

DOCUMENT RESUME

ED 052 905

RE 003 740

AUTHOR Counelis, James Steve
TITLE First Grade Students in the Hunters Point-Bayview
SEED Project: A Diagnostic Review.
INSTITUTION San Francisco Univ., Calif.
PUB DATE 15 Aug 70
NOTE 74p.
EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS *Beginning Reading, Class Attendance, Class Size,
Community Involvement, Data Analysis, *Disadvantaged
Youth, Educational Improvement, *Grade 1, Negro
Students, *Program Evaluation, *Reading Achievement,
Sex Differences

ABSTRACT

A first-year report of the South East Education Development (SEED) project, an organization between the community-at-large and the schools in a disadvantaged section of San Francisco, California, is presented. The author first lists major findings about the primarily Negro first-grade students as a group and an introduction which refers to the nature of the competent pragmatic test and the empirical basis for this review. Then separate sections discuss pupil attendance patterns, teacher evaluation of reading, and achievement test results. In general, the students were found to be slightly below grade level but working at a satisfactory pace. Other findings were (1) that no significant differences between boys and girls were manifested in relation to age, attendance, and reading stanine scores; (2) that attendance and reading achievement were significantly related; (3) that class size and monthly reading achievement rates were not significantly related; and (4) that SEED-project first graders performed significantly better than first graders in the same schools the previous year. It was therefore concluded that SEED demonstrated its efficacy in promoting reading growth. Tables are included. (AW)

ED052905

THE UNIVERSITY OF SAN FRANCISCO
Educational Planning Laboratory

FIRST GRADE STUDENTS IN THE HUNTERS POINT-BAYVIEW SEED PROJECT:
A DIAGNOSTIC REVIEW

U. S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY.

by

James Steve Counelis
Associate Professor of Education

San Francisco, California

August 15, 1970

740

003

THE UNIVERSITY OF SAN FRANCISCO

Department of Education

Chairman:

Dr. Edward J. Griffin

Program Directors:

Sr. Mary Alma, P.B.V.M.
(Library Science)

Dr. Katherine V. Bishop
(Elementary Education)

Dr. John R. Devine
(Teacher Education)

Dr. Robert G. Lamp
(Administration)

Dr. Thomas D. McSweeney
(Counselor Education)

=

The Educational Planning Laboratory

Director:

Dr. Robert G. Lamp

Director of Research:

Dr. James Steve Counelis

THE SOUTH EAST EDUCATIONAL DEVELOPMENT
170 Hilltop Road
San Francisco, California . 94124

STAFF

School-Community Coordinator:

The Reverend Charles H. Lee

Supervisor for Education:

Robert L. Fisher

Supervisor for Community Relations:

Lonnie White

Secretarial Personnel:

Joan C. Knox
Alma Gray

Community Service Assistants:

Mildred Derrick
Lana Ewing
James Griffin
Edward Grooms
Norma Johnson
Mary Lindsey
Dwayne Manuel
Milton Otis
Lionel Primus
Brenda Rainwater
Carey Stowe
Nathaniel Vaughn

SEED is a project under Title III of the Elementary and
Secondary Education Act of 1965 (Public Law 89-10), as
amended by Public Law 90-247.

THE CITY AND COUNTY OF SAN FRANCISCO
Board of Education

President:

Allan H. Nichols

Vice President:

Dr. Zuretti L. Goosby

Members:

Dr. Laurel E. Glass

Edward Kemmitt

Mrs. Ernest R. Lilienthal

Howard N. Nemerovski

Dr. David J. Sanchez, Jr.

=

Superintendent:	Dr. Thomas A. Shaheen
Assistant Superintendent, Elementary Education:	Dr. Donald A. Rhodes
Assistant Superintendent, Instructional Development Services:	Dr. Raymond J. Pitts
Assistant Superintendent, Innovative Planning:	Isadore Pivnick
Director, Innovative Planning:	Victor Rossi
Acting Director of Research and Program Evaluation:	Yvon O. Johnson

THE SEED BOARD

Chairman:

Lola Belvin

Secretary:

Lois Bonzell

Parent Representatives:

+Cozetta Bruce
Tommie Jean Colbert
+Joleta Johnson
Erlinda Villa

**Community Organization
Representatives:**

+Julia Commer
+Beatrice Dumbar
Bernice Howell
Ruby Markham
+Walter Simmons
+Essie Webb
Eloise Wilson

Principal-Teacher Members:

