T < TN T < TN	• 03	107.4 1	107.4 113.6 112.8	12.8	r c	-0.22	-0.19
Student Group		109.9 <sup>3</sup>	(2,246)		.47	108.4	96.6 124.1	24.1	1.82	0.41	-0.55
F x SG		SN	(4,242)	S < NCR	-		*-		·		
Funding,	Attitude	SN	(2,246)			-0.86	-0.84	-0.85	с г	-0.02	-0.01
Student Group		84.1 <sup>3</sup>	(2,246)	S > CR S > NCR	.41	-0.41	-0.47	-1.28	۲.1	0.05	0.67
F x SG		NS	(4,242)	•							
<sup>1</sup> Significant at	t.05 level	2.	Significant	nt at .01 level	'el		۳°	Sionificant	cant at	100	1 ovel
•			)								ולי

, <u>Table 34</u> (cont.) Grade 6

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Table 34 (cont.)

 $^{5}_{
m The}$  F values given are for the joint test of the two funding comparisons or the two student group comparisons. ف

S = summer students

NCR = other regular year non-compensatory reading students in summer study schools CR = other regular year compensatory reading students in summer study schools

T = students in Title I funded schools

NT = students in non-Title I funded schools

NT/DK = average of non-Title I funded and "don't know" (unclassifiable) schools

<sup>7</sup>In each of the "Funding" rows, raw score means 1, 2, and 3 correspond to Title I, non-Title I, and Unclassifiable groups, respectively.

In each of the "Student Group" rows, raw score means 1, 2, and 3 correspond to Summer, CR, and NCR students, respectively.

<sup>8</sup>See Tables 35-38 for significant interaction means.

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A few funding x student group interactions were also significant. As was the case with the significance tests of main effects, the tests of interactions were joint tests. The following four tables show cell means and t values for the four significant interactions appearing in Table 34.

Table 35

	x Student Fall Cooper			n: Grade 2. ading	9
. ·	Summer	CR	NCR	F <sub>1</sub>	F <sub>2</sub>
Title I	18.3	19.6	27.4	. 1	1
Non-Title I	23.8	20.2	31.8	-1	-1/2
Unclassifiable	16.0	19.8	30.2		-1/2
sc <sub>1</sub> : sc <sub>1</sub>	: 1	1	4		
SG <sub>2</sub>	: 1	•• •	-1		
	F <sub>1</sub> x S	$GG_1: t = GG_2: t = GG_1: t = GG_1$	-0.2	•••••	
No	-	$SG_2: t = 374$	0.9		

Table 35 shows, in addition to the interaction cell means, the definitions of the various funding and student group contrasts (e.g., the first funding contrast,  $F_1$ , is defined as Title I vs. Non-Title I; the first Student Group contrast,  $SG_1$ , is defined as summer vs. CR students). The relative contributions of the various contrast combinations are reflected in the t values given below the table (note that in Table 34 the joint interaction test was significant even though none of the individual t values was significant). The double lines enclose those means which correspond to the comparisons associated with the highest t value (in this case,  $F_1 \times SG_1$ ). Thus it can be seen that the interaction represented above is caused to a substantial extent by the fact that CR > Summer for Title I schools, but CR <

|--|

Funding x	Student Group	Interaction:	Grade 2,
	Spring MA	T Stories	

	Summer	CR	<u>NC</u> R
Title I	18.2	19.9	24.9
Non-Title I	24.9	20.4	26.7
Unclassifiable	19.5	20.1	26.1
······································	$F_1 \times SG_1$ :	t = -3.3	
	$F_1 \times SG_2$ :		
	$F_2 \times SG_1$ :	t = -2.0	
	$F_2 \times SG_2$ :	t = -1.4	
	D.F. =	265	
			•

Inspection of Table 36 shows that disproportionalities throughout most of the table contribute substantially to the significant interaction. The element of the interaction having the highest t value ( $F_1 \times SG_1$ ) is enclosed in double lines. As was the case with the grade 2 Fall Cooperative Primary Reading data, CR > Summer for Title I schools, but CR < Summer for Non-Title I schools.

Table 37

Funding x Student Group Interaction: Grade 2, Spring MAT Reading

	Summer	CR	NCR
Title I	28.4	30.6	36.9
Non-Title I	37.0	31.3	39.3
Unclassifiable	29.7	31.0	38.5
	F <sub>1</sub> x SG <sub>1</sub> :	t = -3.1	
	$F_1 \times SG_2$ :		
	$F_2 \times SG_1$ :	t = -1.8	
	$F_2 \times SG_2$ :	t = -1.2	
	D.F. =	265	
·			

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Table 37 shows a situation for MAT Reading analogous to the preceding result for MAT Stories.

•	opring Acciliate 10wa	itu Keading	
	Summer	CR	NCR
Title I	-0.36	-0.58	-1.38
Non-Title I	-0.15	-0.62	-1.44
Unclassifiable	-1.68	-0.68	-1.43
	$F_{1} \times SG_{1}: t$ $F_{1} \times SG_{2}: t$ $F_{2} \times SG_{1}: t$ $F_{2} \times SG_{2}: t$	= -1.1 = 2.1	• <u></u>
	D.F. = 25	2	

#### <u>Table 38</u>

## Funding x Student Group Interaction: Grade 4, Spring Attitude Toward Reading

The interaction shown in Table 38 is somewhat complex, but it seems that an important contributing element is the extreme divergence of summer student attitudes in Non-Title I and Unclassifiable schools, as contrasted to the similarity of student attitudes in these school funding categories for both CR and NCR students.

Although Spring-Summer achievement differences were negligible for the total group of schools, it was of interest to determine whether achievement differences existed among schools. Table 39 shows the results of analyses of variance performed on Spring (pretest for the summer study) achievement data of summer program students, separately by grade. The dependent variable is Total achievement score, the unit of analysis is the individual student, and the effect tested is differences among schools.

	Schoo	ols Offering A Summe	r 1973 Program
			Proportion of Variance Explained by
<u>Grade</u>	D.F		Differences Among Schools
2	22,123	4.2 <sup>3</sup>	.43
4	16,63	6.0 <sup>3</sup>	.60
<u> </u>	11,44	<u>2.8<sup>2</sup></u>	.41

Table 39

Pretest (Spring 1973) Total Reading Achievement Differences Among Schools Offering A Summer 1973 Program

<sup>1</sup>.05 level

<sup>2</sup>.01 level

<sup>3</sup>.001 level

Reference to Table 39 shows that significant pretest differences existed among summer study schools at all three grade levels.

Analyses of variance were also performed to assess the pretest (Spring 1973) and posttest (Summer 1973) Total Reading Achievement differences among summer study schools, with the effects of the following funding\_category\_contrasts\_removed:

- 1. Title I vs. Non-Title I
- 2. Title I vs. the average of Non-Title I and Unclassifiable schools

The unit of analysis is the individual student. Table 40 shows the results, based on pretest and posttest data for the same student sample.

Examination of Table 40 reveals that, within the various funding source strata, there are significant achievement differences among summer study schools at grades 2 and 6 in terms of Spring achievement data, and at grades 2 and 4 in terms of Summer achievement data.

