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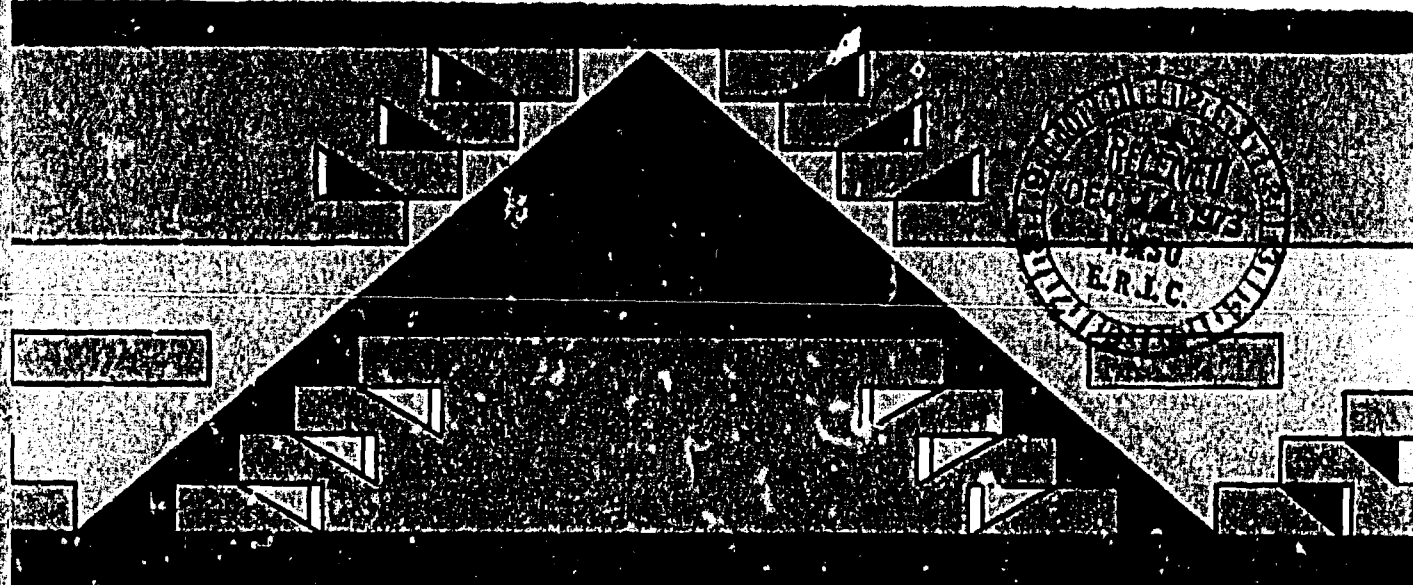
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ABSTRACT

A summary of the Elementary and Secondary Education Act Title I projects operated in the Bureau of Indian Affairs (BIA), Phoenix Area, during fiscal year 1973 is given in this evaluation report on a school by school basis. Data, presented by charts and graphs, cover: the BIA's organization; student enrollment in the Phoenix Area; school expenditures; student participation by component and school; professional and paraprofessional staff; parent council involvement; and student achievement in reading, language, mathematics, special education, and physical education. The data in this report show that, except for a few isolated grades in some schools, projects were very successful during 1973. Students in every grade gained at or above the national average in reading and language and, with the exception of students in grades 3 and 11, also in mathematics. The following recommendations are made: (1) schools showing low gains in reading and mathematics should critically evaluate their programs to see what is hindering their students and (2) projects which are demonstrating consistent gains in every grade should attempt to have the regular program institute the activities throughout the school. (NQ)

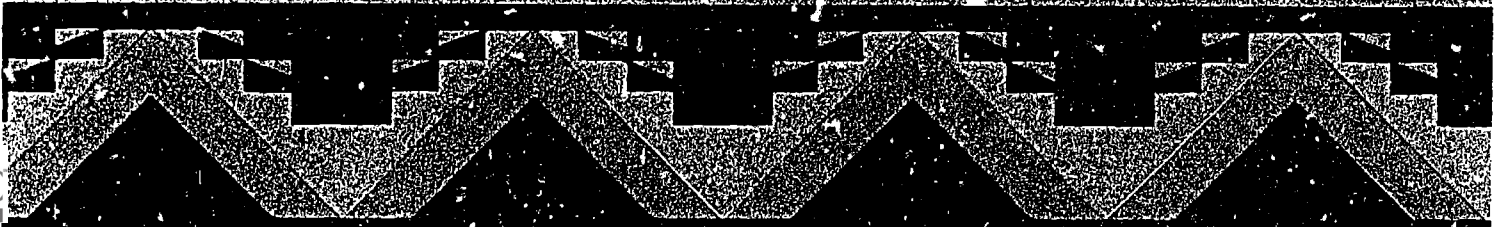


TITLE 1

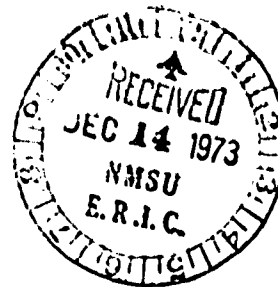
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1973

FINAL EVALUATION REPORT
phoenix area
BUREAU OF INDIAN AFFAIRS
DEPARTMENT OF THE INTERIOR



ED 085130



REPORT OF FINAL EVALUATION
ESEA TITLE I PROJECTS
FISCAL YEAR 1973

U.S. DEPARTMENT OF THE INTERIOR
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First to the teachers whose diligence and perseverance made the difference between the spectacular results reported here and the mediocre results that could have occurred. Secondly, to the Title I Coordinators, School, and Agency Administrators whose logistical work and cooperation were invaluable. Appreciation is extended to the Parent Advisory Councils for their concern, input, and support in the planning and operation of all local school projects.

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INTRODUCTION

This Evaluation report addresses itself to a summary of projects operated in the Bureau of Indian Affairs, Phoenix Area, during Fiscal 1973. The format of the present report is a break from the traditional Phoenix area report in that the long narrative has been replaced with a more manageable and readable presentation of charts and graphs.

Additionally, this year the Phoenix Area is presenting two evaluation reports. One, for general distribution, is a composite summary of the data into an area-wide report. The second is an individual school report that presents the data on a school by school basis. The school report is primarily meant for distribution to the 22 Phoenix Area Schools; however, anyone who wants a copy of the report may have one.

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OVERVIEW AND ORGANIZATION OF THE BUREAU OF INDIAN AFFAIRS

At the time of printing of this report, the Bureau of Indian Affairs was considering several reorganization plans, each of which would change the alignment and functions of the different administrative levels. However the basic organizational flow from the Commissioner to the field Area Offices, agency, and school levels appears not to change from previous years. (See figure 1)

The Phoenix Area Office exercises jurisdiction over Bureau of Indian Affairs schools in a three state region. Figure 2 shows the geographical location of schools in the Phoenix Area. The twenty-one schools are situated in a three-state region comprised of Arizona, California and Nevada. With the exception of two off-reservation high schools, all are located in Arizona. The two exceptions are Sherman Indian High School in Riverside, California and Stewart Indian High School in Stewart, Nevada. Phoenix Indian High School, the Area's third boarding high school, is located in the heart of Phoenix, Arizona.

Located in the White Mountains of eastern Arizona are the John F. Kennedy Day School, Cibecue Day School, and Theodore Roosevelt Boarding School. To the north, approximately 180 miles are the Hopi mesas and the six schools which serve the Hopi children. A mule trip is necessary to reach the Havasupai village, where the Supai Day School is located near the Grand Canyon. Farther south near the Mexico-Arizona border in the Sonoran Desert, is the Santa Rosa Boarding School and three small day schools on the Papago Reservation. Approximately 30 miles south of Phoenix on the Gila River Reservation are the two Pima Bureau day schools, one small tribal operated school and one mission school. Also, located near metropolitan Phoenix is the Salt River Reservation which contains one day school.

Figure 1
 Organization-Bureau of Indian Affairs

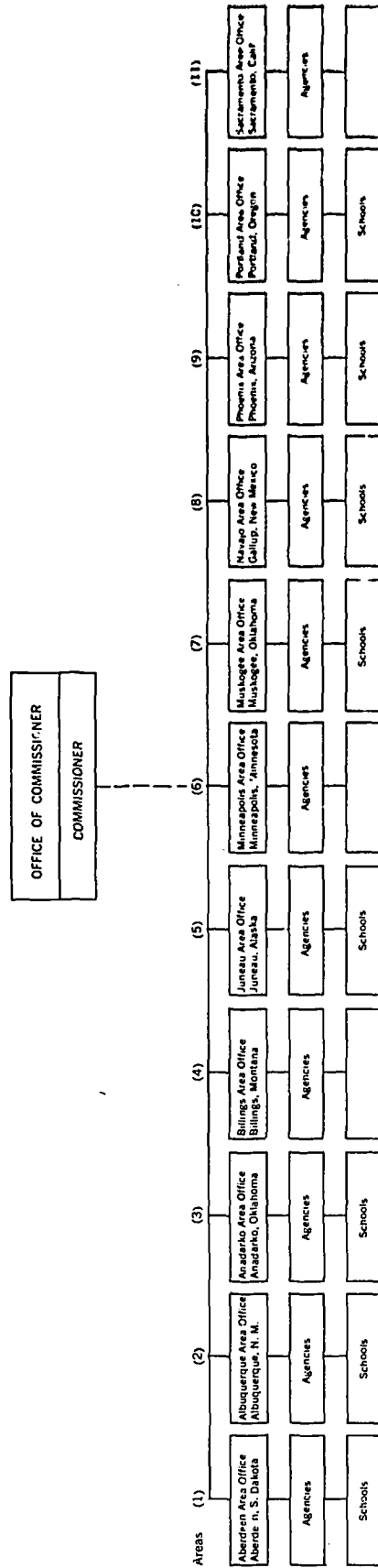
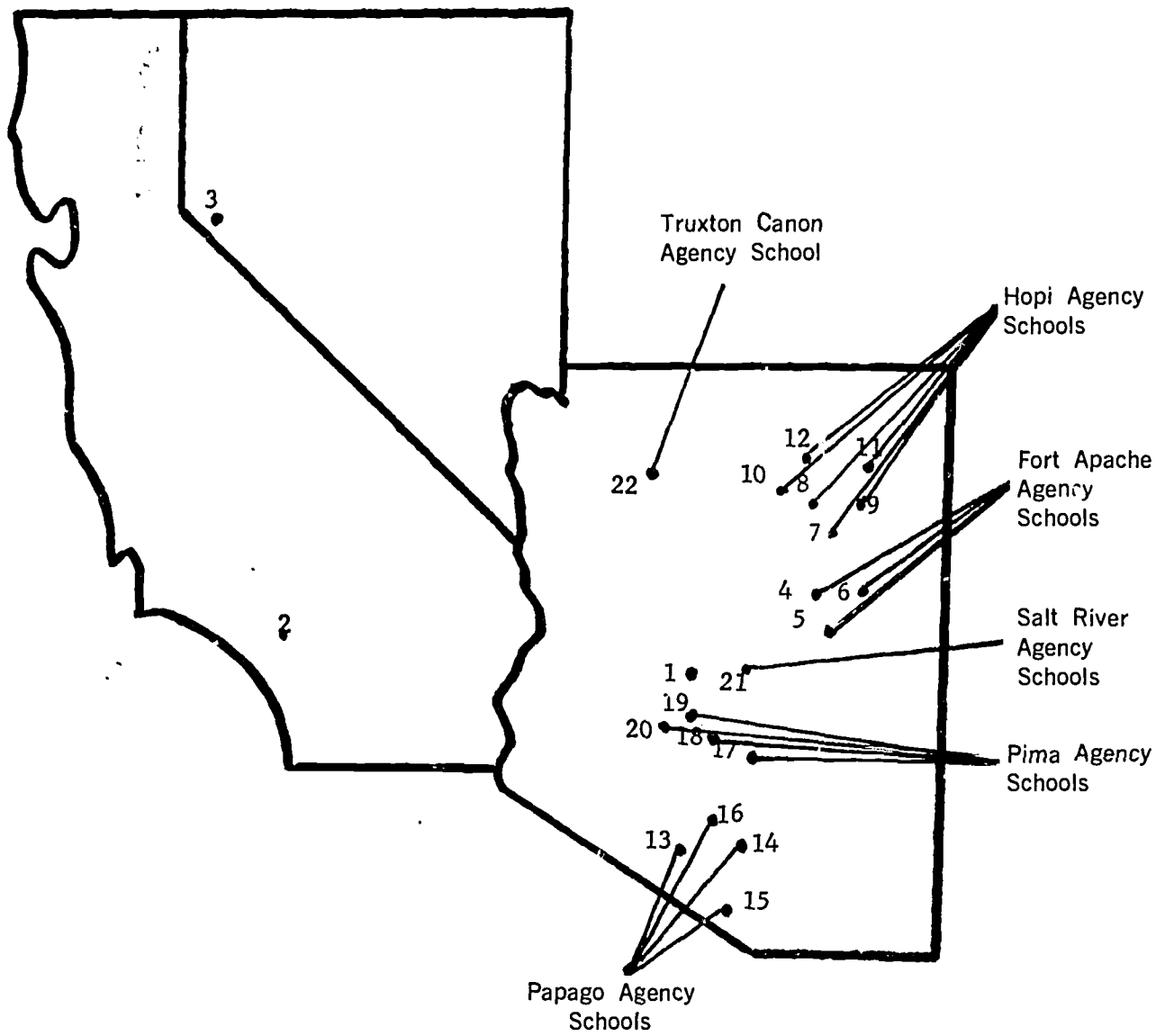


Figure 2
Phoenix Area Schools



- | | |
|---------------------------------------|-------------------------------------|
| 1. Phoenix Indian High School; | 12. Second Mesa Day School |
| 2. Sherman Indian High School | 13. Kerwo Day School |
| 3. Stewart Indian High School | 14. Santa Rosa Boarding School |
| 4. Cibecue Day School | 15. Santa Rosa Ranch Day School |
| 5. John F. Kennedy Day School | 16. Vaya Chin Day School |
| 6. Theodore Roosevelt Boarding School | 17. Blackwater Demonstration School |
| 7. Hopi Day School | 18. Casa Blanca Day School |
| 8. Hotevilla Day School | 19. Gila Crossing Day School |
| 9. Keams Canyon Boarding School | 20. St. John's Mission School |
| 10. Moencopi Day School | 21. Salt River Day School |
| 11. Polacca Day School | 22. Supai Day School |

Table 1

Enrollment in the Phoenix Area Schools by Agency and School
for School Year 1972-73

Agency & School	Grades Served	Number of Students
Elementary Schools		
Fort Apache Agency		
Cibecue Day School	K-8	288
Theodore Roosevelt Brdg.	K-5	104
John F. Kennedy Day	2-8	213
Hopi Agency		
Hopi Day School	1-8	147
Hotevilla Day School	1-6	103
Keams Canyon Brdg./Day	B-8	279
Moencopi Day School	1-4	59
Polacca Day School	K-6	193
Second Mesa Day School	K-6	276
Papago Agency		
Kerwo Day School	B-8	50
Santa Rosa Boarding/Day	B-8	390
Santa Rosa Ranch Day	B-7	19
Vaya Chin Day School	B-4	74
Pima Agency		
Blackwater Demonstration*	K-1	52
Casa Blanca Day School	K-4	139
Gila Crossing Day School	K-5	114
St. John's Indian School**	1-12	210
Salt River Agency		
Salt River Day School	K-7	285
Truxton Canon Agency		
Supai Day School	B-4	42
High Schools***		
Phoenix Indian High School	7-12	726
Sherman Indian High School	9-12	699
Stewart Indian High School	8-12	490

- * = Contracted to Community
- ** = Catholic Mission School
- *** = Off-Reservation Schools

Table 2
Expenditures/School

	Instructional Components					Supportive Components					Totals
	Reading	Language	Math	Special Education	Total Academic	Physical Education	Administration Dissemination	Parent Council Cost			
Poliacca Day School	20,947		11,851				50*	411		33,259	
Keams Canyon Brdg. Sch.	37,265		21,569			22,012	*22,563	79		103,488	
Moencopi Day School	23,241							79		23,320	
Second Mesa Day Sch.	47,450							381		47,831	
Hotevilla Day School	21,938							79		22,017	
Hopi Day School	31,799							59		31,858	
Cibecue Day School	35,594	31,122					2,626			69,342	
Theodore Roosevelt Boarding School	49,307		10,470				2,566	2,850		65,193	
John F. Kennedy Day Sch.	37,428						1,255	600		39,283	
Kerwo Day School											
Santa Rosa Brdg. School	**104,492		**28,236	**27,354						**182,285	
Santa Rosa Ranch Sch.							**22,203				
Vaya Chin Day School											
Blackwater Day School											
Casa Blanca Day School	**153,943		***27,758	***15,674			***23,649	***404		***221,428	
Gila Crossing Day School											
St. John's Indian School											
Salt River Day School	53,480					22,270				75,750	
Supai Day School	24,055							600		24,655	
Phoenix Indian School					193,244		21,924	2,000		217,168	
Sherman Indian School	23,243		50,445			11,756	6,104	4,800		96,348	
Stewart Indian School	65,899						7,845	4,100		77,844	
Phoenix Area Office							120,970			120,970	
Hopi Follow Through					42,570					42,570	
Total	\$730,081	\$31,122	\$150,329	\$43,028	\$235,814	\$56,038	\$231,755	\$16,442		\$1,494,609	

*This administration cost served all 6 Hopi Schools
 **Agency Project served all 4 Papago Agency Schools
 ***Agency Project served all 4 Pima Agency Schools

**Table 3
Student Participation by Component and School**

	Reading		Language		Mathematics		Special Education		Physical Education	
	Grades	No. of Students	Grades	No. of Students	Grades	No. of Students	Grades	No. of Students	Grades	No. of Students
Keams Canyon Brdg. Sch.	1-7	130			6-8	68			B-3	37
Moencopi Day School	1-4	27								
Hopi Day School	4-8	95								
Hotevilla Day School	1-6	42								
Second Mesa Day School	4-6	40								
Polacca Day School	4-6	70			4-6	41				
Cibecue Day School	4-8	64	K-3	60						
John F. Kennedy Day Sch.	1-7	61								
Theodore Roosevelt Sch.	4-9	185								
Salt River Day School	2-7	90								
Supai Day School	1-4	43								
Phoenix Indian High Sch.	7-9	200	7-9	200	7-9	200	7-9	30		
Sherman Indian High Sch.	9-12	200			9-12	100			9-12	90
Stewart Indian High Sch.	9-12	163								
St. John's High School	8-11	156								
St. John's Elementary	1-7	54			1-7	64				
Blackwater School	1	11								
Casa Blanca Day School	1-4	35			1-4	32	K-4	25		
Gila Crossing Day School	1-5	45			1-5	38				
Vaya Chin Day School	B-4	70			4-5	39				
Kerwo Day School	B-5	48			3-4	12				
Santa Rosa Ranch Day Sch.	B-6	22								
Santa Rosa Boarding Sch.	B-8	202			5-8	89				