Bonnie Hammond
+Julia Irving
+Monica Mc Gloin
Susan Sanford

+Alternate

THE SEED PARENT REVIEW COMMITTEES

All Hallows:

Dorothea Franklin
+Alma Gray
Mary Hayes
Gloria Maffei
+Marlin Milligan
+Evelyn Nero
Erlinda Villa
=Delores Williams

Bayview:

Joyce Allen
Lena Baker
Yvonne Gooch
+Coreen Middleton
=George Turner
Lyndell Walridge

Bret Harte:

Iona Beech
+Gloria Daniels
Ollie Galbraith
James Lintz
-Idella Moultry
Erma Stitt
Tessie Wilburn

Burnett:

Lola Belvin
Cozetta Bruce
+Betty Chaffin
+Katherine Mercer
=Thomas Parker
Doris Phillips
Inez Williams

Fremont:

Grace Britton
Annie Bowman
+Martha Daggs
+Dorothy Darden
Margaret James
Joleta Johnson
=Eva King

Hunters Point II:

Alice Banks
Thelma Crawford
+May Duty
+Nellie Marzett
Bessie Mosley
+Deloris Patton
+Jerline Penn
Aresa Senegal
+Helen Sterling
Norma Whitfield

Jedediah Smith:

Tommie Jean Colbert
George Earl
Eddie Jackson
Hazel Jones
=Willa Dean Jones

Sir Francis Drake:

=Ramona Graves
Selula Jobe
Paulene Ruth
Rosie Weullard
Mary Williams

= Chairman
+ Alternate
- Deceased

THE SEED PROJECT SCHOOLS

All Hallows:

Sr. Marian Madden (Principal)
Sr. Joyce Enyeart
Sr. Ellen O'Leary

Bayview:

Kenneth Schneider (Principal)
Cathie E. Ginsberg
Patricia O'Brien
Barbara B. Weitz

Bret Harte:

James A. Robinson (Principal)
Bobbie Mitchell
Margaret Robbins
Selena Williams

Burnett:

Don E. Anderson (Principal)
Charlotte Conner
Eveïyn Forrester
Lois Weinberg
Tania Whitman

Fremont:

Lucille B. Schmidt (Principal)
Faire Barry
Jean Karrigan

Hunters Point II:

Alto C. Moorbrink (Principal)
Willia Corke
Sara Samuel

Jedediah Smith:

Martel Williams (Principal)
Elizabeth Cook
Leonila Datu
Dorinda Krivohlave
Sandy Rudloff
Diane Thomason
Dorothy Williams

Sir Francis Drake:

Patricia Crocker (Principal)
Dorothy Costa
Betty Hudson
Lida Opalenik
Susan Sanford
Deanna Yee

PREFACE

All tasks begin with anticipation, anxiety, and hope. So it was with the South East Educational Development in the Hunters Point-Bayview area of San Francisco, California. It is a novel social invention, the import of which will be great if it works and achieves most of its goals. If this first year's work is the harbinger of good educational things to come, the SEED project can be revolutionary in influence. Perhaps this new invention of a democratically based interstitial organization between the community-at-large and the schools is the cutting edge for future creativity in education and educational responsibility.

There is much to admire in the SEED project's efforts and educational progress in first grade reading education as the reader will see for himself further in this diagnostic review. However, the work of this diagnostic reviewer was hampered by recent policies of the Unified School District of San Francisco in relation to the use of ability or so called I.Q. tests in the evaluational work of programs. Explicitly, Mr. Yvon O. Johnson's memorandum of May 11, 1970 is the current embodiment of that policy. The complete text of this memorandum is found in Appendix I. Its essence is the prohibition of ability tests for program evaluation purposes. Though there are many reasons why this policy came into being and effect, the accounting for variance in achievement test results is not possible without external criterion measures of a standardized variety. This writer believes that this policy is too stringent in character. He also believes that this was not the original intent of the board policy, viz., to hamper educational evaluation of programs. Allowance for ability tests in program evaluations is not only appropriate but needed. Ignorance is no substitute for science; and the argument from silence is no argument at all.

The preparation of this diagnostic review has been possible because many persons cooperated. I am indebted to the Reverend Charles H. Lee and his entire SEED staff for their unqualified aid and service. And in particular I am moved to cite with pleasure my gratitude to Robert L. Fisher, SEED Supervisor of Education, who without stint gave cheerfully of his time, his knowledge, his office resources and his insightful competence into primary education. In particular, his general review of the findings was appreciated; and I was gratified to know that he found nothing at variance or inconsistent with his intimate knowledge of the total SEED educational enterprise.