Dependent Variable	Grade	<b>D.F.</b>	• <u>F</u>	Proportion of Variance Explained By Differences Among Schools
Pretest	2	20;123	2.12	.25
	4	13;57	NS	
	6	9;44	3.0 <sup>2</sup>	.38
Posttest	2	20;123	2.6 <sup>3</sup>	.30
	4	13;57	2.11	.32
	6	9;44	NS	•

Tal	ble	40

Pretest (Spring 1973) and Posttest (Summer 1973) Total Reading Achievement Differences Among Schools Offering A Summer 1973 Program, With The Effects of Funding Source Removed

<sup>1</sup>significant at .05 level

<sup>2</sup>significant at .01 level

<sup>3</sup>significant at .001 level

Analyses of covariance were performed on Summer (posttest for the summer study) achievement data of summer program students, separately by grade. The dependent variable is Total score, the covariate is Spring Total score, the unit of analysis is the individual student, and the effect tested is differences among schools. Table 41 shows these results, and Table 42 gives the Spring and Summer total achievement means.

Table 41

Total Reading Achievement Gain Among Schools Offering A Summer 1973 Program

· · · · ·			Proportion of Variance Explained by
Grade	D.F.	F	Differences Among Schools
2	22,122	2.5 <sup>3</sup>	•06
4	16,62	1.9 <sup>1</sup>	•06
6	11,43	NS	
<sup>1</sup> .05 le	vel		
	vel		•
3 :001 1	evel	•	• •
		0.0	



	Τc		ng Achieve	-	core Means	
	Grad		ng Achievement Raw Grade 4		Grade 6	
<u>School</u>	Spring	Summer	Spring	Summer	Spring	Summer
A	106.24	100.2	83.3	81.8	·	
В	100.9	100.9	92.2	88.2	115.0	105.8
С	83.5	68.7	67.2	65.0	92.5	94.7
D	108.4	106.9				
Е	89.5	89.1	81.1	77.9	101.0	99.9
F	87.9	89.4	94.8	92.6		
G	111.4	111.1	114.2	108.1	145.5	142.5
H	106.9	107.0	108.3	108.0	` <b></b>	
I	88.0	95.3		. —		<del></del>
<b>J</b> .	68.6	74.6				
К	i00.0	114.0	101.0	95.0	126.0	107.0
L	93.0	83.0	91.7	69.0	112.0	102.5
M	105.2	105.5	99.0	105.3	112.3	104.3
N	87.7	93.3	119.4	117.4	107.9	112.1
0	83.5	73.5	75.0	73.5	•	
Ŕ	97.6	92.8				
Q	88.6	86.0	97.3	77.7	126.0	122.0
R	83.7	94.0				
S	106.9	110.7	98.0	103.2	101.8	104.6
Т	66.5	67.7	54.4	58.1		
U	77.7	83.2	84.7	86.3		
V	73.4	73.2				
W	71.0	59.2				
x	<b></b>		94.0	86.0	67.6	56`.6
Y		<u> </u>			90.0	101.8
Total	90.7	90.6	91.5	87.8	108.1	104.5

# Table 42 ·

Pretest (Spring 1973) and Posttest (Summer 1973) Total Reading Achievement Means (Summer Program Students Only) for Schools Offering A Summer 1973 Program

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Table 41 shows significant reading achievement gain differences among schools in grades 2 and 4. Individual school effects were examined and ten outlier schools were identified (grade 2: three positive, three negative; grade 4: two positive, two negative) Of the five positive outlier schools, three had Title I funded summer programs, one was non-Title I funded, and one did not respond to that questionnaire item. Of the five negative outlier schools, four had Title I funded summer programs and  $\infty$  e was non-Title I funded.

A content analysis of administrator and teacher questionnaires was performed, separately by positive and negative schools, with the following results:

- positive schools concentrate more on grade 2 programs and less on multiage programs than do negative schools.
- positive schools have more teachers who teach in another school in the district during the regular school year; negative schools have more teachers who teach in the same school.
- positive schools have more experienced teachers than do negative schools.
- 4. teachers in positive schools were more likely to have been assigned to that summer program; teachers in negative schools were more likely to have chosen it.
- 5. teachers in positive schools were in general more satisfied with various aspects of the program than were those in negative schools.
- 6. teachers in positive schools tended to disagree with the following statement, teachers in negative schools to agree: "The pupils want to learn but they do not have the right background for school work."

Analyses of variance testing the pretest and posttest Total Reading Achievement differences between Summer Title I and Non-Title I schools were also performed. Table 43 shows the results of these analyses.

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ment Di	fference	es Betw	een Sum	mer Title I a	nd Non-7		I School	.s
Dependent <u>Variable</u>	<u>Grade</u>	<u>D.F.</u>	<u>t</u>	Difference	<u>Title</u> <u>Mean</u>	<u>≥    I                                </u>	<u>Non-Tit</u> <u>Mean</u>	le I <u>N</u>
Pretest	2	20	4.3 <sup>3</sup>	NT > T	84.1	14	104.5	7
	<b>4</b> -	- 14	3.4 <sup>2</sup>	NT > T	81.2	9	102.1	6
	6	9	NS	·	95.0	4	114.6	6
Posttest	2	20	4.0 <sup>3</sup>	NT > T	83.5	14	105.5	7
	4	14	2.5 <sup>1</sup>	NT > T	78.8	9	98.1	6
	6	9	NS		89.2	4	109.7	6
						·		

Table 43

Pretest (Spring 1973) and Posttest (Summer 1973) Total Reading Achieve-

<sup>1</sup>.05 level

<sup>2</sup>.01 level

<sup>3</sup>.001 level

Reference to Table 43 reveals that Summer Non-Title I schools exceeded Summer Title I schools in terms of Spring and Summer total reading achievement in grades 2 and 4.

Analyses of covariance testing the Total Reading Achievement Spring/Summer gain differences between Summer Title I and Non-Title I schools were also performed. There were no statistically significant differences at any grade level.

Analyses of covariance were performed to assess the Spring/Summer achievement gain differences among summer study schools, with the effects of funding category removed. The unit of analysis is the individual student. Table 44 shows the results.

Reference to Table 44 shows that, for grades 2 and 4, there are significant achievement gain differences among summer study schools within the various funding source categories.



### <u>Table 44</u>

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Total Reading Achievement Spring/Summer Gain Among Schools Offering A Summer 1973 Program, With The Effects of Funding Source Removed

Grade	<b>D.F.</b>	F	Proportion of Variance Explained by Differences Among Schools
2	20;122	2.7 <sup>3</sup>	. 30
4	13;56	2.1	.33
6	9;43	NS	

<sup>1</sup>significant at .05 level

<sup>2</sup>significant at .01 level

<sup>3</sup>significant at .001 level

Note: Regression lines for each of the above covariance analyses were parallel.

As a part of the cost study of summer programs, these programs were categorized by focus or thrust:  $^{1}$ 

- Remedial--"implies the program is designed to help children who are falling behind."
- 2. Enrichment--"implies the program is primarily for the enjoyment of the student and its primary objectives would be to make students like school and to improve the students' self-concept."
- Remedial/Enrichment--"implies that aspects of both are used."
- 4. Compensatory--"similar to Remedial, but with more emphasis on helping disadvantaged children."

Programs were thus classified by the cost study interviewer during his site visit, after consultation with the principal or program administrator. Linear analyses of covariance were performed separately by grade, using in turn each of the Summer 1973 reading achievement and attitude measures as the dependent variable, and the corresponding Spring 1973 measures as covariate. The school mean was the unit of analysis. The following contrasts, consisting of various combinations of the previously described program thrust categories, were tested:

<sup>&</sup>lt;sup>1</sup>See Nabeel Al-Salam and Donald Flynn, "An Evaluation of the Cost Effectiveness of Alternative Compensatory Reading Programs. Volume IV: Cost Analysis of Summer Programs," <u>Report UR-231</u>. Resource Management Corporation: Bethesda, Md., 1976, p. 49.