Table 4
Number of Professional and Para-Professional
Staff for the Reading Components

School	Professional		Para-Professional	
	Regular Program	Title 1	Regular Program	Title 1
Blackwater School	1 teacher	1 teacher		1 aide
Casa Blanca Day School		2 teachers		1 aide
Cibecue Day School		2 teachers		4 aides
Gila Crossing Day School		2 teachers		1 aide
Hopi Day School	5 teachers			3 aides
Hotevilla Day School		1 teacher		1 aide
John F. Kennedy Day Sch.		2 teachers		3 aides
Keams Canyon Brdg. Sch.		1 teacher 1 specialist		2 aides
Kerwo Day School	2 teachers			2 aides
Moencopi Day School		1 teacher		1 aide
Phoenix Indian High Sch.	3 teachers	1 teacher 1 specialist		11 aides
Polacca Day School	1 teacher			2 aides
St. John's Elementary		2 teachers 1 counselor		1 aide
St. John's High School		2 teachers 1 counselor		2 aides
Salt River Day School		1 teacher 1 counselor		4 aides
Santa Rosa Brdg. Sch.	5 teachers	1 teacher		7 aides
Santa Rosa Ranch Sch.	1 teacher			1 aide
Second Mesa Day Sch.		3 teachers		1 aide
Sherman Indian High Sch.	2 teachers		2 aides	
Stewart Indian High Sch.		3 teachers		3 aides
Supai Day School	2 teachers	1 teacher		1 aide
Theodore Roosevelt	1 teacher	2 teachers		3 aides
Vaya Chin Day School.	3 teachers			3 aides

Table 5
Number of Professional and Para-Professional
Staff for the Oral Language Components

School	Professional		Para-Professional	
	Regular Program	Title 1	Regular Program	Title 1
Blackwater School				
Casa Blanca Day School				
Cibecue Day School	3 teachers			3 aides
Gila Crossing Day School				
Hopi Day School				
Hotevilla Day School				
John F. Kennedy Day Sch.				
Keams Canyon Brdg. Sch.				
Kerwo Day School				
Mcencopi Day School				
Phoenix Indian High Sch.				
Polacca Day School				
St. John's Elementary				
St. John's High School				
Salt River Day School				
Santa Rosa Brdg. Sch.				
Santa Rosa Ranch Sch.				
Second Mesa Day Sch.				
Sherman Indian High Sch.				
Stewart Indian High Sch.				
Supai Day School				
Theodore Roosevelt				
Vaya Chin Day School				

Table 6
Number of Professional and Para-Professional
Staff for the Math Components

School	Professional		Para-Professional	
	Regular Program	Title 1	Regular Program	Title 1
Blackwater School				
Casa Blanca Day School		1 teacher		1 aide
Cibecue Day School				
Gila Crossing Day School		1 teacher		1 aide
Hopi Day School				
Hotevilla Day School				
John F. Kennedy Day Sch.				
Keams Canyon Brdg. Sch.	1 teacher			1 aide
Kerwo Day School		1 teacher		1 aide
Moencopi Day School				
Phoenix Indian High Sch.	2 teachers			11 aides
Polacca Day School				
St. John's Elementary		1 teacher		1 aide
St. John's High School				
Salt River Day School				
Santa Rosa Brdg. Sch.				
Santa Rosa Ranch Sch.				
Second Mesa Day Sch.				
Sherman Indian High Sch.		1 teacher		1 aide
Stewart Indian High Sch.				
Supai Day School				
Theodore Roosevelt				1 aide
Vaya Chin Day School		1 teacher		1 aide

Table 7
Number of Professional and Para-Professional
Staff for the Special Education Components

School	Professional		Para-Professional	
	Regular Program	Title 1	Regular Program	Title 1
Blackwater School				
Casa Blanca Day School		1 teacher		1 aide
Cibecue Day School				
Gila Crossing Day School				
Hopi Day School				
Hotevilla Day School				
John F. Kennedy Day Sch.				
Keams Canyon Brdg. Sch.				
Kerwo Day School				
Moencopi Day School				
Phoenix Indian High Sch.		1 teacher		
Polacca Day School				
St. John's Elementary				
St. John's High School				
Salt River Day School				
Santa Rosa Brdg. Sch.				
Santa Rosa Ranch Sch.		1 teacher		1 aide
Second Mesa Day Sch.				
Sherman Indian High Sch.				
Stewart Indian High Sch.				
Supai Day School				
Theodore Roosevelt				
Vaya Chin Day School				

Table 8
Number of Professional and Para-Professional
Staff for the Physical Education Components

School	Professional		Para-Professional	
	Regular Program	Title 1	Regular Program	Title 1
Blackwater School				
Casa Blanca Day School				
Cibecue Day School				
Gila Crossing Day School				
Hopi Day School				
Hotevilla Day School				
John F. Kennedy Day Sch.				
Kearns Canyon Brdg. Sch.		1 teacher		2 aides
Kerwo Day School				
Moencopi Day School				
Phoenix Indian High Sch.				
Polacca Day School				
St. John's Elementary				
St. John's High School				
Salt River Day School		1 teacher		2 aides
Santa Rosa Brdg. Sch.				
Santa Rosa Ranch Sch.				
Second Mesa Day Sch.				
Sherman Indian High Sch.	2 teachers	1 teacher		
Stewart Indian High Sch.				
Supai Day School				
Theodore Roosevelt				
Vaya Chin Day School				

Table 9
Parent Council Involvement

School	Number of Members	Number of Meetings	Average Attendance
Cibecue Day School	10	6	4
John F. Kennedy Day School	5	12	4
Theodore Roosevelt Brdg.	7	2	6
Stewart Indian High School	11	3	9.7
Sherman Indian High School	7	4	5
Phoenix Indian High School	16	3	5
Supai Day School	15	6	6
Hotevilla Day School	2	4	2
Moencopi Day School	3	9	3
Second Mesa Day School	8	8	7
Casa Blanca Day School	65	5	8
Gila Crossing Day School	55	8	10
Blackwater Demonstration	12	8	12
St. John's Indian School	27	8	6
Vaya Chin Day School	7	4	4.5
Kerwo Day School	6	6	4
Santa Rosa Ranch Day School	6	2	4
Santa Rosa Boarding School	17	4	9
Salt River Day School	12	8	8
Polacca Day School	7	5	7
Keams Canyon Brdg/Day School	5	8	3
Hopi Day School	5	8	3

Table 10
First Grade Reading Results

School	N	Post Test
Keams Canyon Boarding School	11	1.9
Supai Day School	6	2.1
John F. Kennedy Day School	15	1.0
Blackwater School	3	1.5

Figure 4
Pre-Post California Achievement Test Total Reading Grade Equivalent
Scores for all Schools with a Second Grade Reading Program

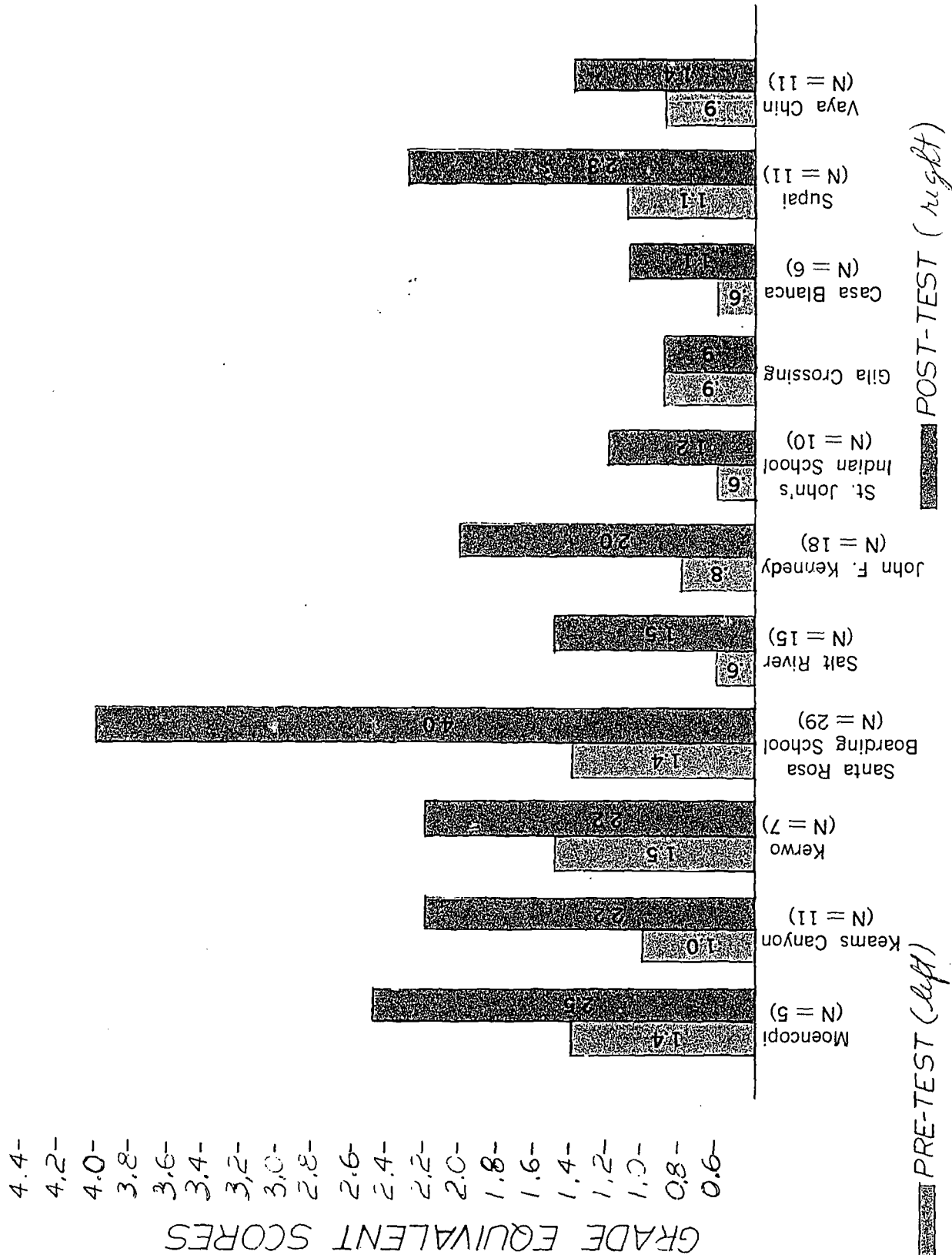


Table 11
2nd Grade
Reading Component

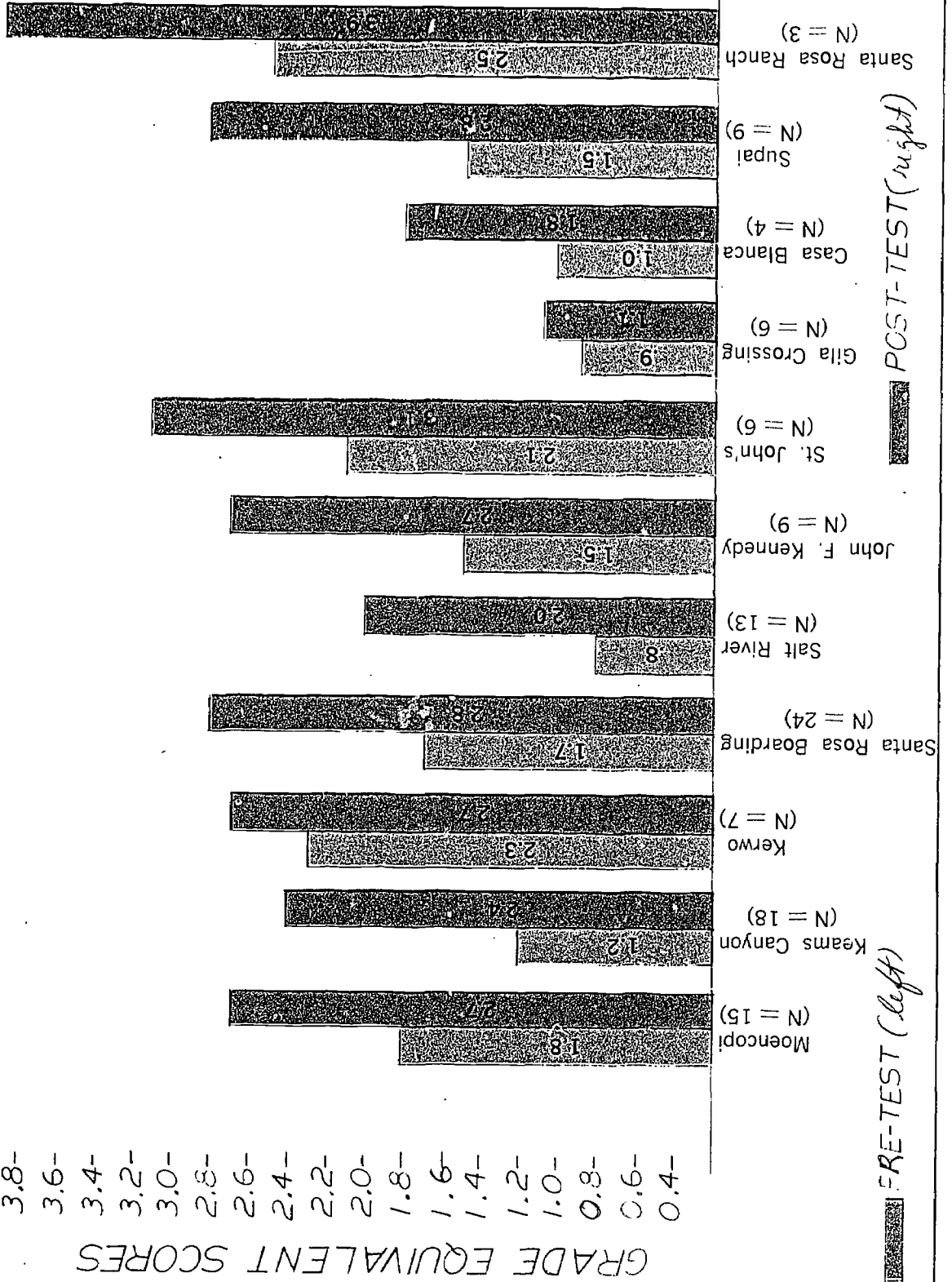
School	Actual Gain Scores	Expected Gain Scores	Difference
Moencopi Day School	1.1	.7	+ .4
Keams Canyon Boarding Sch.	1.2	.5	+ .7
Kerwo Day School	.7	.8	- .1
Santa Rosa Boarding School	2.6	.7	+1.9
Salt River Day School	.9	.3	+ .6
John F. Kennedy Day School	1.2	.4	+ .8
St. John's Indian School	.6	.3	+ .3
Gila Crossing Day School	0	.5	- .5
Casa Blanca Day School	.5	.3	+ .2
Supai Day School	1.2	.6	+ .6
Vaya Chin	.5	.5	0

Figure 5

Pre-Post California California Achievement Test Total Reading Grade Equivalent Scores for all Schools with a Third Grade Reading Program

GRADE EQUIVALENT SCORES

4.2-
4.0-
3.8-
3.6-
3.4-
3.2-
3.0-
2.8-
2.6-
2.4-
2.2-
2.0-
1.8-
1.6-
1.4-
1.2-
1.0-
0.8-
0.6-
0.4-



POST-TEST (right)

PRE-TEST (left)

Table 12
3rd Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Moencopi Day School	.9	.6	+ .3
Keams Canyon Boarding	1.2	.4	+ .8
Kerwo Day School	.4	.8	- .4
Santa Rosa Boarding	1.1	.6	+ .5
Salt River Day School	1.2	.3	+ .9
John F. Kennedy Day School	1.2	.5	+ .7
St. John's Indian School	1.0	.7	+ .3
Gila Crossing Day School	.2	.3	- .1
Casa Blanca Day School	.8	.3	+ .5
Supai Day School	1.3	.5	+ .8
Santa Rosa Ranch	1.4	.8	+ .6

Figure 6
 Pre-Post California Achievement Test Total Reading Grade Equivalent
 Scores for all Schools with a 4th Grade Reading Program