Further, I must note with special regard the computer programming work of Hugh James Everett, doctoral student in computer

sciences in the University of California-Berkeley. His conscientiousness and fortitude is appreciated; and the results he produced through that almost magical instrument, Berkeley's 6400 computer, is a significant contribution to this review.

To Mrs. Shirley A. Griffith and Miss Alvina A. Lee of the secretarial staff of the Department of Education, I am grateful. The expert typing services of this manuscript and the drafting work on the tables are important contributions which make this review what it physically is.

To Dr. Robert G. Lamp, Director of the Educational Planning Laboratory in the University of San Francisco and my colleague on the education faculty, I owe much. I am grateful to him for the opportunity to work on this project and learn from it a great deal. Also, I am appreciative of his aid and support when the chips were down and time was running out.

And to my wife Anna and my two boys, Steven and George, I owe much in affection; for, I have received much in wifely support and mountains of child tolerance for a tired and perhaps grumpy father during these last several weeks.

Of course, the results of this review are mine; and the responsibility for them rests with me.

JSC

August 15, 1970,
The University of San Francisco,
San Francisco, California.

A LIST OF MAJOR FINDINGS

The following findings of this diagnostic review are about the SEED project first grade students as a group. These findings are subject to the qualifications that arise from the variability found at the levels of the school, the classroom, and the individual pupil.

1. SEED project first grade pupils earned for their schools significantly higher mean grade equivalent scores in reading than the first grade pupils in the same schools of the prior school year.

2. SEED project first grade students' monthly reading achievement rate was .91 for each month of instruction within the project. This was slightly less than the normal rate of one month's achievement for each month of instruction (1.00).

3. SEED project first grade students' mean grade equivalent score in reading was 1.7, which indicates a two month reading disability according to the standard set by the San Francisco Unified School District.

4. SEED project boys and girls did not differ in terms of age, attendance, or earned stanine scores on the standardized reading test.

5. SEED project first grade students' achievement appeared to be related significantly to attendance.

6. SEED project teacher; subjective and experientially based estimates of their pupils' within-grade levels capacities were validated by achievement test results at the one percent level of significance.

7. SEED project first grade students' achievement did not appear to be related to class size.

INTRODUCTION

Inventions and innovations are products of the human intellect. Their early merit is wholly abstract. Such merit as they appear to have seems to rest upon some imaginative or insightful novelty that is related, ostensibly, to the real world and its real problems. Successful inventions and innovations are those which withstand the pragmatic test as to whether the idea, or invention, or innovation works in ordinary use. Hence federalism and regional government, intelligence and projective tests, the computer and the airplane have been tried and found to work in ordinary use. This writer knows of no such success for the ordinary use of rain dances, exorcisms, or dowsing rods even under the best of circumstances.

A competent pragmatic test is one in which reality-testing and feedback obtains to the creators or users of the idea or object under test. Such a pragmatic test is facilitated by independent examiners and observers who have no vested interest in the test's outcome. Through independent observers and empirical data competently designed and gathered and interpreted, the competent pragmatic test seeks to establish in an explicit manner the following about the object under test: (1) design simplicity; (2) rigor and robustness under use; (3) stability of functional

success over time. In this regard, the work of the Consumers' Union comes to mind.

The South East Educational Development is a social invention, founded and established within the Hunters Point-Bayview area of San Francisco, California. This part of San Francisco is a classic "across the tracks" industrial slum. It is the area of San Francisco's greatest poverty. About a third of the families live in a temporary housing section; the other two-thirds live in permanent low-cost housing in the surrounding area. World War II housing is now deteriorated, dilapidated, and damaged by acts of vandalism. The unemployment rate is estimated to be between 10 to 15 percent where the metropolitan rate is 4.4 percent. Almost 25 percent of the Hunters Point families have incomes less than \$3000 as compared with 13 percent for such families in the city at large.

The educational level of the Hunters Point-Bayview area is below that of the city. Thirty percent have less than an eighth grade education when compared with 17 percent for the city. Only 10 percent of the adults have completed four years of high school as compared with 27 percent for the city. Of the residents between the ages of 15-34 who attend college, there are 3.3 percent as compared with 10.1 percent for the city at large. And the State Testing Program of 1966-1967 showed that the students were well below the city averages in reading. The school dropout rate for this area is 22.5 percent as compared with 8.7 for the city.