- 1. Remedial vs. Enrichment
- 2. Remedial/Enrichment vs. Compensatory
- Average of Remedial and Enrichment vs. average of Remedial/Enrichment and Compensatory

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Joint tests of the above three contrasts, using grade 2 data, showed non-significant differences for each achievement and attitude measure. All slopes were parallel. From this result it may be concluded that the data showed no significant differences in Spring-Summer gain among the four summer program types for any achievement or attitude measure.

Because there was only one school in the "enrichment" category in each of grades 4 and 6, there were insufficient degrees of freedom to perform parallel analyses for those grades. Therefore, in grades 4 and 6 the following set of contrasts were tested:

- 1. Remedial/Enrichment vs. Compensatory
- 2. Remedial vs. the average of Remedial/Enrichment and Compensatory

€,

Joint tests of the above two contrasts, separately for grade 4 and grade 6 data, showed non-significant differences for each achievement and attitude measure. All slopes were parallel. Thus it was not possible to show significant differences in Spring-Summer gain among the Remedial, Remedial/Enrichment, and Compensatory summer program types for any fourth or sixth grade achievement or attitude measure.

Table 45 shows the pretest (Spring 1973)/posttest (Summer 1973) correlations for each reading achievement and attitude toward reading measure.

	and Attitude Measure	S	
Grade	Measure	Correlation	N
2	MAT Word Knowledge	.87	147
	MAT Sentences	.73	146
	MAT Stories	.77	146
	MAT Reading	.84	146
	MAT Total	.89	146
•	Cooperative Primary Reading	.80	147
	MAT Total + Coop.	<b>.</b> 90	146
· ·	Attitude 🧳	.63	124
4	MAT Word Knowledge	.87	81
	MAT Reading	.77	81
	MAT Total	.87	.80
	Cooperative Primary Reading	.82	83
	MAT Total + Coop.	.90	80
	Attitude	.78	64
6	MAT Word Knowledge	.61	、 57
	MAT Reading	.71	· 57
	MAT Total	.70	57
	STEP II Reading	.85	58
	MAT Total + STEP	.81	56
	Attitude	.81	51

Spring/Summer Correlations of Reading Achievement

Table 45

Analyses of variance were performed, testing jointly the previously described set of three program focus contrasts separately for pretest (Spring 1973) and posttest (Summer 1973) data. The only significant differences obtained were for STEP II Reading in grade 6, as shown in Table 46.

It should be noted that in each of the two administrations shown in Table 46, the Remedial vs. Enrichment comparison was the only significant one of the set tested (Spring administration, t = 3.6, D.F. = 7; Summer administration, t = 4.1, D.F. = 7).

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	· · ·	6 0			
•	s a	Compensatory <u>Mean N</u> 34.0 2 34.6 2			
	CLI *****			• •	
	Categories	su t		•	
		a a Nime		× · · ·	
•	Focus	Remedial/Enrichment Mean N 38.5 3 35.9 3			
- <b>1</b> 00,000 k.	ı Fc		:		
<b>.</b>	ran	<u>Hean</u> 38.5 35.9			
	rog	smec		•	
	Among Program				
· · · ·	Tom	1 L N			
		nrichm Mean 54.5 54.5			
	<u>6</u> Differences 6	Enrichment Mean N 54.5 1 54.5 1			~~ <b>~</b>
•	fere				
· · · ·	6 Difj 6	t i i i		• .	
	4	Remedial Mean N 30.5 5 30.4 5	•		5 <sup>m</sup> .
	Table 4 1973) Grade				
	HI	f iso			
	Summer	p. of iance laine mpari .66 .71			
	(Si	rop Xplic Mult			•
	es t	Pro Var Exp By Co			
	stt				
	Ро				
· · ·	and Posttest	3,7 D 4.6 <sup>1</sup> 5.6 <sup>1</sup>	А. С.		
	3)	Administration $F(3,7 D.F.)$ Prop. of Variance Explained By ComparisonSpring $4.6^1$ .66Summer $5.6^1$ .71		•	·
•	197	Б Б	H	· · ·	
·	8 U	ati ng	eve		
	pri	<u>istrat</u> Spring Summer		•	·
<sup>1</sup> 2,	(S	S S	0	•	
	est	Adm	the		
	Significant Pretest (Spring 1973)		<sup>1</sup> significant at the .05 level		
	Г Ц	<u>ble</u> II Reading II Reading	nt		
	can	Re Re	ica		• •
	lif1		nif		
•	lign	<u>Variable</u> STEP II 1 STEP II 1	sig		
	S				

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In assessing the implications of the foregoing results, readers must judge for themselves the validity of the process whereby program focus was determined. The Resource Management Corporation report<sup>1</sup> describes this process thus:

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During the site visits conducted to these programs, the interviewer--after consultation with the principal or similar program administrator--classified the program thrust as remedial, enrichment, remedial/enrichment, or compensatory. There were programs on the boundaries between categories; however, they were assigned to the thrust category the interviewer felt was dominant.

<sup>1</sup>Nabeel Al-Salam and Donald Flynn, "An Evaluation of the Cost Effectiveness of Alternative Compensatory Reading Programs. Volume IV: Cost Analysis of Summer Programs," <u>Report UR-231</u>. Resource Management Corporation: Bethesda, Md., 1976, p. 49.

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APPENDIX

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C.R.P. SUMMER PROGRAM SURVEY

ADMINISTRATOR (PRINCIPAL) QUESTIONNAIRE

	· · · · · ·	
SCHOOL		
SCHOOL DISTRICT	STAT:	·

NAME OF SUMMER PROGRAM ADMINISTRATOR

DIRECTIONS: This questionnaire is in two parts. The first part is intended to elicit information about your summer program and the students in it. PLEASE FEEL FREE TO CONSULT OTHERS IN THIS SCHOOL OR SCHOOL DISTRICT IN ORDER TO PROVIDE THE INFORMATION REQUESTED. The second part of the questionnaire has to do with compensatory reading instruction. By compensatory reading instruction is meant any reading instruction provided to students because they are reading below their grade level.

#### PART I

PLEASE PROVIDE THE FOLLOWING INFORMATION ABOUT YOUR SUMMER PROGRAM. Answer all questions with reference to the current summer unless otherwise indicated.

1. Enrollment this summer (number of pupils).

Less than 50

- 50-99
- 100-199
- 200-299
- 300 or more

OMB No. 51-572043 Expires 8/73



2. Please indicate below the grades (or grade equivalents) included in your summer program. If you have a combination of graded and ungraded classes, indicate the instructional organization for each grade or, if ungraded, the equivalent grades in your school. (Check only one box in each row.)

Instructional Organization	Instruct:	ional (	Organi	zation
----------------------------	-----------	---------	--------	--------

	Grade or Equivale	NOT included			Graded &
	·	in school	Graded	Ungraded	Ungraded
	(a) Kindergarten				
	(b) Grade l				
	(c) Grade 2				
	(d) Grade 3			 -	
	(e) Grade 4				
	(f) Grade 5				
	(g) Grade 6	 			
	(h) Grade 7			 	 L
	(i) Grade 8				°
3.	Number of classes	at each grad	de level:	•	•
	K	3		6	
	1	4		···· 7	
	2	5		8	
	Constal an u				
	Special or u			•	•
4.	What is the length	h of the summ	ner program	?	
	Three we	eks or less	. [	Eight weeks	
	Four weel	ks	Ē	Nine weeks	or more
	Five weel	ks .			
	Six weeks	5	•	·	
	Seven we	eks	77		

5. How long is the school day in the summer?

Same length as regular year school day



Shorter than regular school day

5a. If the summer program day is a short one, is the program held in the morning or the afternoon?