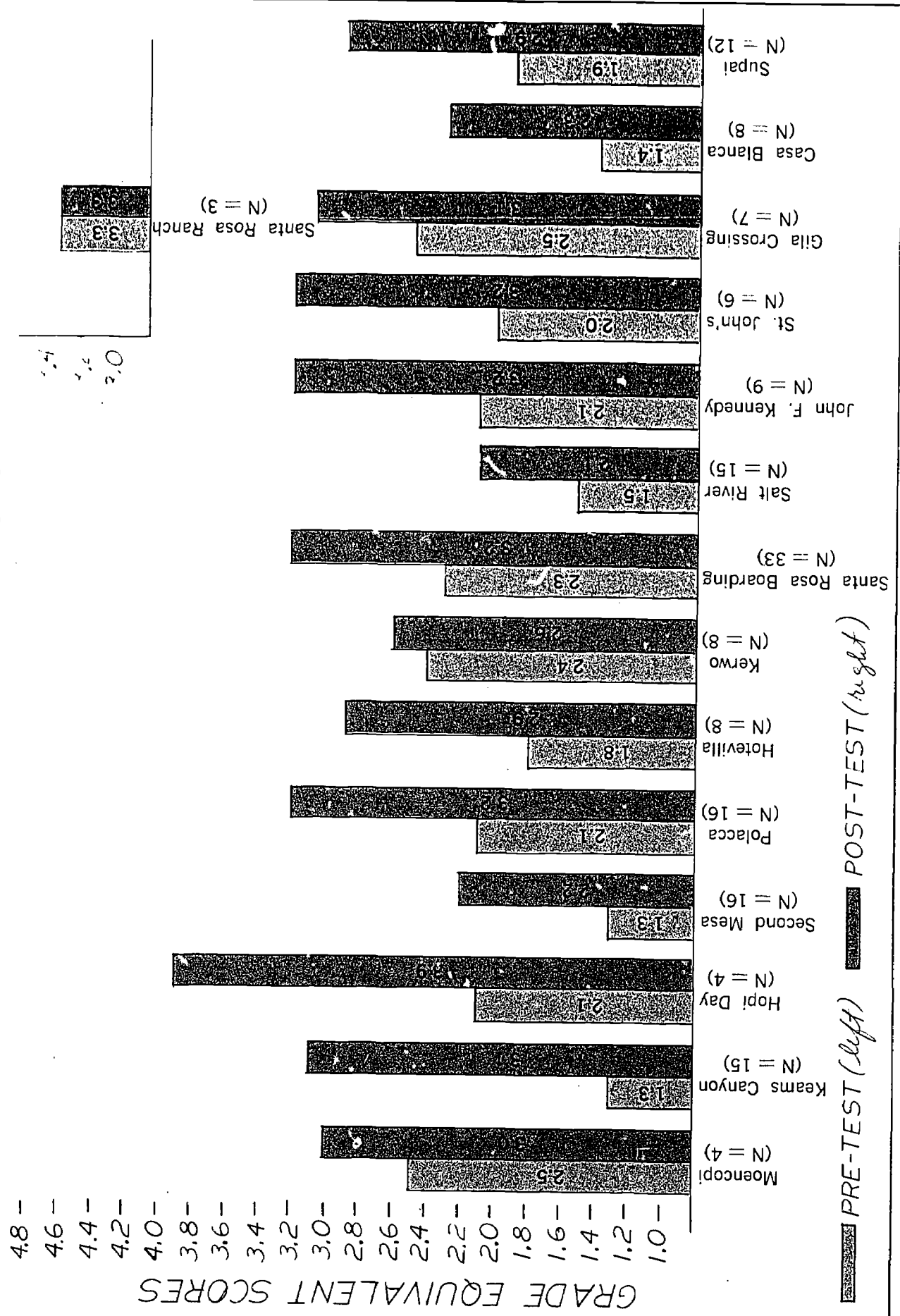


Table 13
4th Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Moencopi Day School	.5	.6	-.1
Kearns Canyon Boarding	1.8	.3	+1.5
Hopi Day School	1.8	.5	+1.3
Second Mesa Day School	.9	.3	+.6
Polacca Day School	1.1	.5	+.6
Hotevilla Day School	1.1	.5	+.6
Kerwo Day School	.2	.6	-.4
Santa Rosa Boarding	.9	.6	+.3
Salt River Day School	.6	.4	+.9
John F. Kennedy Day School	1.1	.5	+.6
St. John's Indian School	1.2	.5	+.7
Gila Crossing Day School	.6	.6	0
Casa Blanca Day School	.9	.4	+.5
Supai Day School	1.0	.5	+.5
Santa Rosa Ranch	0	.8	-.8

Figure 7
Pre- Post California Achievement Test Total Reading Grade Equivalent
Scores for all Schools with a 5th Grade Reading Program

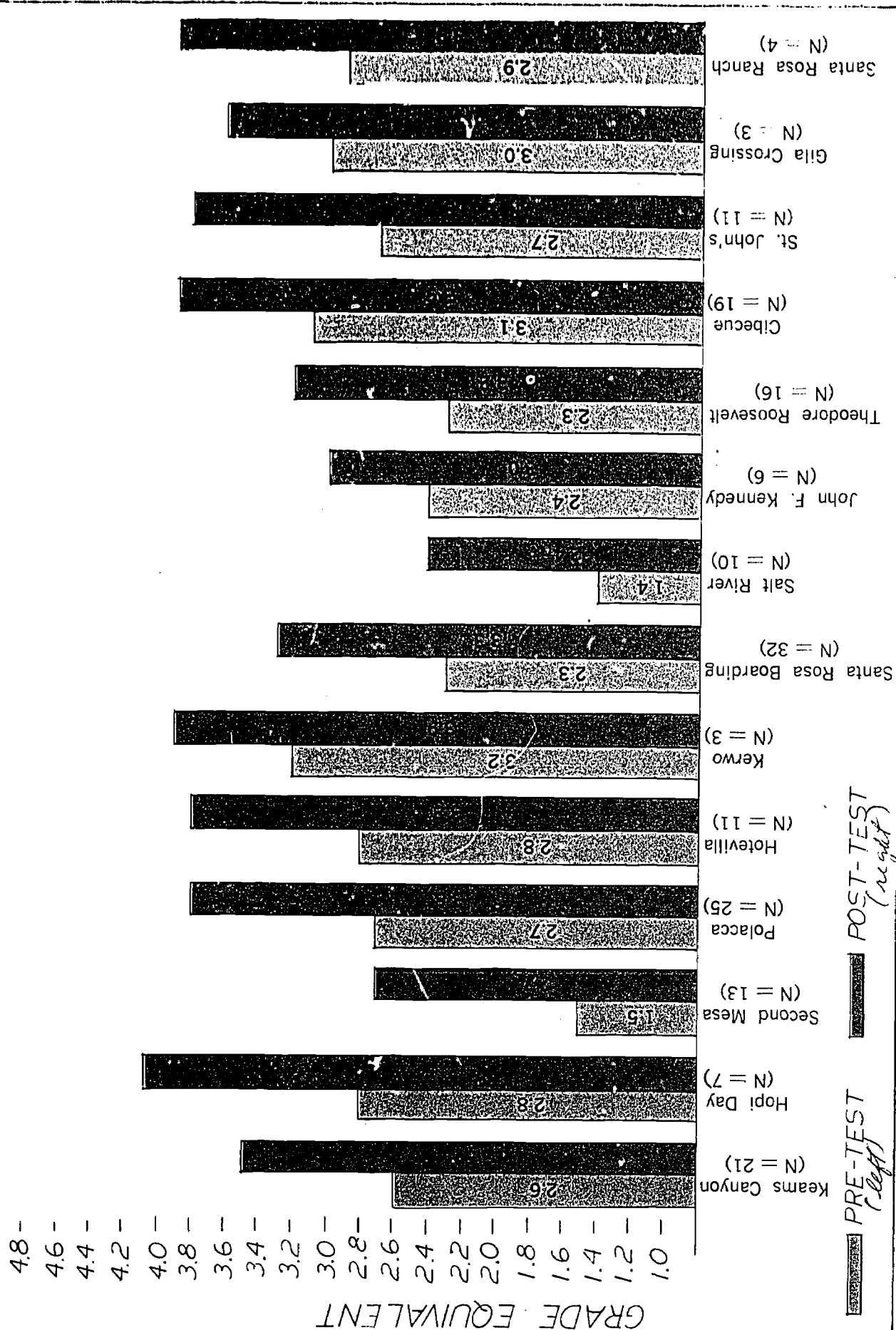
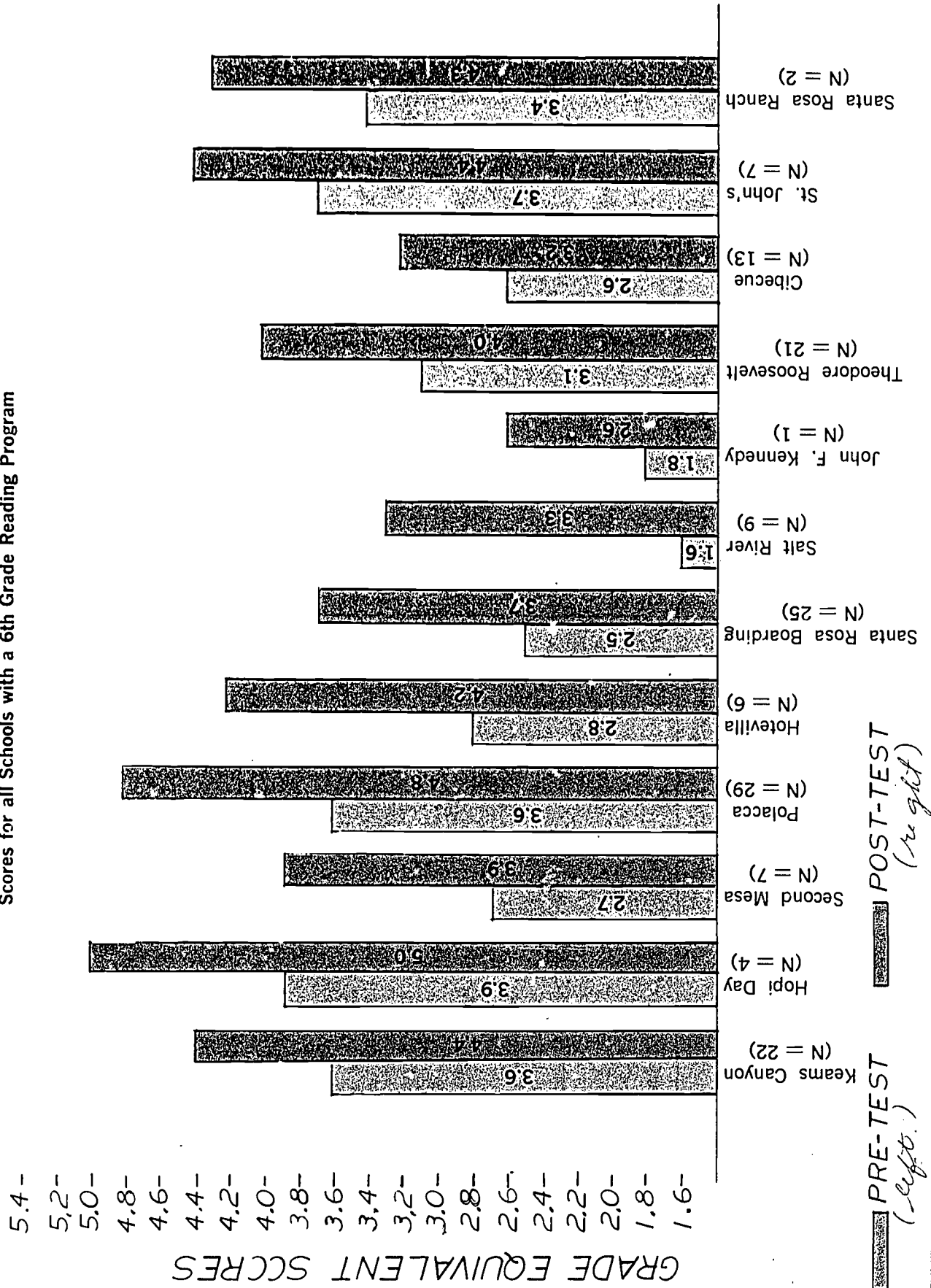


Table 14
5th Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Keams Canyon Boarding	.9	.5	+ .4
Hopi Day	1.3	.6	+ .7
Second Mesa Day School	1.2	.3	+ .9
Polacca Day School	1.1	.5	+ .6
Hotevilla Day School	1.0	.6	+ .4
Kerwo Day School	.7	.6	+ .1
Santa Rosa Boarding	1.0	.5	+ .5
Salt River Day School	1.0	.3	+ .7
John F. Kennedy Day School	.6	.5	+ .1
Theodore Roosevelt	.9	.5	+ .4
Cibecue Day School	.8	.6	+ .2
St. John's Indian School	1.1	.5	+ .6
Gila Crossing Day School	.6	.6	0
Santa Rosa Ranch	1.0	.6	+ .4

Figure 8
Pre- Post California Achievement Test Total Reading Grade Equivalent
Scores for all Schools with a 6th Grade Reading Program



PRE-TEST (left.)
POST-TEST (right.)

Table 15
6th Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Keams Canyon Boarding Sch.	.8	.6	+ .2
Hopi Day School	1.1	.7	+ .4
Second Mesa Day School	1.2	.5	+ .7
Polacca Day School	1.2	.6	+ .6
Hotevilla Day School	1.4	.7	+ .7
Santa Rosa Boarding School	1.2	.4	+ .8
Salt River Day School	1.7	.3	+1.4
John F. Kennedy Day School	.8	.3	+ .5
Theodore Roosevelt	.9	.5	+ .4
Cibecue Day School	.6	.4	+ .2
St. John's Indian School	.7	.6	+ .1
Santa Rosa Ranch	.9	.6	+ .3

Figure 9
Pre- Post California Achievement Test Total Reading Grade Equivalent
Scores for all Schools with a 7th Grade Reading Program

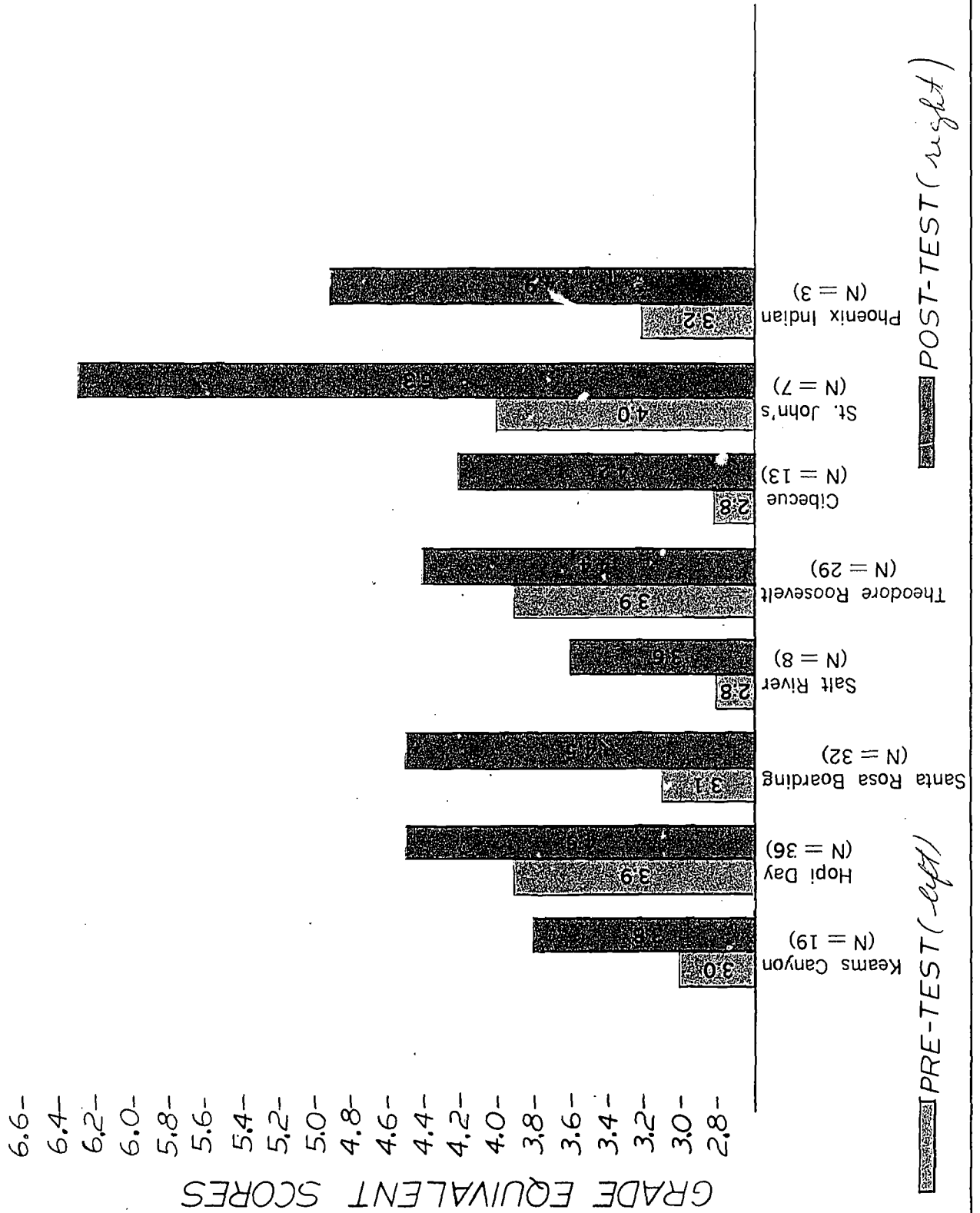


Table 16
7th Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Keams Canyon Boarding Sch.	.8	.5	+ .3
Hopi Day School	.6	.6	0
Santa Rosa Boarding School	1.4	.4	+1.0
Salt River Day School	.8	.4	+ .4
Theodore Roosevelt	.5	.6	- .1
Cibecue Day School	1.4	.4	+1.0
St. John's Indian School	2.3	.6	+1.7
Phoenix Indian School	1.7	.5	+1.2

Figure 10
Pre- Post California Achievement Test Total Reading Grade Equivalent
Scores for all Schools with a 8th Grade Reading Program

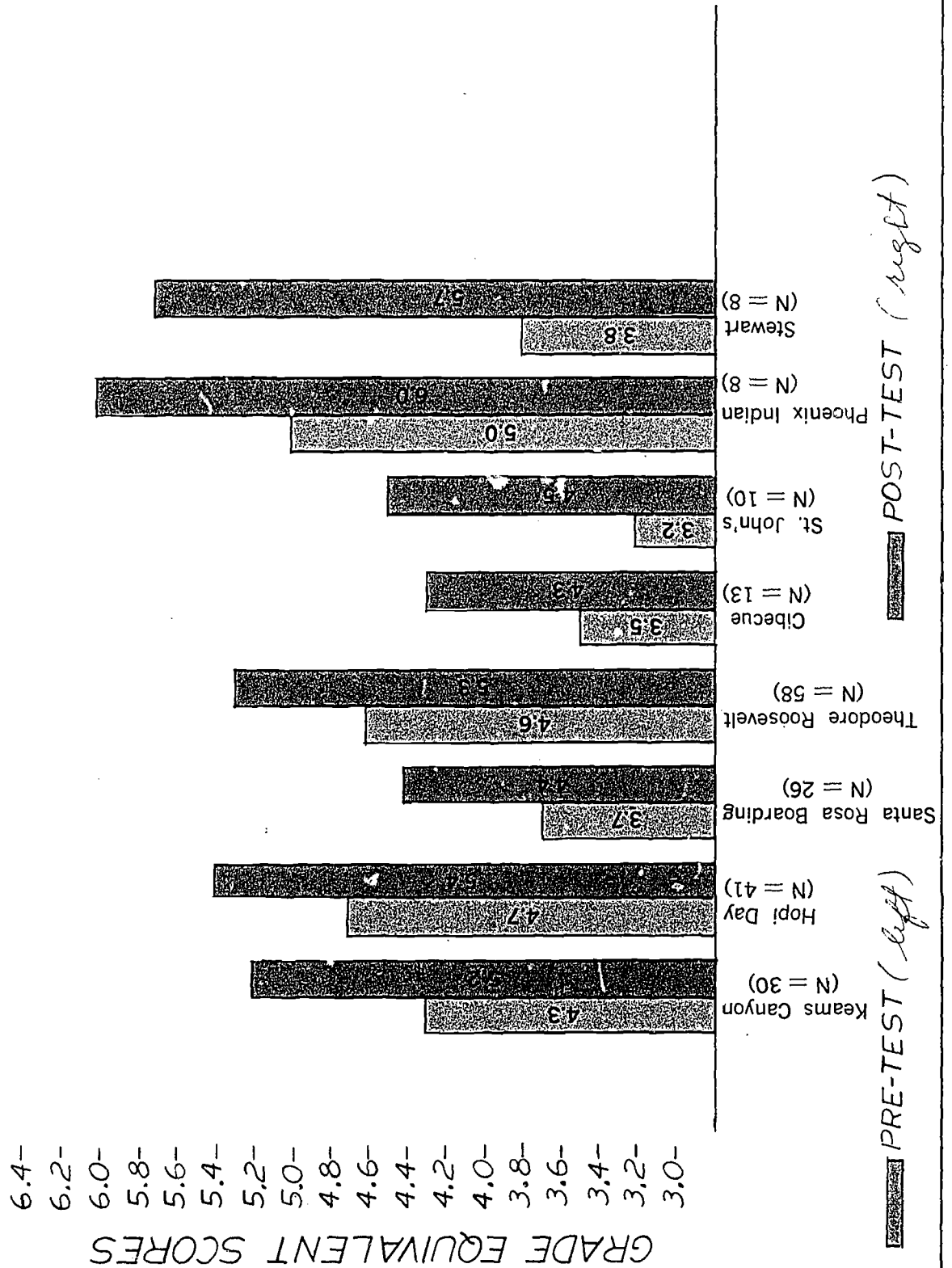


Table 17
8th Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Keams Canyon Boarding Sch.	.9	.5	+ .4
Hopi Day School	.7	.6	+ .1
Santa Rosa Boarding School	.7	.5	+ .2
Theodore Roosevelt	.7	.6	+ .1
Cibecue Day School	.8	.4	+ .4
St. John's Indian School	1.3	.4	+ .9
Phoenix Indian School	1.0	.6	+ .4
Stewart Indian School	1.9	.5	+1.4