To create breakthroughs in resolving the educational plight of the people in the Hunters Point-Bayview area, the SEED project has as its intention the development of a community-school organization to improve the education of the elementary school child in the area. In the words of the project writers:

[SEED seeks] to establish an exemplary model of community organization. . .which will foster. . .a more meaningful, intellectually productive, and personally satisfying education[al] program for the children in the elementary schools of the Hunters Point-Bayview District.

The pragmatic test here is whether an "intellectually productive" education has been obtained under the community-school organization thus far developed. That is one of the purposes of this study. That is its objective part.

But more importantly, this report is designed for a use. It is designed to be a diagnostic review and not a judgment. Its use is to provide guidance in program development for the second and third years of the project's life. This guidance is for the professional staffs of the schools, the SEED staff, and the parents of the children in the program. To assign lauds and blames is easy; but it is not productive of progress and success. The education of children is too important to wait upon problems of community frictions, interpersonal rivalries, and self-gratification through power.

The SEED project schools are eight in number. The seven public schools are: (1) Bayview; (2) Bret Harte; (3) Burnett;

(4) Fremont; (5) Hunters Point II; (6) Jedediah Smith; (7) Sir Francis Drake. All Hallows is the one private school, a Roman Catholic institution.

As school plants go, Bret Harte, Burnett, Fremont, Jedediah Smith and Sir Francis Drake are in reasonably good condition, having been built in the mid 1950's. The Bayview School was built in 1908. It is scheduled for razing and replacement, though this appears to have been delayed at present. However, Hunters Point II consists of ramshackle 1944 wooden portables of the worst description. Also, Jedediah Smith and Sir Francis Drake schools have annex buildings of the same vintage and variety as the 1944 wooden portables of Hunters Point II. Though the Unified School District of San Francisco has approved recently the building of a new school building in Hunters Point, the availability of that plant will be at least some four years in the future.

It is in this milieu that the SEED project operates. This report will provide a descriptive analysis of the first grade children in the SEED project's eight schools. Full or partial records of 568 boys and girls are the basis of this review. The SEED project, being in operation for one year, had as its goal to work on first grade programs in reading and mathematics.

THE EMPIRICAL BASIS FOR THIS DIAGNOSTIC REVIEW

Through the cooperation and service of the SEED office staff, the principals, and the classroom teachers, a set of empirical data was obtained on the first grade students under the SEED Project's funding. These data were: (1) student's name; (2) student's birthday: month and year; (3) student's sex; (4) the number of full days in attendance in the program; (5) teacher's estimate of the student's reading level: below grade, at grade, and above grade levels; (6) the grade for reading assigned by the teacher at the end of the school term; (7) the stanine score and the grade equivalent score earned by the student on the Stanford Achievement Test: Primary I for Grade 1 - Reading, Form W given in Spring 1970.

Two other pieces of data were collected; but they were not used in this review. These were: (1) teacher's estimate of student's arithmetic level: below grade, at grade, above grade levels; (2) the arithmetic grade assigned by the teacher at the end of the school term. Inasmuch as an achievement examination in arithmetic had not been administered as it had been for reading, the absence of such an external criterion measure made it impossible to make a reasonable diagnostic opinion on achievement in arithmetic.

Even in the best of all possible worlds of Dr. Pangloss, complete records on every child are not possible. Every researcher

expects to find a certain number of partial records. But it was unfortunate for this review that about 23 percent of the total students' records are partial in respect to significant data. Particularly difficult is the fact that 49 percent of the Bayview School's student records and 83 percent of the student records from the Jedediah Smith School are partial in significant data. Nonetheless, these gaps do not constitute an insurmountable deterrent toward achieving a reasonable, useful, and meaningful diagnostic review. See Tables Nos. 1 and 2 for the number, the particular areas of data, as well as the schools and classes for which student records are partial in a significant degree.

This diagnostic review will not attempt to study the several curricular approaches to the teaching of first grade reading in the several SEED schools. These problems are not amenable to post hoc educational analysis. Though very complex, such problems are amenable to systematic inquiry, given the development and correct installation of the research design into the reading curricula so that the data collection becomes an integral and unobstrusive routinized element planned into the learning process of the children. This was not the case during this first year of SEED.