3

	Мо	rning
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Afternoon

6. Which of the following subject areas are offered in the summer program? (Mark one box for each area)

•	Reading	For All Students		For Some Students	Not Offered
;	Mathematics		· .		
1	Language Arts				
•	Social Studies				
	Music				
	Arti			· 🔲	
•	Crafts				
	Swimming				
	Other sports				
	Other (specify)				•
	<u> </u>				

4 6a. Aside from formal reading instruction, which of the following is included to be reading-related activities as you define and exectivities in your summer program? (Mark all that apply)								
<pre>consider to be reading-related activities as you define and exectivities in your summer program? (Mark all that apply)</pre>				4		• • 1		
<pre>consider to be reading-related activities as you define and exectivities in your summer program? (Mark all that apply)</pre>								
<pre>consider to be reading-related activities as you define and exects them in your summer program? (Mark all that apply)   Mathematics   Language Arts   Social Studies   Music   Art   Crafts   Swimming   Other sports 6b. Are there any other activities included in your summer program that you consider to be reading-related?   No   Yes If Yes, please describe briefly:</pre>			<b>د</b> ب		· .			
<pre>consider to be reading-related activities as you define and exects them in your summer program? (Mark all that apply)   Mathematics   Language Arts   Social Studies   Music   Art   Crafts   Swimming   Other sports 6b. Are there any other activities included in your summer program that you consider to be reading-related?   No   Yes If Yes, please describe briefly:</pre>				· .				
<pre>them in your summer program? (Mark all that apply)</pre>	6a.							
<pre>Language Arts Social Studies Music Art Crafts Swimming Other sports 6b. Are there any other activities included in your summer program that you consider to be reading-related? No Yes If Yes, please describe briefly; Yes If Yes, please describe briefly; Student population: Location:</pre>								
<pre>Language Arts Social Studies Music Art Crafts Swimming Other sports 6b. Are there any other activities included in your summer program that you consider to be reading-related? No Yes If Yes, please describe briefly: Yes If Yes, please describe briefly: Location: Location:</pre>		·	-					
<pre>Social Studies Music Art Crafts Svimming Other sports 6b. Are there any other activities included in your summer program that you consider to be reading-related? No Yes If Yes, please describe briefly: Yes If Yes, please describe briefly: No Student population: Location:</pre>	、 ·	Ļ	Mathematics	•			•	
<pre>Music Art Crafts Swimming Other sports 6b. Are there any other activities included in your summer program that you consider to be reading-related? No Yes If Yes, please describe briefly: Yes If Yes, please describe briefly: No Location: Location:</pre>		·	Language Arts					:
<pre>  Music   Art   Crafts   Swimming   Other sports 6b. Are there any other activities included in your summer program that you consider to be reading-related?   No   Yes If Yes, please describe briefly:</pre>		[]	Social Studies	•				
<pre>Art     Crafts     Svimming     Other sports 6b. Are there any other activities included in your summer program that     you consider to be reading-related?     No</pre>			Social Studies		•			
<pre>Crafts Swimming Other sports 6b. Are there any other activities included in your summer program that you consider to be reading-related? No Yes If Yes, please describe briefly:</pre>	•		Music					
Crafts          Grafts         Swimming         Other sports         6b. Are there any other activities included in your summer program that you consider to be reading-related?         No         Yes       If Yes, please describe briefly:			Art			с. С. С. С		
Swimming          Other sports         6b. Are there any other activities included in your summer program that you consider to be reading-related?         No         Yes       If Yes, please describe briefly:								
<pre>     Other sports      b. Are there any other activities included in your summer program that     you consider to be reading-related?</pre>			Crafts			· ·		
<ul> <li>6b. Are there any other activities included in your summer program that you consider to be reading-related?</li> <li>No</li> <li>Yes If Yes, please describe briefly:</li></ul>			Swimming					
<ul> <li>6b. Are there any other activities included in your summer program that you consider to be reading-related?</li> <li>No</li> <li>Yes If Yes, please describe briefly:</li></ul>		. []	Other sports					
you consider to be reading-related?	•				• •		-*	
No          Yes       If Yes, please describe briefly:	6Ъ.				ed in your su	mmer program	that	
<pre>Yes If Yes, please describe briefly:</pre>		you cons	ider to be read	ing-related?				
7. How does the summer program differ from the regular school year program with respect to each of the following items? (Describe differences briefly for each )          Student population:			No		:			
7. How does the summer program differ from the regular school year program with respect to each of the following items? (Describe differences briefly for each ) Student population:								
<pre>with respect to each of the following items? (Describe differences briefly for each ) Student population: Location:</pre>			Voc If Voc	place describ	hriefly.			
<pre>with respect to each of the following items? (Describe differences briefly for each ) Student population: Location:</pre>		🗆	Yes If Yes,	please describ	oe briefly;			
<pre>with respect to each of the following items? (Describe differences briefly for each ) Student population: Location:</pre>	·	🗆	Yes If Yes,	please describ	be briefly;			
<pre>with respect to each of the following items? (Describe differences briefly for each ) Student population: Location:</pre>			Yes If Yes,	please describ	be briefly:			
<pre>with respect to each of the following items? (Describe differences briefly for each ) Student population: Location:</pre>			Yes If Yes,	please describ	be briefly:			· 
for each ) Student population: Location:	•					· · ·		· 
Student population:	7.	How does	the summer pro	ogram differ fro	om the regula	r school yea	r program	
Location:	7.	with res	the summer pro	ogram differ fro	om the regula	r school yea cribe differ	r program ences bri	efly
Location:	7.	with res for each	the summer propert to each of	ogram differ fro	om the regula	r school yea cribe differ	r program ences bri	efly
Location:	7.	with res for each	the summer propect to each of	ogram differ fro the following	om the regula items? (Des	cribe differ	ences bri	efly
	7.	with res for each	the summer prospect to each of ) population:	ogram differ fro the following	om the regula items? (Des	cribe differ	ences bri	efly
7 ;)	7.	with res for each Student	the summer prospect to each of ) population:	ogram differ fro the following	om the regula items? (Des	cribe differ	ences bri	efly
7 ;)	7.	with res for each Student	the summer prospect to each of ) population:	ogram differ fro the following	om the regula items? (Des	cribe differ	ences bri	efly
7:)	7.	with res for each Student	the summer prospect to each of ) population:	ogram differ fro the following	om the regula items? (Des	cribe differ	ences bri	efly
7 3)	7.	with res for each Student	the summer prospect to each of ) population:	ogram differ fro the following	om the regula items? (Des	cribe differ	ences bri	efly
7 :)	7.	with res for each Student	the summer prospect to each of ) population:	ogram differ fro the following	om the regula items? (Des	cribe differ	ences bri	efly
7:)	7.	with res for each Student	the summer prospect to each of ) population:	ogram differ fro the following	om the regula items? (Des	cribe differ	ences bri	efly
	7.	with res for each Student	the summer prospect to each of ) population:	ogram differ fro the following	om the regula items? (Des	cribe differ	ences bri	efly
	7.	with res for each Student	the summer prospect to each of ) population:	ogram differ fro the following	om the regula items? (Des	cribe differ	ences bri	efly
	7.	with res for each Student	the summer prospect to each of ) population:	ogram differ fro the following	om the regula items? (Des	cribe differ	ences bri	efly
	7.	with res for each Student	the summer prospect to each of ) population:	ogram differ fro the following	om the regula items? (Des	cribe differ	ences bri	efly

Instructional organization (class groupings):\_\_\_\_ . Staff:\_\_\_\_\_ Philosophy (goals):\_\_\_\_\_ . Instruction: 7a. In approximate order of their importance, please list the goals of your summer program: 1. (Most important goal):\_\_\_\_\_ \_\_\_\_\_ -----2. (Second most important goal):\_\_\_\_\_ • • . ··· • ·· ·---3. (Third most important goal):\_\_\_\_\_ . \_\_\_\_

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8. Please estimate the percentage of students in the summer program who are of the following racial or national origins. (Check only one box in each lettered row.)