Figure 11
 Pre- Post California Achievement Test Total Reading Grade Equivalent
 Scores for all Schools with a 9th Grade Reading Program

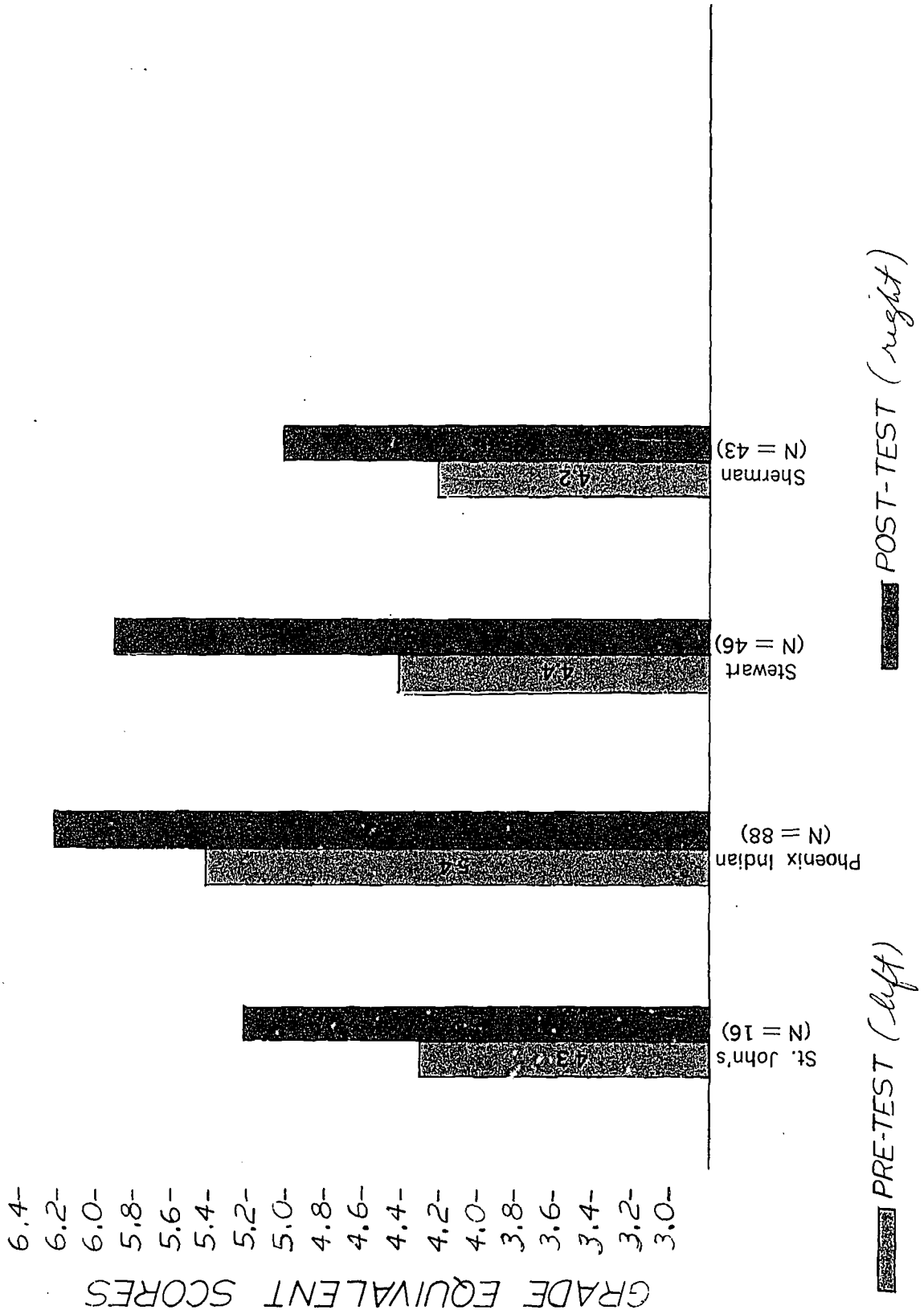
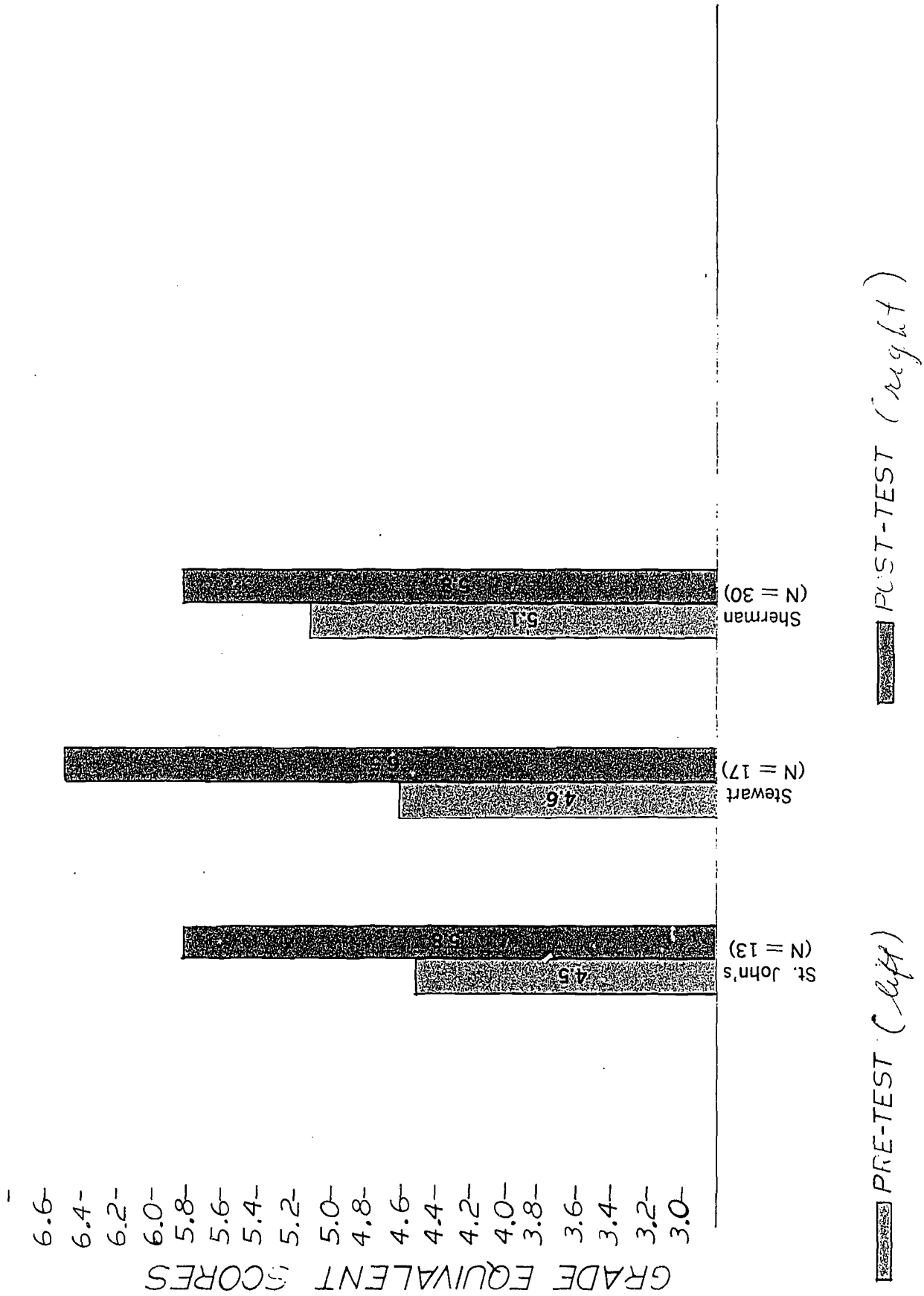


Table 18
9th Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Difference
St. John's Indian School	.9	.5	+ .4
Phoenix Indian School	.8	.6	+ .2
Stewart Indian School	1.5	.5	+1.0
Sherman Indian School	.8	.5	+ .3

Figure 12
 Pre- Post California Achievement Test Total Reading Grade Equivalent
 Scores for all Schools with a 10th Grade Reading Program



PRE-TEST (left)

POST-TEST (right)

Table 19
10th Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Difference
St. John's Indian School	1.3	.5	+ .8
Stewart Indian School	1.9	.5	+1.4
Sherman Indian School	.7	.5	+ .2

Figure 13
Pre- Post California Achievement Test Total Reading Grade Equivalent
Scores for all Schools with a 11th Grade Reading Program

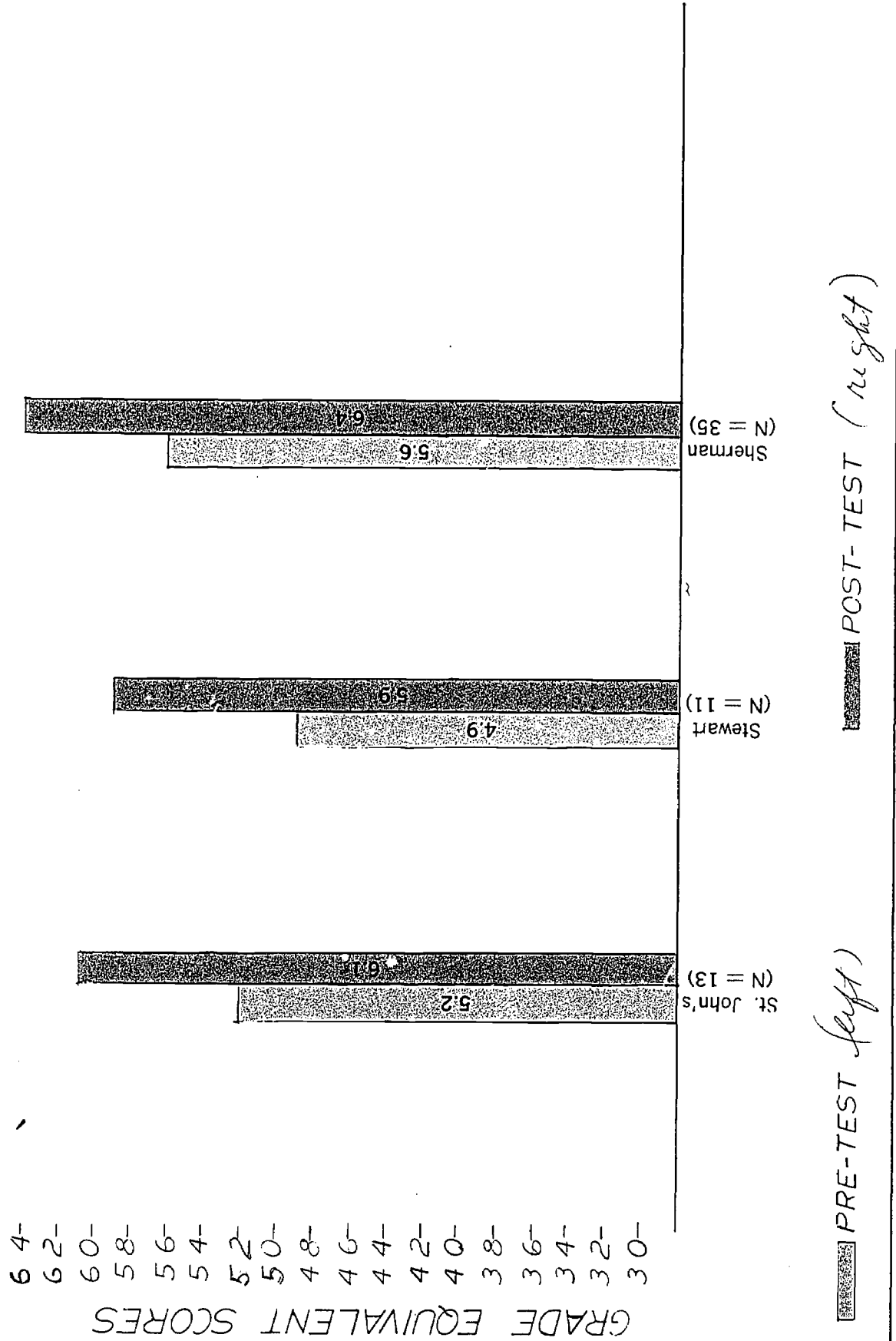
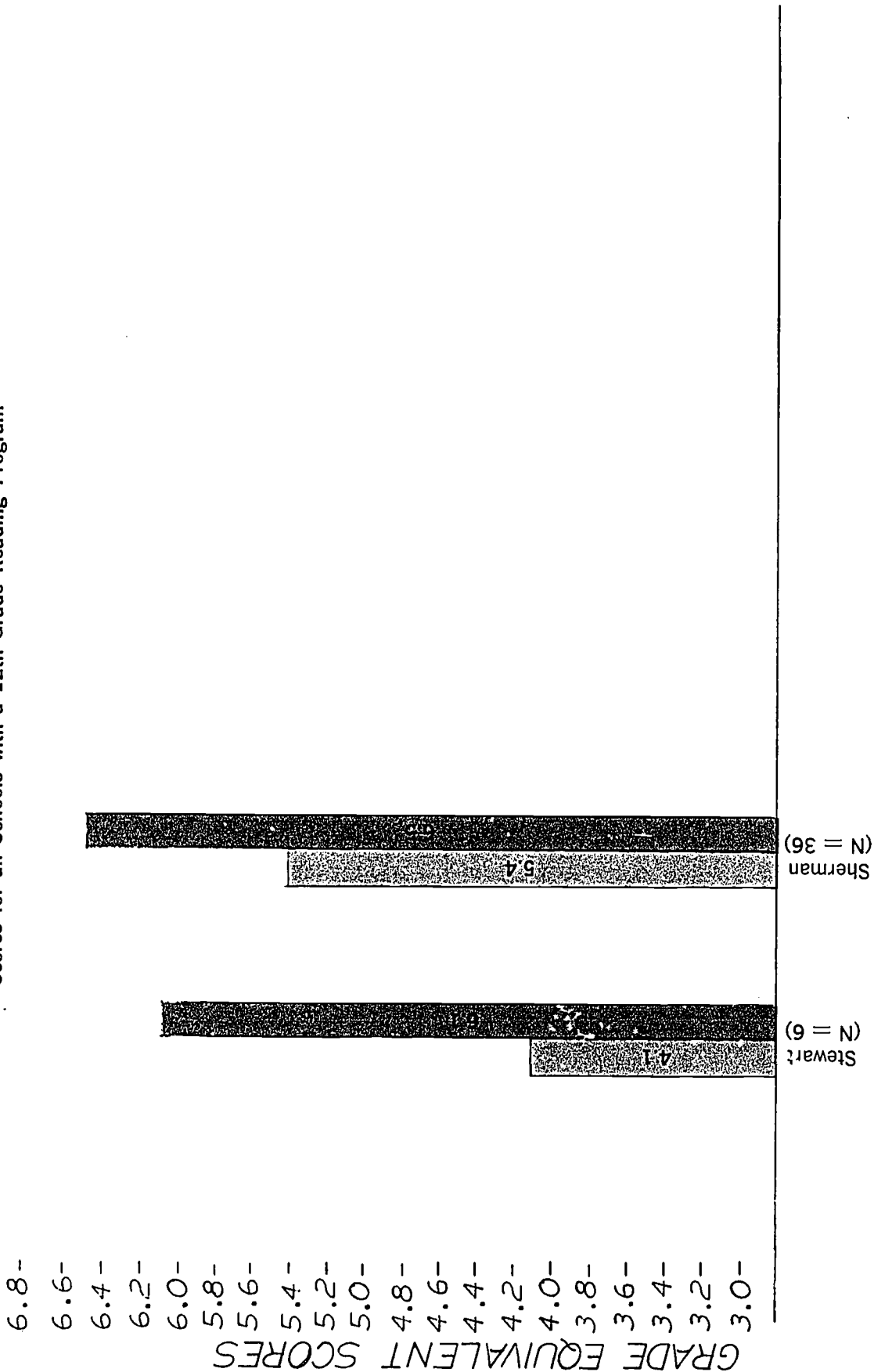


Table 20
11th Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Difference
St. John's Indian School	.9	.5	+ .4
Stewart Indian School	1.0	.5	+ .5
Sherman Indian School	.8	.5	+ .3

Figure 14
Pre- Post California Achievement Test Total Reading Grade Equivalent
Scores for all Schools with a 12th Grade Reading Program



PRE-TEST (Left) POST-TEST (right)

Table 21
12th Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Dirference
Stewart Indian School	2.0	.3	+1.7
Sherman Indian School	1.1	.5	+ .6

Table 22
1st Grade Language results using the Test of Basic English and presented in Stanines.