NON-ACADEMIC CHARACTERISTICS OF SEED FIRST GRADERS

The ethnic composition of the SEED schools typify the current industrial slum. The first graders in the Hunters Point-Bayview area schools are over 90 percent negro. See Tables Nos. 3a and 3b for the ethnic composition of the first grade classes for the academic years of 1968-1969 and 1969-1970. This data on the ethnic composition of the schools was provided by the records of the SEED Office.

The proportional distribution of boys and girls in the 1969-1970 SEED project first graders is 54 percent and 46 percent, respectively. Though All Hallows and Sir Francis Drake have more girls than boys, the reverse is true for the other schools. See Table No. 4 for the data.

As would be expected of first graders entering the second grade, the mean age for all students is seven years. See Table No. 5 for frequency and proportional distribution of SEED first grade pupils by school and sex. The decimal ages were calculated as of June 1970.

ATTENDANCE PATTERNS

School attendance is an empirical indicator of the child's availability and opportunity for instruction. Of course, the lower the attendance record, the lower the student's opportunity to learn, given the desperate economic circumstances of the majority of the Hunters Point-Bayview parents.

But attendance in school is an empirical indicator of the degree of rapport, cordiality and cooperation between parents and the school. The reasoning is, the closer the cooperation between parent and school, the higher the attendance of the child. The higher the attendance of the child in school, the greater the opportunity for a given child to learn.

The total number of days in the academic year of 1969-1970 was 181. For all the SEED schools' first graders, the mean full days in program was 152 days. The range of this statistic was from Hunters Point II mean of 132 days to All Hallows' mean of 169 days. See Table No. 6 for these statistics by school and sex.

Attendance can be stated more cogently in terms of the percent of the base of 181 days of school. For all schools, the first grade boys and girls had a mean percent of 83. The range

of mean percent days in attendance is from Hunters Point II mean of 73 percent to All Hallows mean percent of 93. See Chart No. 7.

There is another way to look at attendance of SEED project first graders, that being the percent of the number of students attending school more than 81 percent of the time. In this regard for all SEED school first graders, 76 percent of the children attended more than 81 percent of the total school calendar of 181 days. This statistic ranges from Hunters Point II where only 50 percent of the children attended more than 81 percent of the time to All Hallows where 98 percent of the children attended more than 81 percent of the total school days. See Table No. 7 for the details of this statistic by school and by sex.

If there is any one issue upon which the SEED organization, the schools and the parents can work cooperatively and with immediate results, that issue is improvement of attendance. It is important, necessary and vital to young lives being molded. It has been suggested that school attendance is a function of the degree of cooperation existing between the school and the parents. It appears that much needs to be done in this area. Further in this report, the connection between school attendance and learning will be demonstrated empirically.

TEACHER EVALUATION OF READING

Under procedures of the Unified School District of San Francisco, the evaluation of primary students is done on a twofold basis. On her practical but subjective experience with the students (this is especially true with first grade pupils), the teacher estimates the within-grade capacity level of each child. These estimates of the within-grade capacity are designated below with a numerical score attached to each:

- (a) Above Grade Level = 1;
- (b) At Grade Level = 2;
- (c) Below Grade Level = 3.

Table No. 8 provides the mean of the within-grade teacher estimates of the SEED project first graders for all schools, for individual schools, and by sex. A cursory reading of this table shows that the teachers tend to rate their students to be "At Grade Level" (2) or slightly below. It appears to be fairly universal as demonstrated by the fact that the standard deviations are about two-thirds of a grade level point. Further evidence is given in the frequency distribution of students placed within these categories because more than one-half of the students tend to be classed within the categories "Above Grade Level" and "At Grade Level," though this does vary with the particular school and teacher.

The second part of the teacher evaluation for primary students is the assignment of grades within each of the above noted within-grade estimates of student capacity. The grades given, along with their numerical value, are:

- (a) Excellent = 1;
- (b) Very Good = 2;
- (c) Satisfactory = 3;
- (d) Improvement Needed = 4.

In the first grade, however, the grade of "Excellent" (1) is never awarded. The highest grade possible is "Very Good" (2). Table No. 9 provides the mean grade for SEED first graders. For the most part, the grade of "Satisfactory" (3) is awarded. This appears to be fairly universal as witnessed by the standard deviations of about two-thirds of a grade point. The frequency distribution of SEED first graders within the grade categories given above further supports this contention because about two-thirds to three-fourths of these pupils were placed in the grade categories "Very Good" and "Satisfactory," though this varies with school and particular teachers.