	•	None	1-25%	26-50%	51-75%	76-100%
(a)	Caucasian or White					
(b)	Negro or Black					· 🛄 .
(c)	Spanish surnamed					
(d)	Oriental					* <u> </u>
(e)	American Indian					$\Box$
(f)	Other (Specify)					
	<u> </u>					
Do y	ou feel these are accura	ate esti	mates?			

- 1 \_\_\_\_ Yes 2 \_\_\_\_ No
- 9. Are children enrolled in the summer program from schools not in your school's regular attendance area?

1 [ : Yes 2 [ No

10. If children from other schools are enrolled, about what percentage of the total summer enrollment comes from outside of this school's regular attendance area?

1	1-10%	1	26-50%
2	11-25%	2	More than half



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Using your best professional judgment, rate each of the following characteristics 11. of the summer program. Highly Highly Adequate Adequate Inadequate Inadequate Size of physical plant Condition of physical plant Suitability of physical plant for program operation Number of instructional personnel Number of other professional personnel Number of teacher aides ----Number of other nonprofessionals Quantity of books, periodicals, and other printed materials Suitability (quality) of 1 books, periodicals, and other printed materials for instruciton Quantity of audio-visual materials Suitability (quality) of audio-visual materials for instruction Quantity of instructional equipment Suitability (quality) of instructional equipment for instruction

12. Estimate the percentage of students in your summer program of the following grade levels who are reading one or more years below grade level according to current test data. The estimate should be based upon the concept of national norms for the grade for which you are reporting.

~ (a)	Grade 2		. • • •
	1 🔄 None	4 26-50%	7 🔄 91–100%
	2 1-10%	5 51-75%	
	3 11-25%	6 76-90%	
(b)	Grade 4	·	:
	1 🔄 None	4 26-50%	7 91-100%
	2 1-10%	5 51-75%	•
	3 11-25%	6 76-90%	
(c)	Grade 6		
	1 None	4 26-50%	7 91-100%
	2 1-10%	5 51-75%	
	3 11-25%	6 76-90%	
		·	in the second

13. Does your summer program include at least some compensatory reading instruction as defined?

1

.: ·.;

Yes If so, please go to question 14 and complete the remainder of this quesitonnaire.

83

2 No

If not DO NOT COMPLETE THE REMAINDER OF THIS QUESTIONNAIRE. Instead, return the questionnaire to ETS in the postage-paid envelope provided. Thank you for your cooperation.

	14.	Please describe briefly below the compensatory reading instruction that takes place in your summer program.		
				· -
	14a.	. Is the compensatory reading instruction in your summer program funded totally or in part by funds (federal, state, local, or other) supplementary to the regular ongoing school budget?		
		Yes	· .	
		No		
		Don't know		•
	15.	What is the per pupil expenditure for your summer program?		
		r r		
		Check here if you don't know	•	
	16.	What are the total funds allocated for compensatory reading in your		
		summer program?		
		Check here if you don't know		
•	17.	What are the costs per pupil of compensatory reading in your summer school?		
		Check here if you don't know	-	
	18.	How are the costs of the summer compensatory reading program broken down	ı?	
		Staff costs		
	•	Materials		
		0+hor		
		other		
		Total		• • • • •
		Check here if you cannot		
		break down costs for program		
EDIC.	· .			
Full Text Provided by ERIC		81		

19. About what percentage of the students participating in the summer reading program in your school are from culturally, linguistically, and/or economically deprived backgrounds? (Mark one box in each lettered row.)

	None
	1-107
$\Box$	11-50%
	51-90%
$\Box$	91-100%
$\square$	Don <sup>†</sup> t Know

20. Indicate the approximate level of funding for the summer reading program in your school by each source indicated below.

د د سې د

FEDERAL	Total	Partial	None	•
ESEA Title I			·	
Other (Specify)		<b>.</b>		•
<u> </u>				· · · · · · · · · · · · · · · · · · ·
STATE (Specify)				
				, · ·
LOCAL (Specify)		,		
<b>Ø</b>				
·.				
OTHER		,		

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Check here if you cannot provide the information requested above.

21.	What is the basis for determining pupil participation in summer reading program(s)? (Mark all that apply.)
	All students in the summer program participate
	Membership in one or more specific target groups (i.e. economically disadvantaged, migrants, non-English speaking)
	Depressed reading levels (as indicated by test results)
Sina	Teacher (or other staff) recommendation
	Parent request
	Volunteer
	Other (Specify)
22.	Does the summer reading program use parents or other volunteers (paid or unpaid) to help in the classroom?
	1 Yes
	2 📃 No
23.	Does the summer reading program use pupils as tutors?
	1 Yes
	2 🔄 No
24.	Did you fill out a questionnaire like this for the Compensatory Reading Project during the 1972-73 school year?
	Yes
	No
	Don't know
	PLEASE CHECK TO MAKE SURE ALL QUESTIONS HAVE BEEN ANSWERED.
	THEN RETURN YOUR QUESTIONNAIRE TO ETS IN THE POSTAGE-PAID
	ENVELOPE PROVIDED. THANK YOU FOR YOUR COOPERATION.

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#### C.R.P. SUMMER PROGRAM SURVEY

## CLASS AND PROGRAM CHARACTERISTICS QUESTIONNAIRE

This questionnaire is designed to elicit information about your reading instruction and the group(s) to which you provide such instruction. Because reading instruction and instructional groups are so variable, some definitions are given below. Please keep the definitions in mind as you answer the questions, and refer to them as often as you need to.

In many instances, the questionnaire asks for information about classes. For purposes of this study, a class is any instructional group that is exposed to a common set of materials, personnel and/or services, however large and extensive that set might be, and that can sensibly be treated as a group in terms of its general characteristics. IF YOU ARE A MEMBER OF A TEAM THAT TOGETHER INSTRUCTS SUCH A GROUP, PLEASE COMPLETE THIS QUESTIONNAIRE TOGETHER WITH THE OTHER MEMBER(S) OF THE TEAM.

If your class includes children from several grade levels, please answer the questionnaire with respect to the grade level(s) that are appropriate to this study (2, 4, and/or 6).

#### 1. CLASS CHARACTERISTICS

If you are a classroom teacher, answer questions 1 and 2. If you are NOT a classroom teacher, skip to question 3.

1. What grade do you teach?

Two

**Four** 

Six

Ungraded (Cive equivalent grades

la. How many pupils are in your class? (Give actual number)

How many are boys?\_

How many are girls?