School	N	Pre Test	Post Test	Gain
Kerwo	7	3	4	+ .1
Vaya Chin	12	2	4	+ .2
Santa Rosa Boarding	23	1	6	+ .5

Figure 15
 Pre-Post California Achievement Test Total Language Grade Equivalent
 Scores for all Schools with a 2nd Grade Language Program

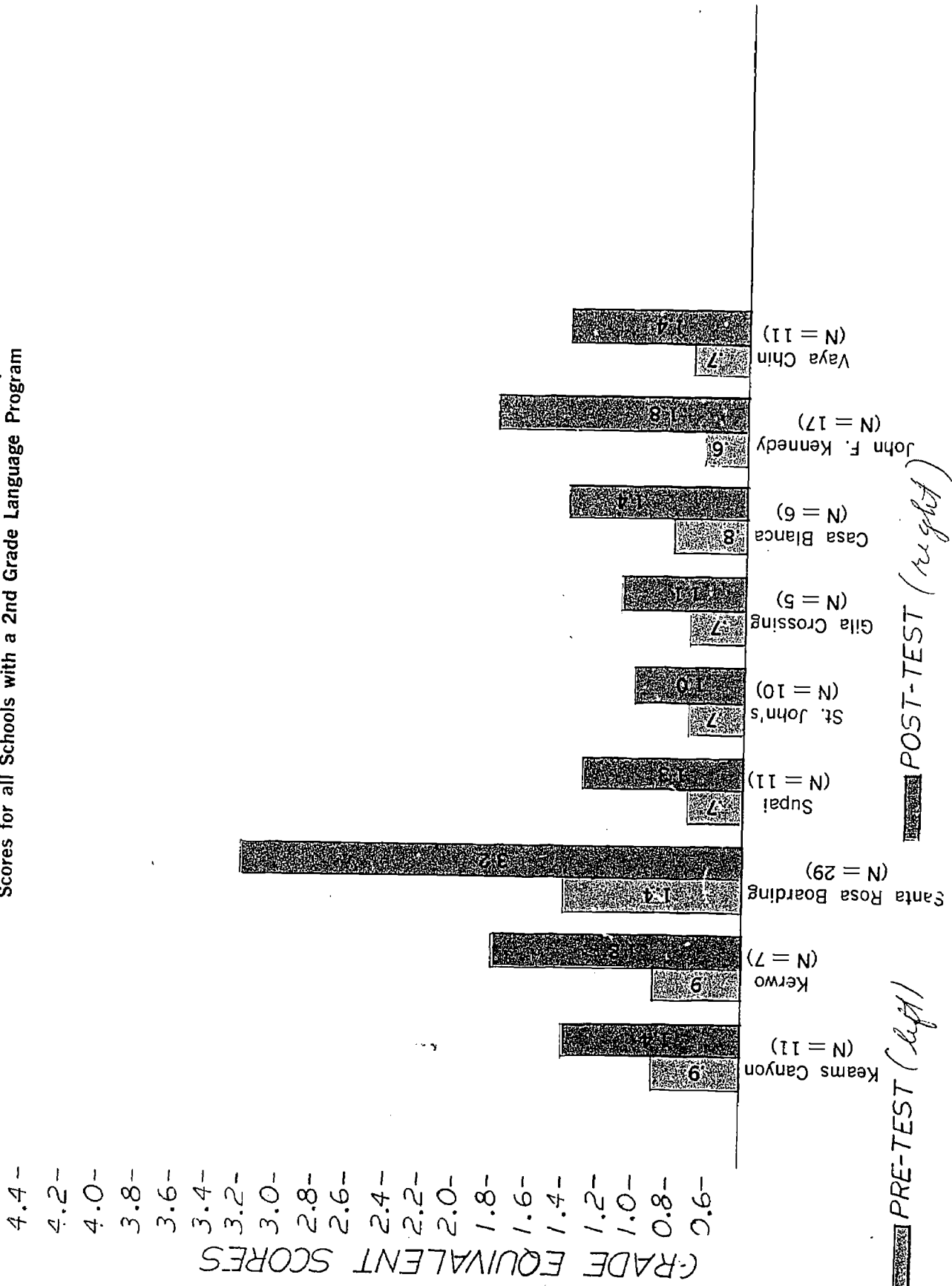


Table 23
2nd Grade
Language Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Keams Canyon Boarding Sch.	.5	.5	0
Kerwo Day School	.9	.5	+ .4
Santa Rosa Boarding School	1.8	.7	+1.1
Supai Day School	.6	.4	+ .2
St. John's Indian School	.3	.4	- .1
Gila Crossing Day School	.4	.4	0
Casa Blanca Day School	.6	.4	+ .2
John F. Kennedy Day School	1.2	.3	+ .9
Vaya Chin	.7	.4	+ .3

Figure 16
 Pre-Post California Achievement Test Total Language Grade Equivalent
 Scores for all Schools with a 3rd Grade Language Program

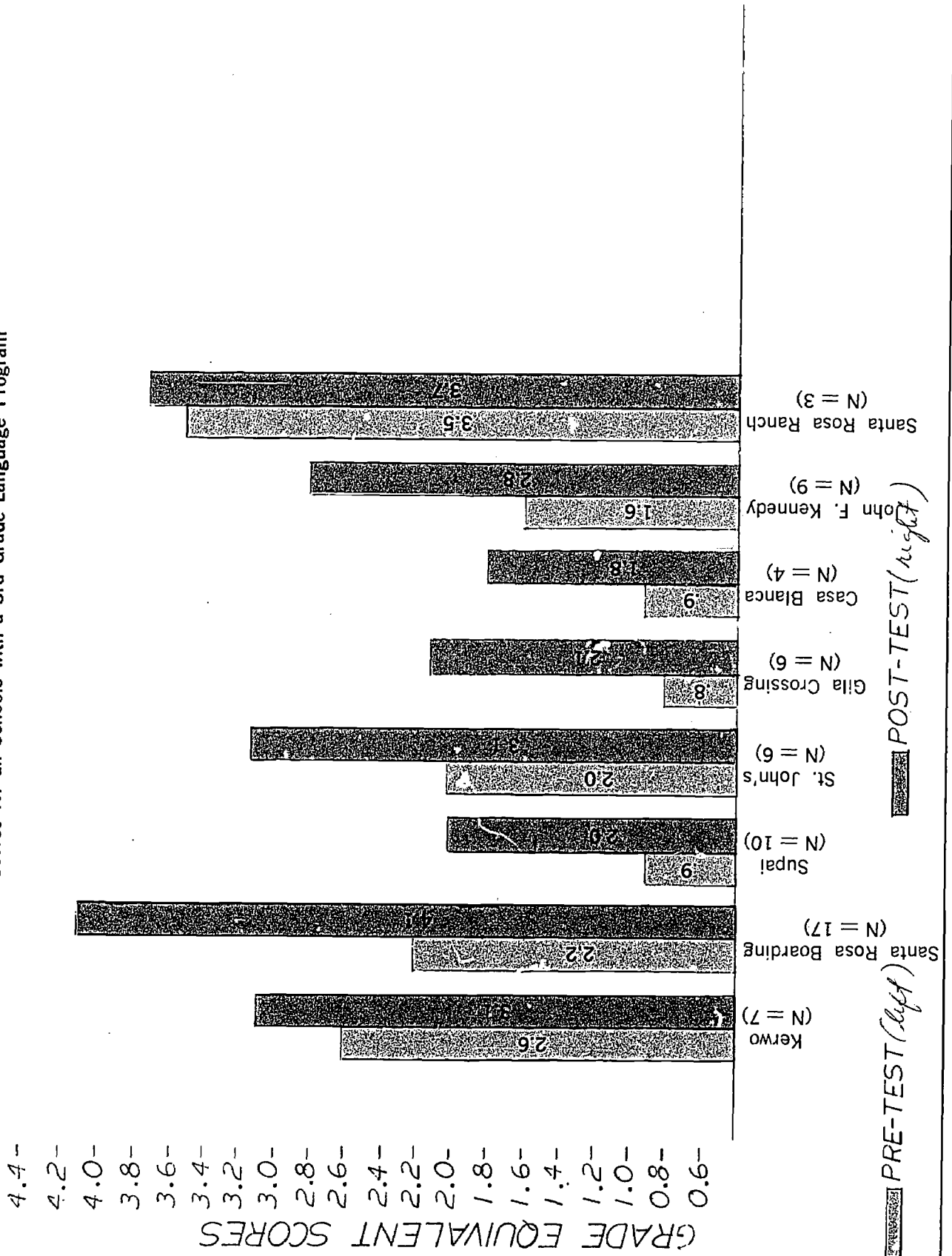


Table 24
3rd Grade
Language Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Kerwo Day School	.5	.9	-.4
Santa Rosa Boarding School	1.9	.7	+1.2
Supai Day School	1.1	.3	+.8
St. John's Indian School	1.1	.7	+.4
Gila Crossing Day School	1.3	.3	+1.0
Casa Blanca Day School	.9	.3	+.6
John F. Kennedy Day School	1.2	.5	+.7
Santa Rosa Ranch	.2	1.2	-1.0

Figure 17
Pre-Post California Achievement Test Total Language Grade Equivalent
Scores for all Schools with a 4th Grade Language Program

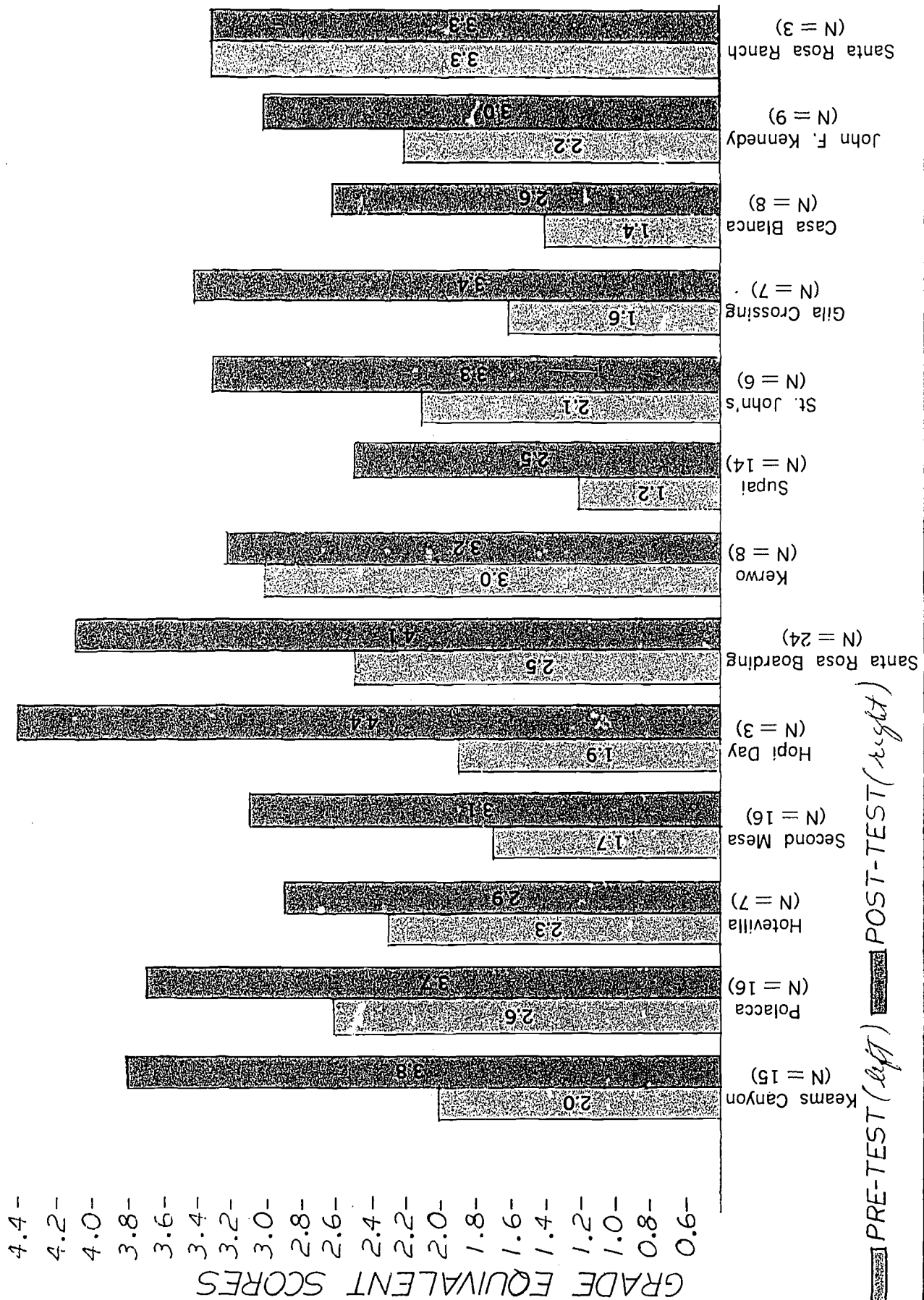


Table 25
4th Grade
Language Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Keams Canyon Boarding Sch.	1.8	.5	+1.3
Polacca Day School	1.1	.7	+.4
Hotevilla Day School	.6	.6	0
Second Mesa Day School	1.4	.4	+1.0
Hopi Day School	.5	.5	0
Santa Rosa Boarding School	1.6	.7	+1.0
Kerwo Day School	.2	.8	-.6
Supai Day School	1.3	.3	+1.0
St. John's Indian School	1.2	.5	+.7
Gila Crossing Day School	1.8	.4	+1.4
Casa Blanca Day School	1.2	.4	+.8
John F. Kennedy Day School	.8	.6	+.2
Santa Rosa Ranch	0	.8	-.8

Figure 18
 Pre-Post California Achievement Test Total Language Grade Equivalent
 Scores for all Schools with a 5th Grade Language Program

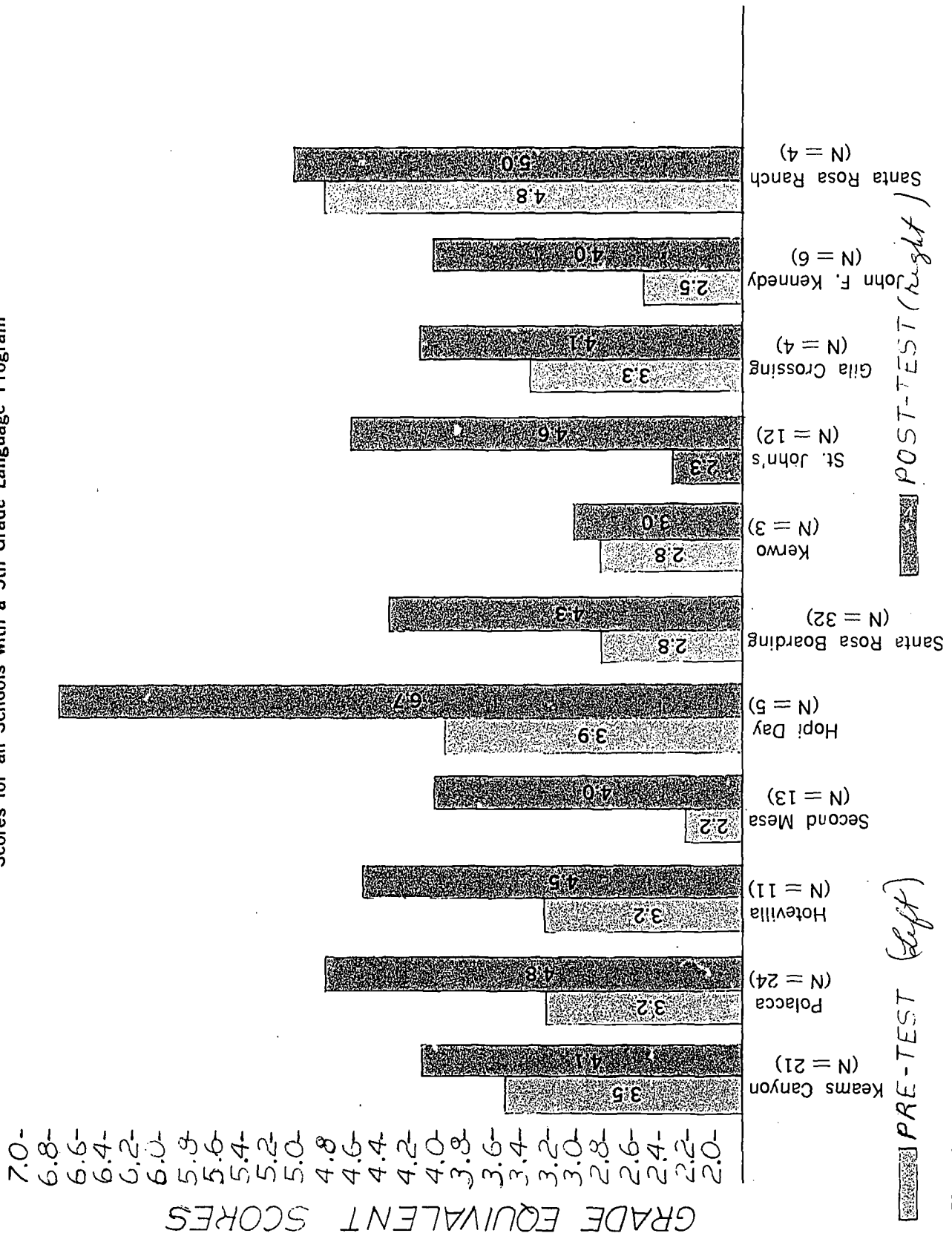


Table 26
5th Grade
Language Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Keams Canyon Boarding Sch.	.6	.7	-.1
Polacca Day School	1.6	.6	+1.0
Hotevilla Day School	1.3	.6	+.7
Second Mesa Day School	1.8	.4	+1.4
Hopi Day School	2.8	.8	+2.0
Santa Rosa Boarding School	1.5	.6	+.9
Kerwo Day School	.2	.6	-.4
St. John's Indian School	2.3	.5	+1.8
Gila Crossing Day School	.8	.7	+.1
John F. Kennedy Day School	1.5	.5	+1.0
Santa Rosa Ranch	.2	.2	0

Figure 19
Pre-Post California Achievement Test Total Language Grade Equivalent
Scores for all Schools with a 6th Grade Language Program