In a collective sense, the SEED teachers' assessment of their first grade scholars is quite obvious. These teachers believe that their pupils are at grade level and doing satisfactorily therein. See Tables Nos. 8 and 9 for the detailed statistics upon which this assertion is built. A comparison of these assessments will be made with the external criterion of a standardized reading test.

ACHIEVEMENT TEST RESULTS

In May 1970, the first grade SEED project students were tested with the Stanford Reading Achievement Examination, Form W for the first grade. Two scores were recorded for each child taking the examination: (1) a stanine score; (2) a grade equivalent score.

Stanine scores are convenient derived scores which provide useful categories within which students rank themselves. The following within-grade categories are defined by stanine scores:

- (a) Below Grade Level: 1, 2, 3;
- (b) At Grade Level: 4, 5, 6;
- (c) Above Grade Level: 7, 8, 9.

Found in Table No. 10, the overall mean stanine score for SEED project first graders was 3.5 which is at the upper end of the "Below Grade Level" category. Only the Burnett School had earned a mean stanine score of 5.1 which is clearly in the middle of the category labeled "At Grade Level."

As rankings, stanine scores do not provide a useful unit for measuring educational change in terms of time. A means of doing this is the grade equivalent score. The grade equivalent score is a decimal number in which the whole number represents

the grade year and the fractional tenths represent the number of calendar months within a ten month academic year. Thus a grade equivalent score of 3.4 is interpreted to mean the achievement that is commensurate with that found at the fourth month of the third grade in some objectively tested subject matter field.

The mean grade equivalent score for all SEED first graders is 1.7, viz., achievement in reading commensurate with a norm population at the seventh month in the first grade. This mean grade equivalent score suggests that the SEED children will enter the second grade in the Fall of 1970 on the average with a three month handicap. See Table No. 11.

It is significant to note, however, that the SEED program did not commence operation until October 1969 (Expected Grade Equivalent Score=1.1) and that the Stanford reading test was given in late May 1970 (Expected Grade Equivalent Score=1.9). In terms of standard test procedures, there is a difference in instructional time of eight months from the program's beginning to the date of the test's administration. This suggests that the SEED project children's rate of growth was .91 month per each month of instruction within the SEED program, which is slightly below the normal rate of one month's growth for each month's instruction. Theoretically, had the SEED first grade children a full ten months of reading instruction within the SEED program, they would have been slightly less than one month behind a normal grade equivalent score of 2.0. See Table No. 12.

Of particular interest is the mean grade equivalent score

of 2.1 earned by the students in the Burnett School. In about eight months of instruction, these children grew eleven months, or at a rate of about 1.4 months' achievement for each instructional month. With such a rate, the Burnett children as a group have caught up and will be at grade level when they enter the second grade in the Fall of 1970. This accounts also for the 5.1 stanine score that the Burnett School first graders earned collectively, for the assumption behind the stanine score's construction is a full year's instruction at the normal rate of one month's achievement for each month of instruction. Such a signal advance in reading achievement rates of Burnett School first graders must be investigated carefully so that the replicable elements in Burnett's reading program can be installed in the other schools. However, the achievement of the Burnett children is not uniform but varies with the teacher, the class of students, and the individual child learned himself.

In retrospect, it appears that the generalized statistical impression of the SEED teachers that their students were slightly below grade level and working at a satisfactory pace is empirically substantiated. The monthly reading achievement rate for all first grade pupils was .91, or slightly below the normal rate of 1.00. Further, another test substantiating teacher judgment collectively was made. A chi square test of association and a contingency coefficient of correlation C were calculated between the teachers' within-grade capacity estimates of their pupils and the students' earned stanine scores placed into these categories. For all teachers in all schools, the association was statistically significant at the .01 level and the

contingency coefficient C was .47 (57 percent of the maximum value of C for a 3 x 3 table). At the school level, only Hunters Point II teachers did not effectively judge their students at a .01 level. All other schools' faculties did so, with a range of C statistics from .41 to .65. Unfortunately, the Bayview School did not have enough data. See Table No. 13.

OTHER FINDINGS

The section provides a series of three findings that are relevant and important for interpreting this review report as a whole.

Sex-linked Hypotheses: Three hypotheses were empirically tested to determine whether the boys and girls in this test population differed significantly in respect to decimal age, attendance (full days in program), and stanine reading scores. Tables Nos. 14-16 present Mann-Whitney U tests on all three of these variables in relation to sex. All three null hypotheses were accepted, for no significant differences between boys and girls were manifested in relation to the factors of decimal age, attendance, and reading stanine scores.