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•	Which	of	the	following	subject	areas	do	you	teach	in	the	summer	program?
	(Mark	all	l tha	it apply)				•					· · · · · ·

	Reading	
	Mathematics	
	Language Arts	
	Social Studies	
	Music	
	Art	
، مەربىيە ب	Crafts	
• • •	Swimming	
	Other supervised sports	
	Other (specify)	
3. How	o the pupils in your class receive reading instruction?	
	All of the pupils in my class recuive reading instruction	
	from me	
	some from me and some from another teacher	
	Selected pupils in my class receive reading instruction	
	from me	
	some from me and some from another teacher	
The foll	ving questions refer CNLY to those pupils who receive their reading on from you. If you are a classroom teacher, and if all of the pupils	

ins in your class receive reading instruction, answer the questions in terms of the total class. IF ONLY SOME OF THE PUPILS RECEIVE READING INSTRUCTION FROM YOU, ANSWER IN TERMS OF THOSE RUPILS ONLY. If you provide reading instruction to more than one class (as class is described above), answer the questions with respect to one class per program. Answer the questions with reference to the class in any given program that meets earliest each week. Be sure to include all meetings of that class. If you do teach reading to more than one class, indicate in the box how many classes you teach.

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÷.,	4.	How many pupils receive reading instruction from you? (Include any pupils who may be sent to your classroom especially for reading instruction.)
		Total number of pupils
		a. How many are boys?
		b. How many are girls?
	5.	What is the age range of the children in your reading class?
		Age of oldest child: / Age of youngest child: / Years Months Years Months
	For ins	purposes of this survey, compensatory reading instruction is any reading truction provided to students because they are reading below grade level.
	6.	To what extent is your summer reading instruction compensatory (according to the definition given above)?
		Compensatory for all students in the class
		Compensatory for some students in the class
		Not compensatory at all
	7.	What percentage of the pupils in your reading class have received com- pensatory reading instruction during the school year prior to this summer?
		None
		1-25%
		26-50%
		51-75%
		76-100%
		Don't know
	8.	About what percent of the pupils in your summer reading class are members of the following racial or national origin groups? (Mark one box in each lettered row.)
-		None 1-25% 26-50% 51-75% 76-100%
		(a) Caucasian or White
		(b) Negro or Black
		(c) Spanish surnamed
		(d) Oriental
		(e) American Indian

•

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(f) Other Specify\_\_\_\_

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9 Estimate the percentage of pupils in your summer reading class who have persistent problems in each of the following areas. (Mark one box in each lettered row.)

, general de la composition de la compo	•	None	1-10%	11-50%	51-100%	Don't Know
(a)	Speech				·	
(b)	Vision		,			
(c)	Hearing		 l			
(d)	Frequent illness					
(e)	Mental retardation				 !	Ū,
(f)	Emotional problems					
(g)	Family instability			·		
(h)	Other (Specify)				. 🗆	
). What	is the average absentee	rate in yo	ur summer	reading class	s? (About wi	nat

10 is absent on any given day?) cne CLASS

<u> </u>	0-10%	
	11-20%	
	21-30%	
	31-40%	
	41-50%	

i i

More than 50%

. . . .

What of the following would you judge to be the major causes of absenteeism 11. among your pupils? (Mark Yes or No for each cause.) 1 2

••	Yes	No			
•			Illness of pupil	• •	
			Illness of other family member(s)		
			Lack of parental concern		
			Need for pupil-to perform other duties at home	•	····· ·
		$\Box$	Suspension or expulsion		
	 		Other (Specify)		
			0.0		

Questions 12 and 13 ask for your opinions about the pupils you teach. Please answer the questions as candidly as you are able; there are no "right" answers.

12. How far do you expect the average pupil in your summer reading class would be able to go in school if he were given the opportunity?

	Eighth grade, or lower
<sup>.</sup> .	Ninth, tenth, or eleventh grade
	High school graduate
	Junior college, business school, or some other post-secondary course, but not a four year college
	Four year college or beyond
	Other (Specify)
How far actuall	do you expect the average pupil in your summer reading class <u>will</u> y <u>go</u> in school?
	Eighth grade, or lower
	Ninth, tenth, or eleventh grade

High school graduate

13.

Junior college, business school or some other post-secondary course, but not a four year college

Four year college or beyond

Other (Specify)

#### II. PROGRAM CHARACTERISTICS

The following questions refer to your summer reading instruction (see definition on page 1). If you are a classroom teacher, and all ci the pupils in your class receive reading instruction, answer the questions in terms of the total class. If only some of the pupils receive reading instruction, answer the questions in terms of those pupils only, and in terms of that part of the instructional program that is directed to them.

If you are a reading teacher or specialist teacher, answer the questions with reference to the class to-which your instruction applies. If you teach more than one class (as class is defined on page 1), answer the questions with reference to the one class per program that meets earliest in the week. Be sure to include all meetings of that class.

If you do teach more than one class, check this box.

6	
	3
14. When is reading instruction carried out? (Check all that apply.)	
During regular summer school hours in time scheduled for reading instruction	5
During regular summer school hours in time released from other of work	lass
Before or after school or on weekends	
Other (Specify)	
15. What is the average amount of formal instruction time per student in reading?	
a. Minutes per instructional period:	
1-15	
1 1 J 16-30	· .
	• •
<u> </u>	
41-50	t And Star
51-60	
61-75	·
76-90	
91 or more	•
b. Number of instruction periods per week:	•
One	94 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194
Two or three	
Four or five	
More than five	*. •
16. Do most pupils receive reading instruction at the same time of day every instructional day?	
1 Yes	
2 📃 No	
a. If yes, when is the instructional period?	
Before school	
	•
92	

, 9	Remedial reading teacher or supervisor			
	Other professionals (counselors, psychologists, etc.)			
	Paraprofessionals or teacher aide			
	Parent or other volunteer			
	Student teacher			
	Media specialist			
	Resource teacher (music, art, etc.			
	Older student in school		<b>[]</b>	· • • • •

18. During the summer, how many teachers other than yourself have held your particular teaching assignment with your reading class for at least two consecutive weeks? COUNT SUBSTITUTE TEACHERS AND REPLACEMENT TEACHERS; DO NOT COUNT STUDENT TEACHERS OR CLASSROOM AIDES.

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	• .		· .		۰. پ	
		• <i>"</i>			•	
	More than three		-			
	Three	:			·	۰.
	Two					
	One			7		
	None					

7

17.

in the summer program?

Other (Specify)

What additional personnel are available to you in your teaching of reading

Frequently

Occasionally

Rarely

Not Available

19.

. .

If your reading class is organized into groups, indicate the frequency with which you organize these groups by each of the following criteria.