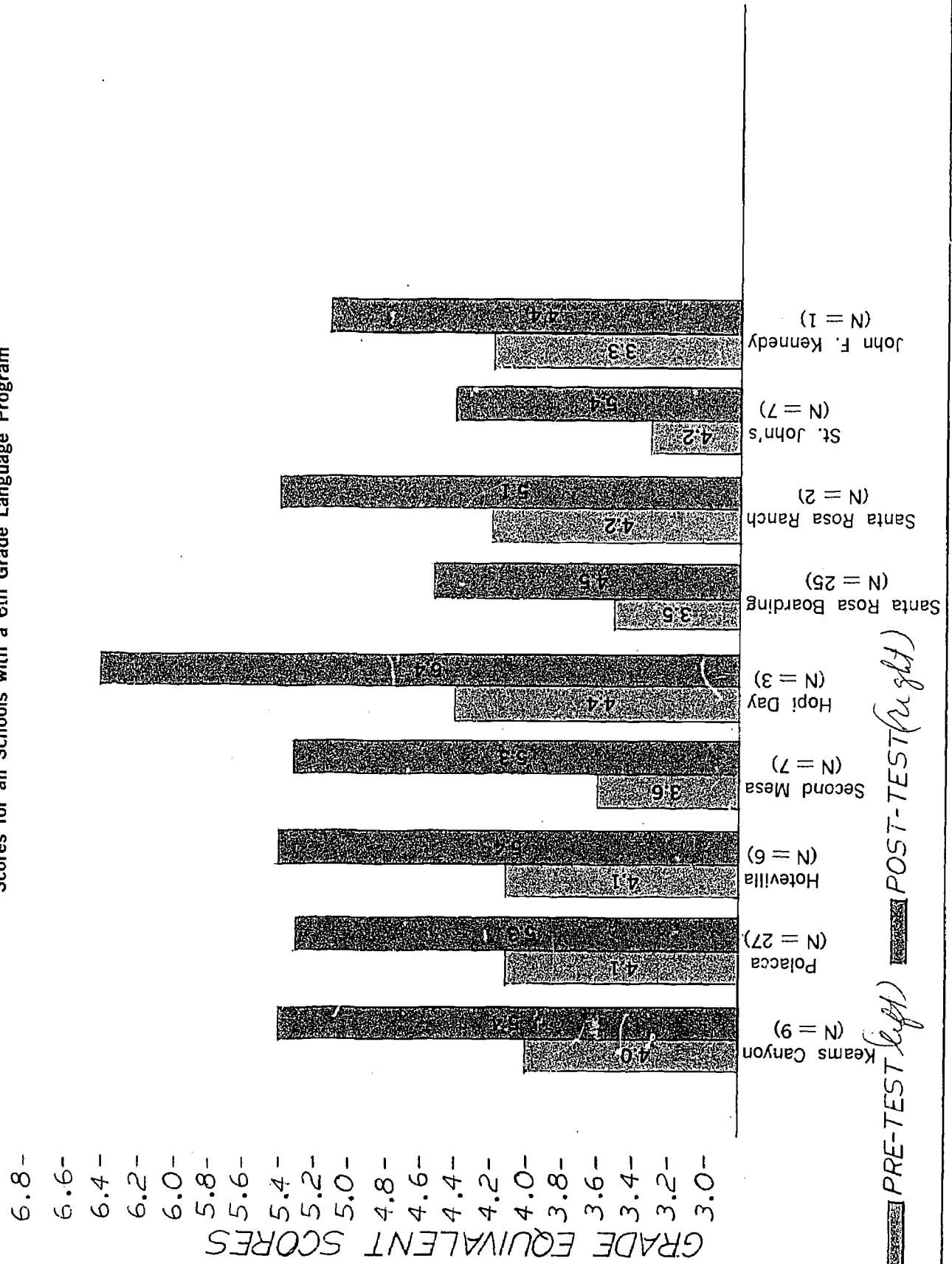
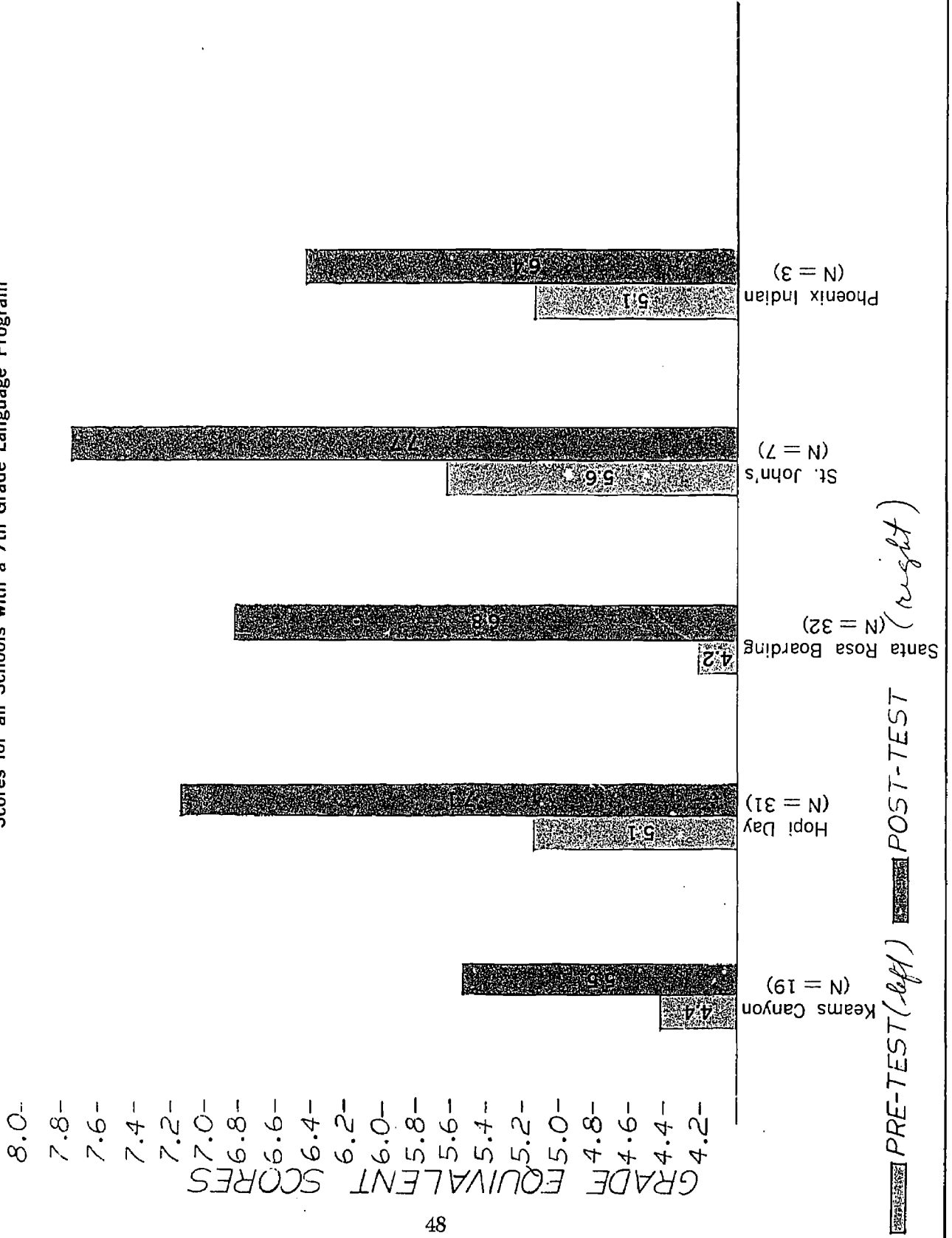


Table 27
6th Grade
Language Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Keams Canyon Boarding Sch.	1.4	.7	+ .7
Polacca Day School	1.2	.7	+ .5
Hotevilla Day School	1.3	.7	+ .6
Second Mesa Day School	1.7	.6	+1.1
Hopi Day School	2.0	.7	+1.3
Santa Rosa Boarding School	1.0	.6	+ .4
Santa Rosa Ranch	.9	.7	+ .2
St. John's Indian School	1.2	.7	+ .5
John F. Kennedy Day School	1.1	.6	+ .5

Figure 20
 Pre-Post California Achievement Test Total Language Grade Equivalent
 Scores for all Schools with a 7th Grade Language Program



(right)

PRE-TEST (left) POST-TEST

Table 28 -
7th Grade
Language Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Keams Canyon Boarding Sch.	1.1	.6	+ .5
Hopi Day School	2.0	.7	+1.3
Santa Rosa Boarding School	2.6	.6	+2.0
St. John's Indian School	2.1	.8	+1.3
Phoenix Indian School	1.3	.7	+ .6

Figure 21
 Pre-Post California Achievement Test Total Language Grade Equivalent
 Scores for all Schools with an 8th or 9th Grade Language Program

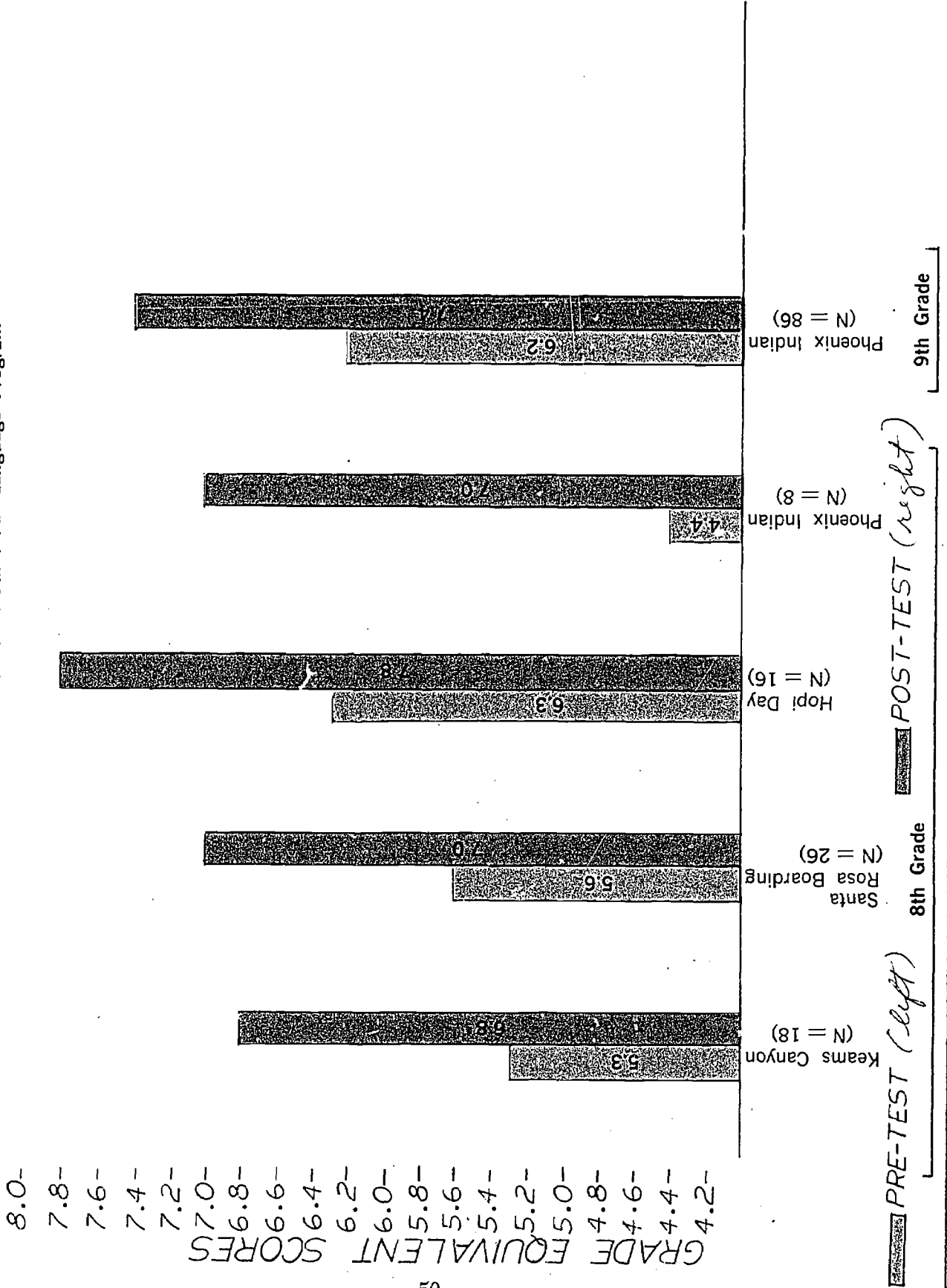


Table 29
8th Grade
Language Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Keams Canyon Boarding Sch.	1.5	.7	+ .8
Santa Rosa Boarding School	1.4	.7	+ .7
Phoenix Indian School	2.6	.6	+2.0
Hopi Day School	1.5	.8	+ .7

Table 30
9th Grade
Language Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Phoenix Indian School	1.2	.7	+ .5

Figure 22
 Pre- Post California Achievement Test Total Math Grade Equivalent
 Scores for all Schools with a 2nd Grade Math Program

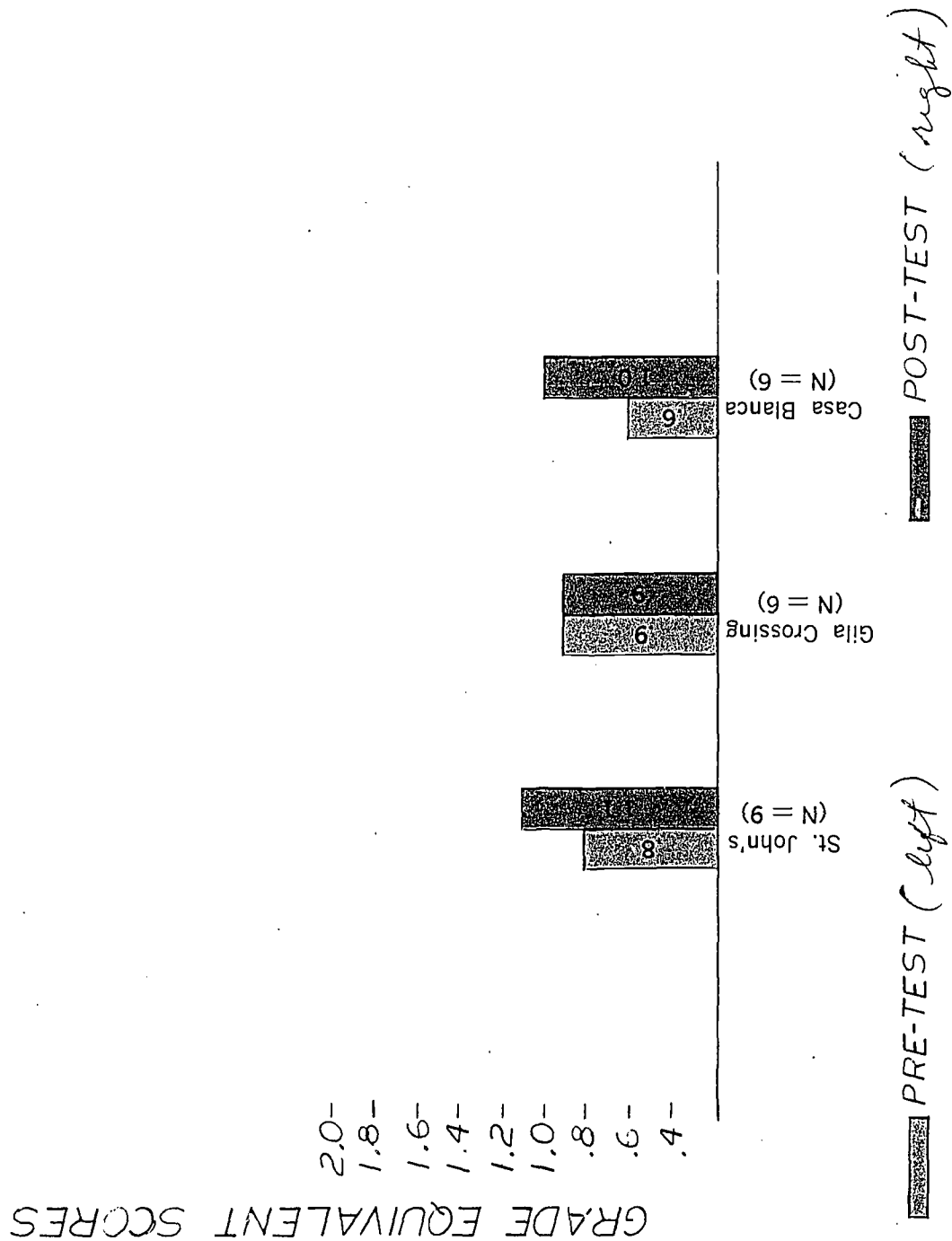


Table 31
2nd Grade
Math Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Casa Blanca Day School	.4	.4	0
Gila Crossing Day School	0	.5	-.5
St. John's Indian School	.3	.3	0

Figure 23
 Pre- Post California Achievement Test Total Math Grade Equivalent
 Scores for all Schools with a 3rd Grade Math Program