Achievement related to Attendance: The hypothesis was tested as to whether attendance (number of full days in program) and reading achievement (stanine scores) were significantly related. A chi square test of association and a contingency coefficient of correlation C were calculated, dividing both variables at their means. The chi square test rejected the null hypothesis at the five percent level. Thus the idea that a significant association exists between attendance and achievement did obtain. Further, the contingency coefficient C was .61 (85 percent of the maximum C value

possible for a 2 x 2 matrix), a remarkable correlation for frequency data. See Table No. 17.

Class Size and Monthly Reading Achievement Rates: The question was raised as to whether for this group of students class size and the students' monthly achievement rates in reading were related in a statistically significant manner. Supporting the results of a vast literature on class size and achievement, no significant statistical difference in monthly reading achievement rates was found to exist between two groups of classes, divided into two categories at their mean size, viz., 20. See Table No. 18. Hence, class size was not, of itself, a significant element in the development of monthly achievement rates. There is undoubtedly some more intimate curricular factor, such as the number of direct instructional hours per pupil, which probably accounts for the differentials obtained.

In the professional and parental evaluation of the SEED project's educational product, these findings, indeed, modify and give depth to the SEED product's meaning.

HAS THERE BEEN SIGNIFICANT IMPROVEMENT IN EDUCATION?

The one significant question left yet to be answered is: Has there been significant improvement in reading achievement under SEED project funding when children are compared to first graders of the prior school year in the same schools? The answer to this question is yes. Tables Nos. 19 and 20 provide the empirical evidence for this assertion.

Table No. 19 contains two sets of comparative mean grade equivalent scores for the seven public schools' first graders. The one set of scores is for the SEED first grade pupils of the academic year 1969-1970. The second set of scores is the cohort of first grade students in these same schools for the prior academic year. A quick inspection of Table No. 19 provides the reader with the fact that all schools, except Bayview, have either the same or improved mean grade equivalent scores. Further, Table No. 20 provides a Kruskal-Wallis One Way Analysis of Variance Test By Ranks H which indicates that a significant difference between the two sets of children obtains. The SEED project first grade pupils earned for their schools higher mean grade equivalent scores. The statistical level of significance is at the one percent level.

The import of this finding should be lost to no one, for it means that something educational significant has happened to the

SEED project first grade pupils. They apparently read better than the previous cohort of first grade children in these same schools.

CONCLUSION

The results of this diagnostic review suggest that something educationally significant is happening in the Hunters Point-Bayview South East Educational Development. In terms of growth in reading achievement, an intellectually productive education is being evolved. It is hoped that these efforts be continued, for they are empirically constructive. And it is the further hope of this writer that the professionals in education, the parents, and the SEED Staff constructively will work together and interpret this report for diagnostic and remediation purposes. This writer stands ready to aid them in this significant continuing endeavor.

In the introduction of this diagnostic review, the writer referred to the nature of the competent pragmatic test. In a sense, this report is one piece of evidence in a pragmatic test as to whether the SEED project works and is educational productive. The estimate of this writer is empirically based. He has little hesitancy in writing the following. If reading growth was the goal of SEED, SEED has demonstrated its efficacy in this area.

APPENDIX I

SAN FRANCISCO UNIFIED SCHOOL DISTRICT
Division of Research and Program Evaluation

May 11, 1970

MEMORANDUM

To: All Evaluators of Special Programs
From: Yvon O. Johnson, Acting Director
Research and Program Evaluation
Subject: Use of Ability (IQ) Tests in Program Evaluation

Inasmuch as the primary intent of all special instructional programs presently carried on in the San Francisco Unified School District is to increase student achievement in subject-matter content and skills;

And, inasmuch as the employment, if any, of ability (IQ) tests is only to attempt to describe the learning ability of the participating students and is not an integral part of the evaluation of student achievement;

And, inasmuch as there exists concern as to the validity of present ability (IQ) tests in measuring the learning potential of ethnic minority and/or low-socioeconomic-status students, and that there is a concern that a self-fulfilling prophecy can result when program personnel use these ability (IQ) scores as an indication of student learning potential;

Therefore, the Division of Research and Program Evaluation hereby directs all inhouse and contract evaluators of special programs that, as of this date, the following statements apply to all present and future special instructional programs:

1. No ability (IQ) tests other than those mandated by the State of California are to be administered to program students.
2. No ability (IQ) test scores, including those obtained from State-mandated testing, are to be maintained in the special program's data bank or records. Existing IQ scores in the program's data bank or records are to be removed or blanked out.
3. Program evaluators will not furnish ability (IQ) scores to program personnel or others.
4. Program evaluation reports will not contain ability (IQ) scores.