------

•	Frequently	Occasionally	Rarely	Never	
Reading grade level					
Spècific skill deficiencie	s 🔲				
Shared interests					
Specific projects					
Other (Specify)					

20. How often do the following instructional groups operate (occur) in the course of your teaching of reading?

•	Frequently	Occasionally	Rarely	Never	
Adult and ch <b>i</b> id in one-to- relation <b>s</b> hip	one 🗌				
Adult and children in grou of between 2 and 10	ps				
Adult and children in grou or more than 20 (includes whole class instruction)	ps 📃				
Individual pupils working independently					
Pupil teams working independently					
Other (Specify)					

21. If your reading class is organized into groups, about how frequently does the composition of the group change?

Daily		-	
Waekly			
Bi-weekly			
Monthly	···· · · · · · · · · · · · · · · · · ·	 	
Rarely, if ever			
Other (Specify)	·	•	
	94	•	

	In a sentence or two, describe the outstanding features of your summer reading instruction.
_	
•	
-	
_	· · · · · · · · · · · · · · · · · · ·
• I f	n a sentence or two, explain how your summer reading instruction differs rom the instruction during the regular school year
_	
 ۷۷ •	Thich one of the following terms comes closest to describing your major
	lassroom approach to the teaching of reading?
	Linguistic-phonetic
	Language experience
	Combination of linguistic-phonetic and language experience
	Modified alphabet
	Eclectic
	Other (Specify)
• Н	ow long have you used this method?
	This is the first year
	For one or two years
	For three, four, or five years
	For six years or more

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To what extent do you use each of the following approaches to teaching reading in your classroom?

Not at All

26.

Minimally Somewhat Extensively

Basal readers			
Programmed instruction		Ξ.	
A total phonics program			
A supplementary phonics program			
Language experience		·	
A linguistic program			
Non-standard orthography (ex., i.t.a.)			
Words in color			
Individualized programs			
Technological devices (ex., "talking typewriter", teaching machines)			
Other (Specify and describe)			

27. Who selected the materials that you are using this summer in your teaching of reading?

You, and you along	
You, as a member of a te	am or committee
An individual, team, or you	committee, operating without any input from
Other (Specify)	

28. How satisfied are you with the materials you are using this summer in your teaching of reading?

Totally satisfied
Satisfied in major aspects; dissatisfied in some minor ones
Lukewarm; neither devoted nor opposed to the materials
Dissatisfied in major aspects; satisfied only in some minor ones

Totally dissatisfied

29. How frequently do you use the following materials in the course of your reading instruction?

• <u>•</u>

	Not Available	Often	Sometimes	Rarely or Never Use
Textbooks other than bas readers	al 🗌			
Books and printed materi other than textbooks	als 🗌			
Newspapers, magazines, a other periodicals	nd 🗍			
Teacher-prepared materia (dittos, etc.)	1s 🦳	·		
Motion pictures and/or filmstrips			, ,	
Slides and transparencie	s			
Tape recordings and reco	rds 🗌			
Video or television tape	s 🗌			
Games, puzzles, and toys				
Other (Specify)				

	deal	Some	Little or none
Improving motor abilities related to reading			
Increasing attention span			
Developing visual discrimination			
Matching letters or words			
Learning letter forms			
Developing a sight vocabulary (Whole word recognition)	, 🗖		D.
Learning word meanings (Vocabulary)			,
Phonic and/or structural analysis			

.....

31. Have you had any special training in the teaching of reading or in instructional techniques for disadvantaged pupils in connection with your current teaching assignment?

1	Yes

2 \_\_\_\_ No

If no, skip to question 35.

If yes, please answer questions 31-34.

32. What form did the special training take? (Check all that apply.)

Summer workshop or institute

College course (whether or not for degree credit)

After school or weekend workshop(s)

\_\_\_\_ Released-time workshop(s)

Individual instruction with supervised practice teaching

Other (Specify)

12

		•
33.	Which of training	the following areas were explored in the course of the special you received? ( <u>Check all that apply</u> .)
		New instructional techniques in reading
		Diagnosis of reading problems
		Open classroom methods
	· 🗖	Individualized instruction
		Use of equipment and materials
		Techniques for cultural enrichment
		Other (Specify)
34.	Over wha	t time period did the special training extend?
		One summer
•		One academic semester
*		One academic year
		One calendar year
		One summer and one academic year
	L]	Other (Specify)
35.	Horr long	ago did you receive your special training?
		Less than one year ago
	نبا 	
		More than one but less than two years ago
		More than two but less than three years ago
		Three or more years ago
		·

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36. For a typical pupil in your summer reading program, about how much time is devoted to each of the following reading or reading-related activities?

Basic reading instructional program	None	Less than l hour per week	Between 1 and 4 hours/week	More than 1 hour a day (5+ hours/week
Compensatory reading				
Instructional program (only if compensatory reading pro- gram is different from basic instructional program)				
Reading in content areas (Science, Social Studies, etc.)				··· []
Independent (self-selected) reading				
Library_activities	$\Box$			
Enrichment activities (in- clude trips, special assemblies, etc.)				
Other relevant activities (Specify)				
· · · ·			, , ,, , ,, , ,, , ,, , , , , , , , , , , , , , , , , , , ,	
				· · · · · · · · · · · · · · · · · · ·

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	and to	what extent you use them.	· · · · · · · · · · · · · · · · · · ·	Jour reading	matraction,	
	Scott Foresman	Series Titles(Specify)	Use as major resource in teaching reading	mental or op-	Occasionally refer to my- self but don't use in class	Don't use at all
	· · ·					
	Harper Row	A				
	Macmillan					
	American Book Co	•				
	Ginn & Co.	·				
-	Houghton-Mifflin					
	Lippincott					
	Allyn & Bacon					
	· · · ·	· · · ·				
	Holt, Rinehart & Winston					
	SRA					
•	Harcourt Brace & World					
		Open Court ITA-				
3 ] (	C	Merrill Linguistics	01			

37. Please indicate below what materials you use in your reading instruction, and to what extent you use them.

List a <b>ll</b> a <b>d</b> ditional materials used, including hardwa <b>re</b>	Use as major resource in teaching reading	Use as supple- mental or op- tional course in class	Occasio <b>nally</b> refer to my- self but don't wse in class
-			
;			
8. Do you create any of the mater	ials you are curr	ently using in tead	ching reading?
2 No a. If Yes, which of the ( <u>Check all that apply</u>	following types of )	f materials do you	create?
Worksheets	ies, poems, or ess	says	
Transparenci Filmstrips	es for overhead p	rojector	
Slides Motion Pictu	res		· : · ·
Charts			 
Tapes Other (Speci	fy)		



39.

How would you rate each of the following activities in terms of importance to you as goals in your current teaching of reading?

	Major Goal	Secondary Goal	Of little or no Importance as a goal
Improving motor abilities related to reading			
Increasing attention span			
Developing auditory discrimination			
Matching letters or words			
Learning letter forms			
Developing a sight vocabulary (Whole word recognition)			
Learning word meanings (Vocabulary)			
Phonic and/or structural analysis			
Developing skill in using context clues		viet a line be	
Practicing syllabification skills			
Practicing punctuation and paragraph skills			
Developing comprehension skills			
Improving comprehension rate			
Developing listening skills			
Reading aloud			
Reading silently (independent silent reading)			
Developing study skills			
Developing library skills			
Improving verbal communication		· · · · ·	
Creative writing			
Reading for enjoyment			

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				•	
·		Major Goal	Seconda <b>ry</b> Goal	Of little or no Importance as a goal	
•	Enriching cultural background				
	Imp <b>roving</b> self-image				
	Impro <b>ving attit</b> udes toward reading				
	Other (Specify)				
- ·			•		<u>.</u>
			<u>1.</u> 		
40.	About how often does each child in your read to read aloud to the class?	ling class	have the opp	ortunity	• .
	At least once a day		, · ·		
	Several times a week, but not daily	7			
	About once a week				
	Less than once a week, but regularl	у			
	Seldom or never on a regular basis				
41.	About how often does each child in your read to read aloud to you alone (or to another ad	ling class lult)?	have the opp	ortunity	
	At least once a day				
· .	Several times a week, but not daily				
	About once a week			•.	
	Less than once a week, but regularl	v	•		
N.,	Seldom or never on a regular basis				
	· · · · · · · · · · · · · · · · · · ·			· · · ·	
	· · · · ·		· •		
•					
			· · · •,		

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42.	How successful would you to each of the following	consider your criteria?	reading teaching to be with respect			
		Highly Successful	Moderately Successful	Moderately Unsuccessful	Totally Unsuccessful	
	Enhancing pre-reading skills					
	Enhancing measured reading achievement					
•	Improving attitudes toward reading			• •		
	Improving students' self images					
	Remediating cultural deprivation				· 🛄	
43.	Use this space for addit:	ional comments	•		·	

PLEASE CHECK TO MAKE SURE ALL OUESTIONS HAVE BEEN ANSWERED. THEN RETURN YOUR QUESTIONNAIRE TO ETS IN THE POSTAGE-PAID ENVELOPE PROVIDED. THANK YOU FOR YOUR COOPERATION.