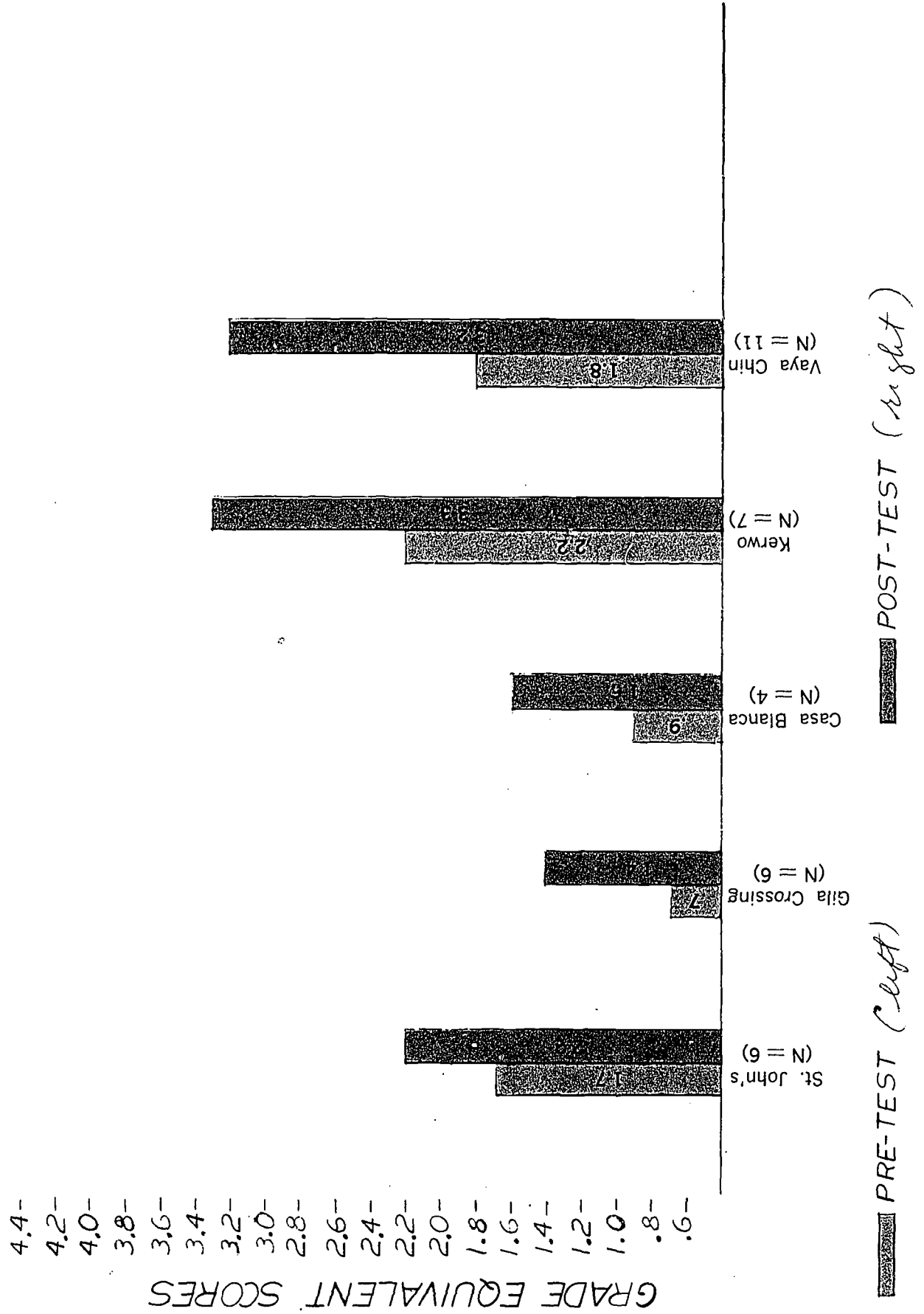


Table 32
3rd Grade
Math Component

School	Actual Gain Scores	Expected Gain Scores	Difference
St. John's Indian School	.5	.6	-.1
Gila Crossing Day School	.7	.2	+.5
Casa Blanca Day School	.7	.3	+.4
Kerwo Day School	1.1	.7	+.4
Vaya Chin Day School	1.4	.6	+.8

Figure 24
Pre- Post California Achievement Test Total Math Grade Equivalent
Scores for all Schools with a 4th Grade Math Program

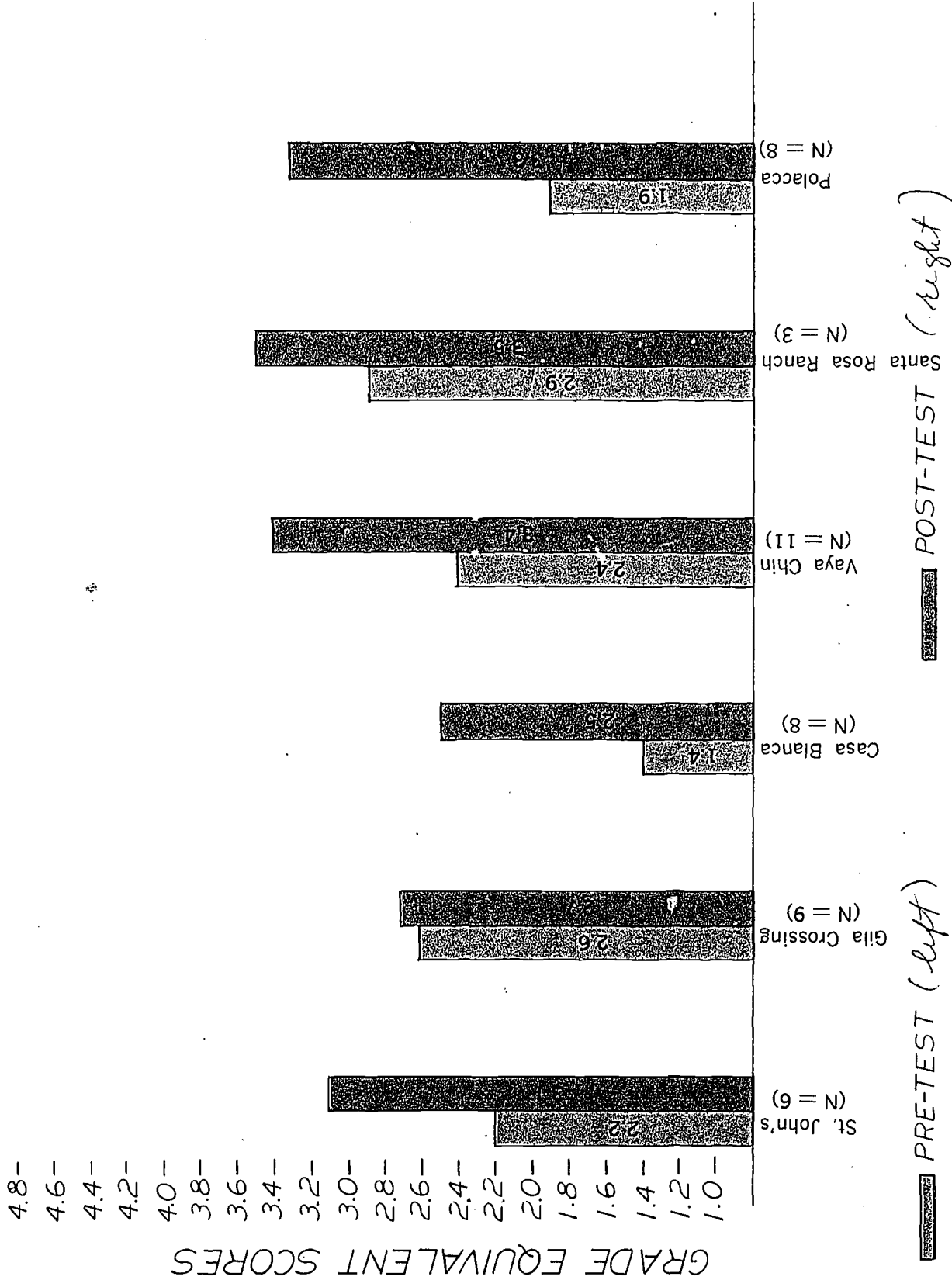


Table 33
4th Grade
Math Component

School	Actual Gain Scores	Expected Gain Scores	Difference
St. John's Indian School	.9	.6	+ .3
Gila Crossing Day School	.1	.7	- .6
Casa Blanca Day School	1.1	.4	+ .7
Vaya Chir. Day School	1.0	.6	+ .4
Santa Rosa Ranch	.6	.7	- .1
Polacca Day School	1.4	.5	+ .9

Figure 25
Pre- Post California Achievement Test Total Math Grade Equivalent
Scores for all Schools with a 5th Grade Math Program

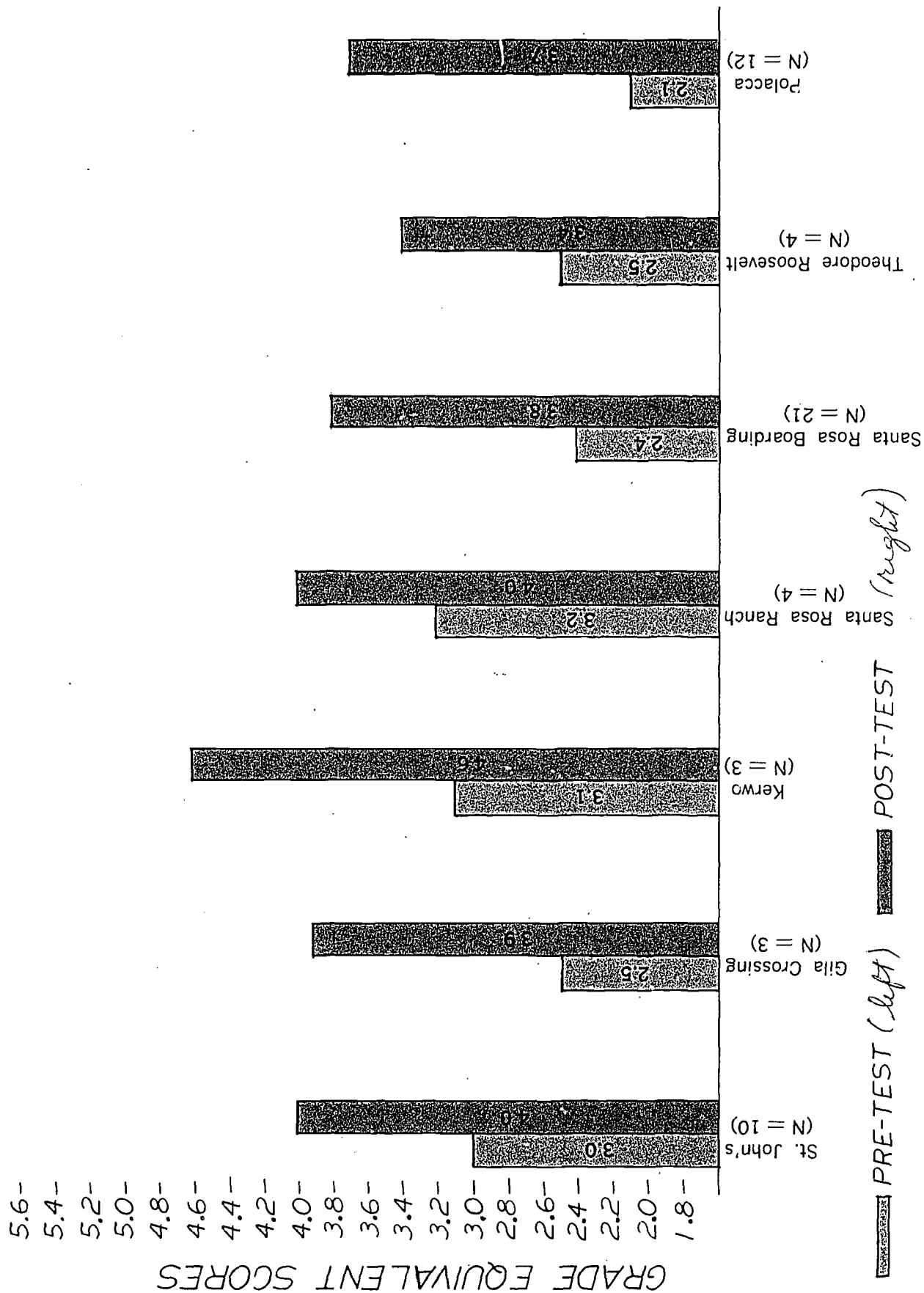
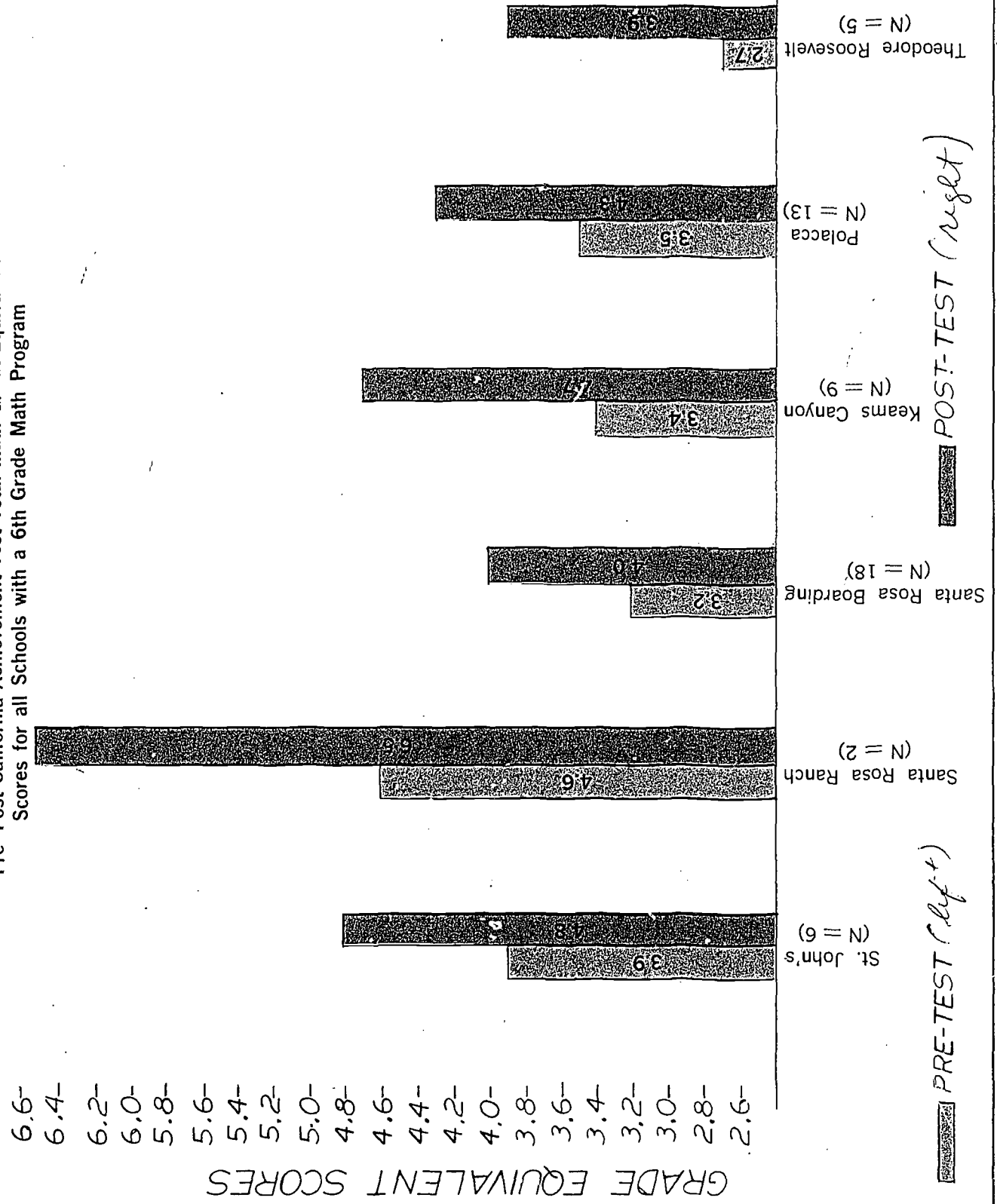


Table 34
5th Grade
Math Component

School	Actual Gain Scores	Expected Gain Scores	Difference
St. John's Indian School	1.0	.6	+ .4
Gila Crossing Day School	1.4	.5	+ .9
Kerwo Day School	1.5	.6	+ .9
Santa Rosa Rancho	.8	.6	+ .2
Santa Rosa Boarding School	1.4	.5	+ .9
Theodore Roosevelt	.9	.5	+ .4
Polacca Day School	1.6	.4	+1.2

Figure 26
Pre- Post California Achievement Test Total Math Grade Equivalent
Scores for all Schools with a 6th Grade Math Program



POST-TEST (right)

PRE-TEST (left)

Table 35
6th Grade
Math Component

School	Actual Gain Scores	Expected Gain Scores	Difference
St. John's Indian School	.9	.7	+ .2
Santa Rosa Ranch	1.9	.8	+1.1
Santa Rosa Boarding School	.8	.5	+ .3
Keams Canyon Boarding Sch.	1.3	.6	+ .7
Polacca Day School	.8	.6	+ .2
Theodore Roosevelt	1.2	.5	+ .7

Figure 27
Pre- Post California Achievement Test Total Math Grade Equivalent
Scores for all Schools with a 7th Grade Math Program

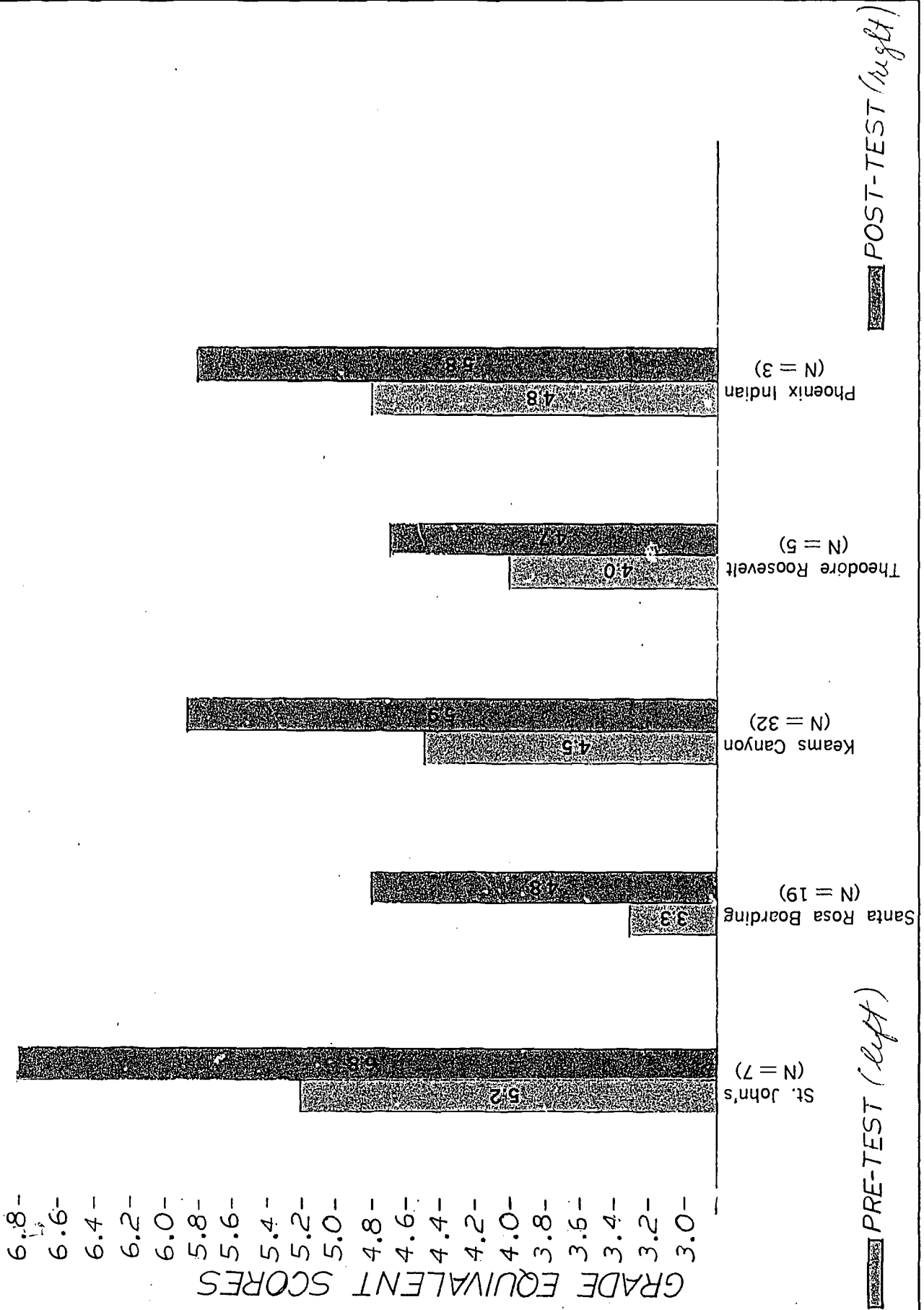
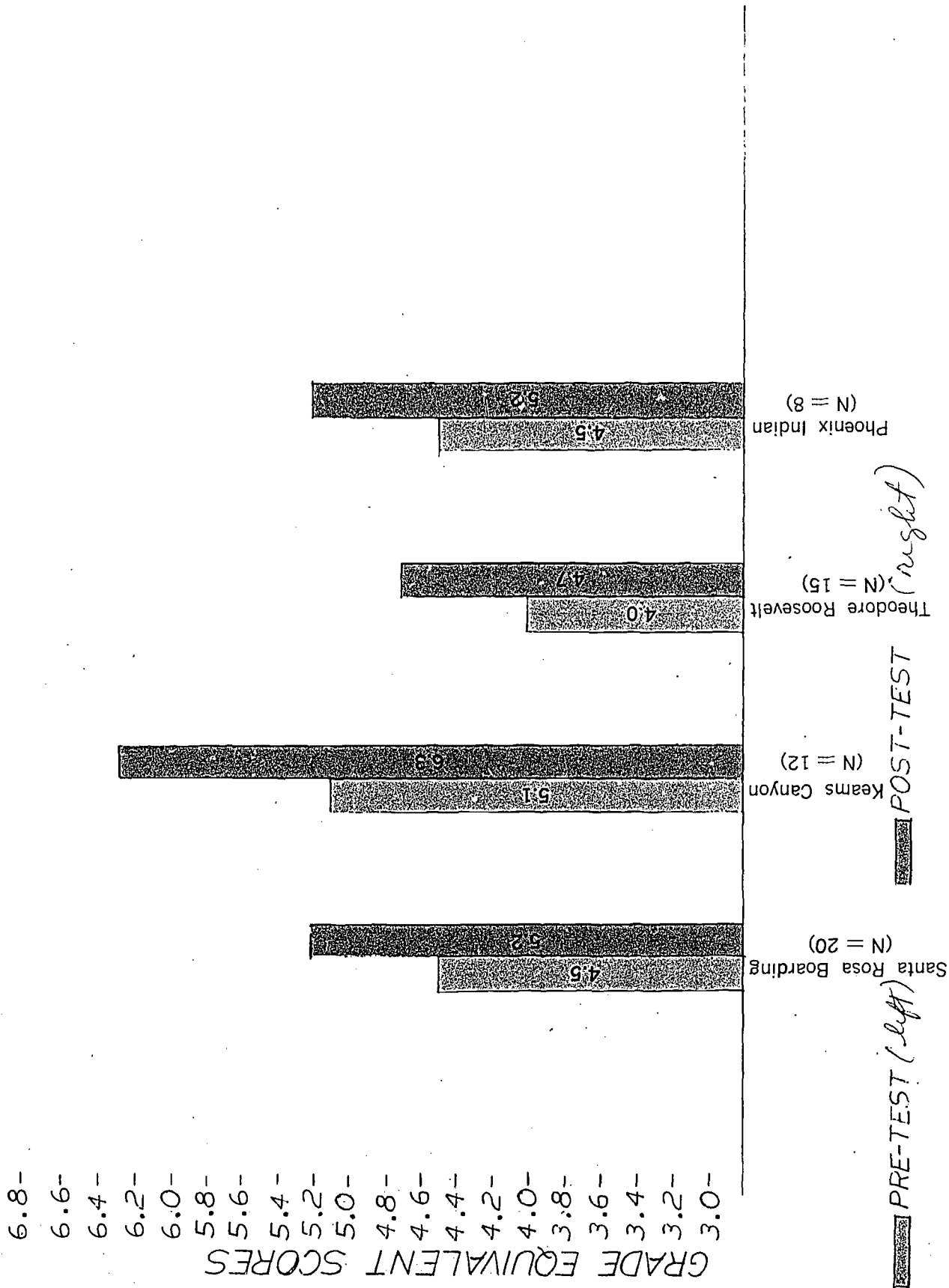


Table 36
7th Grade
Math Component

School	Actual Gain Scores	Expected Gain Scores	Difference
St. John's Indian School	1.6	.7	+ .9
Santa Rosa Boarding School	1.5	.5	+1.0
Keams Canyon Boarding	1.4	.6	+ .8
Theodore Roosevelt	.7	.6	+ .1
Phoenix Indian School	1.0	.7	+ .3

Figure 28
 Pre- Post California Achievement Test Total Math Grade Equivalent
 Scores for all Schools with a 8th Grade Math Program



GRADE EQUIVALENT SCORES
 6.8-
 6.6-
 6.4-
 6.2-
 6.0-
 5.8-
 5.6-
 5.4-
 5.2-
 5.0-
 4.8-
 4.6-
 4.4-
 4.2-
 4.0-
 3.8-
 3.6-
 3.4-
 3.2-
 3.0-

PRE-TEST (left) POST-TEST (right)

Table 37
8th Grade
Math Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Santa Rosa Boarding School	.7	.6	+ .1
Keams Canyon Boarding	1.2	.6	+ .6
Theodore Roosevelt	.7	.5	+ .2
Phoenix Indian School	.7	.6	+ .1

Figure 29
 Pre- Post California Achievement Test Total Math Grade Equivalent
 Scores for all Schools with a 9th Grade Math Program

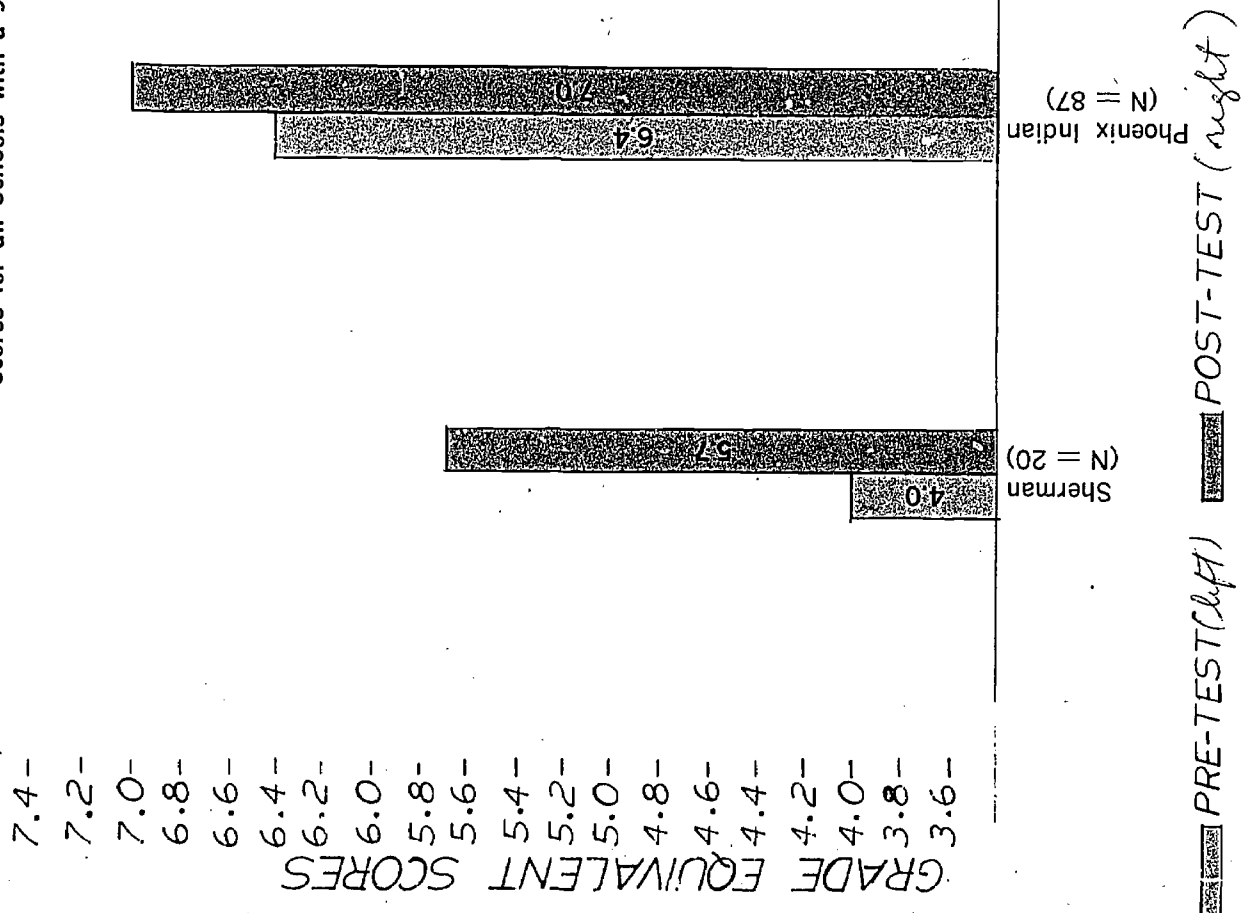
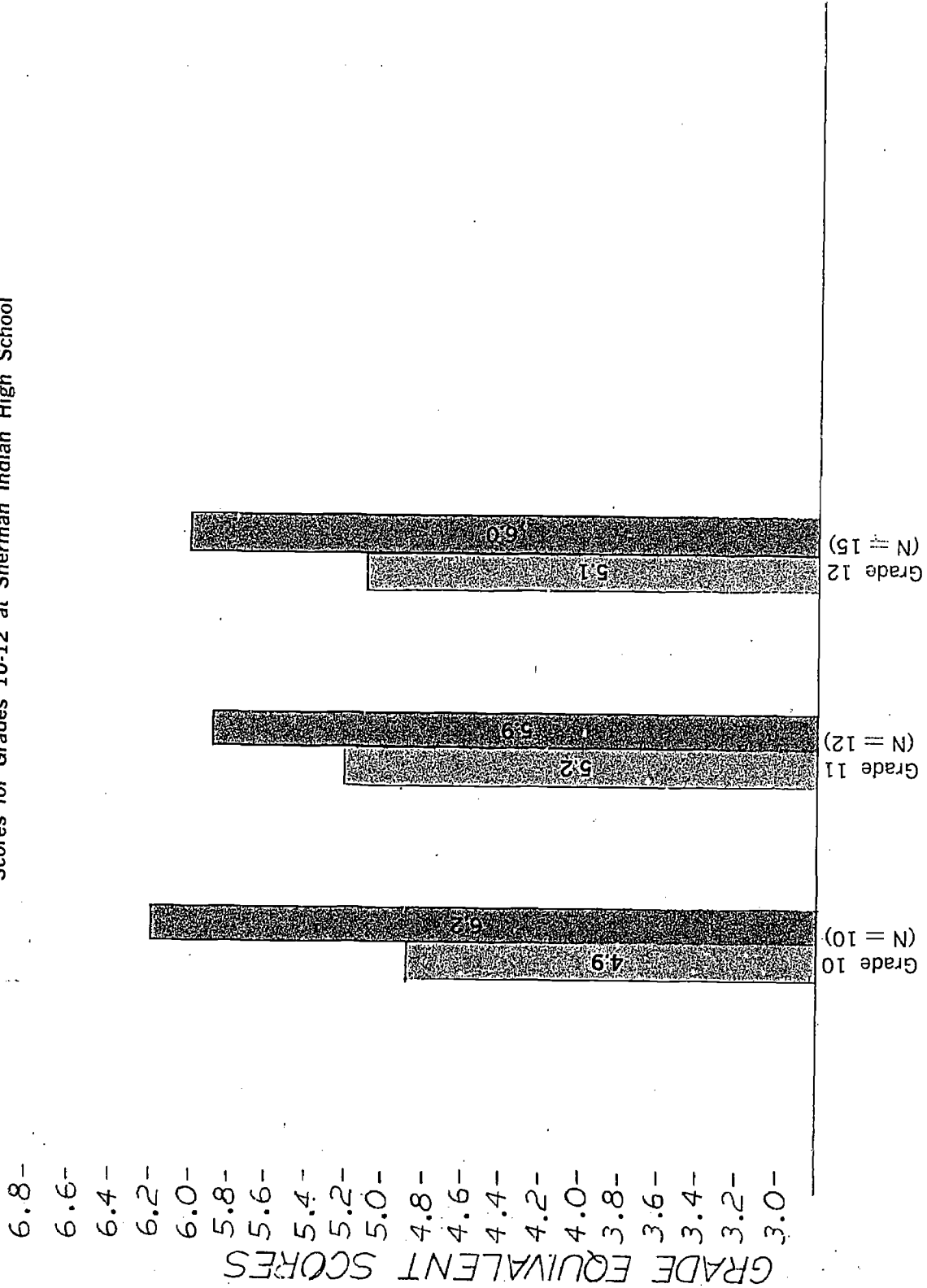


Table 38
9th Grade
Math Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Sherman Indian School	1.7	.4	+1.3
Phoenix Indian School	.6	.7	- .1

Figure 30
Pre- Post California Achievement Test Total Math Grade Equivalent
Scores for Grades 10-12 at Sherman Indian High School



PRE-TEST (left) POST-TEST (right)

GRADE EQUIVALENT SCORES

Table 39
10th-12th Grade
Math Component

School	Grade	Actual Gain Scores	Expected Gain Scores	Difference
Sherman High School	10	1.3	.5	+ .8
Sherman High School	11	.7	.5	+ .2
Sherman High School	12	.9	.4	+ .5

Table 40

California Achievement Test Total Battery Results
for Students in Schools with a Special Education Component

School	Grade	N	Pretest	Posttest	Actual Gain	Expected Gain	(Actual - Expected)
Casa Blanca	2	5	.6	.9	.3	.3	0
Casa Blanca	3	4	.8	1.6	.8	.3	+.5
Casa Blanca	4	5	1.1	1.9	.8	.3	+.5
Phoenix Indian High	7	2	4.6	5.5	.9	.7	+.2
Phoenix Indian High	9	10	4.0	4.8	.8	.5	+.3

Table 41

AAHPER and Glover Physical Education Results in Percentiles
for those Schools with a Physical Education Component

School	Grade	N	Pretest	Posttest	Gain
Salt River	1	19	31	81	50
	2	11	40	75	35
	3	11	38	73	35
	4	9	34	65	31
	5	22	28	46	18
	6	23	27	46	19
	7	15	29	44	15
Keams Canyon	B	9	12	56	44
	1	11	20	61	41
	2	10	24	50	26
	3	7	12	60	48
Sherman	9	31	36	52	16
	10	25	32	53	21
	11	19	36	58	22
	12	7	33	51	18

Conclusions and Recommendations

The data presented in this report clearly show that except in a few isolated grades in some schools the Title I projects were tremendously successful in FY 1973. This is documented in the Phoenix Area consolidated schools report where students in every grade gained at or above the national average in reading and language. Except for students in grades 3 and 11 this was also true in mathematics.

Reading

A number of schools, Keams Canyon, Hoteville, Polacca, Second Mesa, Supai, and Stewart reported gain scores that met or exceeded the national average in every grade. Three schools, Santa Rosa Boarding grade 2, St. Johns grade 7, and Stewart grade 12 reported gains of 2 or more years.

In contrast, students did not gain at a satisfactory level at Gila Crossing Day School in grades 2-5, or at Kerwo in grades 3-4. In addition, there were several other schools that reported low gains in reading in one isolated grade whereas they reported large gains in other grades.

Language

There were several schools in which the students met or exceeded the national average in every grade. These schools were John F. Kennedy, Hopi Day, Polacca, Second Mesa, and Santa Rosa Boarding School. In addition several schools had gain scores of double or more the national average; these were Hopi Day school grades 4-7, Santa Rosa Boarding school grades 3 and 7, and St. Johns Indian school in grades 5 and 7.

On the other hand, several schools reported unexpectedly low gains in language, Keams Canyon in grades 2 and 5, and Kerwo and Santa Rosa Ranch in grades 3-5. These schools had several grades in which the students either gained what was expected without Title I intervention or less.

Mathematics

There were several schools, Keams Canyon, Polacca, Kerwo, and Vaya Chin, in which the students in every grade averaged gains at or above the national Average.

There were small gains in Casa Blanca and Gila Crossing schools in grades 2-3. These results were not entirely unexpected. The type of program offered in these schools in the early grades is a measurement based program that teaches mathematics concepts not measured by the California Achievement Test. Thus, the major benefits to be derived from the program will not become evident until grade 5 or where the students should reach the national average in mathematics.

Special Education

The results in special education do not at first glance appear to be very substantial. However, this was the first year of operation for these programs and many logistical and technical problems in implementation were not solved until mid year. Even so, the actual gains in total achievement exceeded in every case the gains that would have occurred without Title I intervention.

Physical Education

The results in physical education show that students in every grade at two schools had post test physical fitness scores at or above the 50th percentile. The two schools are Keams Canyon and Sherman. The lowest test average for any school was at the 44th percentile which is a substantial change from the pre tests scores.

Recommendations

The data reported logically lead to two major recommendations: First, those schools showing low gains in reading and mathematics should critically evaluate what is occurring in their programs that is preventing their students from making gains equal to students in other Phoenix Area schools, and secondly, those Title I projects that are demonstrating consistent gains in every grade should attempt to have the regular program institute the activities throughout the school.

DEFINITION OF TERMS

There are several terms used in the manuscript that might not immediately be clear without some clarification.

N = the number of students who took both the pre and post-test and thus comprise the total number of students included in the test results.

Expected Gain: For purposes of this report, expected gain refers to the gain in grade equivalent score that would be expected if the students did not receive Title I services. The value was computed by dividing the students pre-test score by the number of years in school +1. Thus a student beginning the second grade with a pre-test score of 1.6 would have an expected growth of .8 in grade equivalents. While it is recognized that this does not take into account the gain/loss factor over the summer it was the most accurate figure that could be derived given the limitations of the data.

Test Dates: Dates of administration of the pre-tests were the last 2 weeks in September and of the post-test were the first 2 weeks in May.