## C.R.P. SUMMER PROGRAM SURVEY

# TEACHER CHARACTERISTICS QUESTIONNAIRE

This questionnaire is one of several that are designed to provide information about summer programs and the students enrolled in them. Please answer all questions with reference to the current summer and the students you are presently teaching.

ang m

1.	What	is	your sex?	Male		_Female				
	la.	Wha	at grade(s)	are you te	aching	this summ	ner? (M	ark all	that apply	y) ~
			Two	1						
			Four							· ··
	•		Six					•		
			Multiage	(specify g	rade le	vels repr	esented			_)
			Other (spe	ecify				)		
				e			•••••			
2.	Whic	h of ¢	the follow	ing repres	ents yo	ur curren	t employ	ment sta	atus?	
	•		A teacher regular so	(or other s hool year	staff m	ember) in	this so	chool du	ing the	
			A teacher district d	(or other a luring the p	staff m regular	ember) in school y	anothe: ear	school	in this	·· .
•			A summer e	mployee on	у			1		
			Other (spe	cify)					•	Ĩ
·.	2a.		you are a r summer ass ependent ar	rgument par	LULYC	our rutt-v	vear con	s school tract, c	district r is it a	, is n
			Full-year	contract, c	ne sala	iry				
			Full-year,	extra pay	for sum	mer				
			Summer con	tract only	•			•		
			Other (spe	cify)	<i>1</i> .		· · ·	•		۰ <i>۲</i>
	e			·	and the second					

3.	How many years of teaching experience (public and nonpublic), including this past school year, have you had?
	One year or less
	More than 1 year but less than 3 years
	At least 3 years but less than 6 years

At least 6 years but less than 10 years

At least 10 years but less than 20 years

Twenty years or more

4. How many years, including this summer, have you taught in a summer program? (Include all summer programs you have taught in, whether in this district or another.)

One year or less

More than 1 year but less than 3 years

At least 3 years but less than 6 years

At least 6 years but less than 10 years

At least 10 years but less than 20 years

Twenty years or more

What type of teaching certification do you have? 5.

• No certificate

Temporary, provisional, or emergency certification

Regular certification

- What is the highest earned college degree you hold? (Do not report honorary 6. degrees.)
  - No degree

A degree or diploma based on less than 4 years of work

A bachelor's degree

A master's degree

A doctor's degree (EdD, PhD, etc.)

	3
7.	Have you had any special training in the diagnosis and treatment of reading problems?
	Yes No
	7a. If yes, at what academic level was the training?
	Undergraduate
	Graduate
	Inservice
	On the job
	Other (specify)
8.	Are most of your summer students of the same racial or national origin as you?
	Yes No
9.	Were you <b>assign</b> ed to or did you choose the summer program in which you are teaching?
	- Was assigned to school Chose school
10.	Were you assigned to or did you choose to teach the group you are teaching this summer?
	Was assigned to class Chose class
- Malayan m	
you pro as int	e questions that follow are all designed to elicit your opinions about ur summer program, the pupils you teach, and any compensatory reading ogram you might be involved in. Please answer the questions as candidly you are able. There are no "right" answers to these questions; we are terested in obtaining some information about how teachers feel about mpensatory reading programs and about the pupils in them.
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11. Compared with other schools and programs in your district or community, how satisfied are you with respect to the following things about your summer program?

	Highly Satisfied	Moderately Satisfied	Moderately Dissatisfied	Highly Dissatisfied
Physical facilities (buildings, etc.)				
Faculty (teachers)				
Ability of student body				
Attitudes of student bod	у 📋			
Administration				
Overall philosophy of education				

12. How responsive is the summer program administration to any requests you might make for additional teaching materials or equipment?

Highly responsive

Moderately responsive

Not at all responsi
---------------------

13. For remedial or other help for one of your students?

	<b>Hig</b> hly	responsive	
--	----------------	------------	--

Moderately responsive

1	Not	ot	ااء	Tegn	onsive
	1100			LCOP	

### 14. For changes in your curriculum?

Highly responsive

Moderately responsive

Not at all responsive



15. Do you believe there is a sound basis in educational policy for giving compensatory programs to disadvantaged students at extra per pupil cost?

Definitely yes				-
Probably yes		· .		
I am undecided	۴.			
Probably no				 <b>₹</b> ~
Definitely no			an an	:

16. Do you believe that compensatory programs are generally worthwhile?

Definitely yes
Probably yes
I am undecided
<b>Probably</b> no
Definitely no

17. Did you fill out a questionnaire like this for the Compensatory Reading Project for the 1972-73 school year?

Ye <b>s</b>		
No		
Don't		

know

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	· .	. 6					
18. The following statements are all related to the academic capabilities of disadvantaged pupils. For each statement, indicate the degree to which you agree or disagree with the idea expressed.							
	a.	With proper instruction they can learn about as well as any other pupils.	Strongly Disagree	Disagree	Uncertai	Agree	Disagree
	b.	No matter how good the instruction these pupils receive they will always score lower than middle class children.					
	c.	These children do not want to learn.					
	d.	The pupils want to learn but they do not have the right background for school work.					
	e.	It has been sufficiently proven that such pupils will never do as well as other students.					
	f.	Materials are more important than methods in the teaching of reading.					
	g.	Methods are more important than materials in the teaching of reading.					
	h.	The teacher's ability is more important than either methods or materials in the teaching of reading.					
	<b>i.</b>	Disadvantaged children have more trouble learning to read th <b>an</b> advantaged children.					
	j.	Disadvantaged children have a shorter attention span than advantaged children.					
•	k.	Disadvantaged children have different linguistic experiences than advantaged children.					
	1.	Disadvantaged children are disadvantaged mainly in that they do not have the foundation of concepts that advantaged children have.					
	. m.	Learning to verbalize complete thoughts is particularly important for disadvantaged children.					
	n.	Improving the student's self-image as a learner is particularly important for disadvantaged children.					
	0.	The ability to ask questions which require a complete answer is extremely important in teaching reading to disadvantaged children.					
	p.	In teaching reading, a wrong response can be as useful as a correct response.					
•	q۰	Disadvantaged children often have lower aspirations than advantaged children.					

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Use this space for additional comments.

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PLEASE CHECK TO MAKE SURE ALL QUESTIONS HAVE BEEN ANSWERED. THEN RETURN YOUR QUESTIONNAIRE TO ETS IN THE POSTAGE-PAID ENVELOPE PROVIDED. THANK YOU FOR YOUR COOPERATION.

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