This directive does not preclude any studies or experiments that attempt to develop culture-free or culturally relevant tests of learning ability, proficiency, or potential. Permission for such studies must, of course, be obtained through this office.

YOJ:eh

APPENDIX II

TABLE NO. 1: CHECK SHEET OF DATA OBTAINED ON SEED PROJECT FIRST GRADE STUDENTS
BY SCHOOL AND CLASSROOM TEACHER

SCHOOL AND TEACHER	BIRTH DATE	NUMBER OF FULL DAYS IN PROGRAM	TEACHER'S READING GRADE LEVEL ESTIMATE	READING COURSE GRADE	READING TEST STANINE SCORE	READING TEST GRADE-EQUIVALENT SCORE	SEX
<u>ALL HALLOWS</u>	(1)	X	X	X	X	X	X
	(2)	X	X	X	X	X	X
<u>BAYVIEW</u>	(1)	X	O	O	X	X	X
	(2)	O	O	O	X	X	X
	(3)	X	X	X	X	X	X
<u>BRET HARTE</u>	(1)	X	X	X	X	X	X
	(2)	X	X	X	X	X	X
	(3)	X	X	X	X	X	X
<u>BURNETT</u>	(1)	X	X	X	X	X	X
	(2)	X	X	X	X	X	X
	(3)	X	X	X	X	X	X
	(4)	X	X	X	X	X	X

TABLE NO. 1: CHECK SHEET OF DATA OBTAINED ON SEED PROJECT FIRST GRADE STUDENTS
BY SCHOOL AND CLASSROOM TEACHER

SCHOOL AND TEACHER	BIRTH DATE	NUMBER OF FULL DAYS IN PROGRAM	TEACHER'S READING GRADE LEVEL ESTIMATE	READING COURSE GRADE	READING TEST STANINE SCORE	READING TEST GRADE-EQUIVALENT SCORE	SEX
<u>FREMONT</u>							
(1)	X	X	X	X	X	X	X
(2)	X	X	X	X	X	X	X
<u>HUNTERS POINT II</u>							
(1)	X	X	X	X	X	X	X
(2)	X	X	X	X	X	X	X
<u>J. SMITH</u>							
(1)	X	O	O	O	X	X	X
(2)	X	O	O	O	X	X	X
(3)	X	X	X	X	X	X	X
(4)	X	O	O	O	X	X	X
(5)	X	O	O	O	X	X	X
(6)	X	O	O	O	X	X	X
<u>SIR FRANCIS DRAKE</u>							
(1)	X	X	X	O	X	X	X
(2)	X	X	X	X	X	X	X
(3)	X	X	X	X	X	X	X

TABLE NO. 1: CHECK SHEET OF DATA OBTAINED ON SEED PROJECT: FIRST GRADE STUDENTS
BY SCHOOL AND CLASSROOM TEACHER

SCHOOL AND TEACHER	BIRTH DATE	NUMBER OF FULL DAYS IN PROGRAM	TEACHER'S READING GRADE LEVEL ESTIMATE	READING COURSE GRADE	READING TEST STANINE SCORE	READING TEST GRADE-EQUIVALENT SCORE	SEX
<u>SIR FRANCIS DRAKE (cont.)</u>							
(4)	X	X	X	X	X	X	X
(5)	X	X	X	X	X	X	X

TABLE NO. 2: EXTENT OF PARTIAL RECORDS ON SEED PROJECT FIRST GRADE STUDENTS

SCHOOLS	TOTAL STUDENTS IN PROJECT		TOTAL STUDENTS IN STUDY		TOTAL STUDENTS WITHOUT DATA	
	N	%	N	%	N	%
<u>ALL SCHOOLS</u>						
Boys	308	54	239	55	69	22
Girls	260	46	198	45	61	24
Boys and Girls	568	100	437	100	130	23
<u>ALL HALLOWS</u>						
Boys	25	43	24	43	1	4
Girls	33	57	32	57	1	3
Boys and Girls	58	100	56	100	2	3
<u>BAYVIEW</u>						
Boys	32	60	18	67	14	44
Girls	21	40	9	33	12	57
Boys and Girls	53	100	27	100	26	49
<u>BRET HARTE</u>						
Boys	37	54	37	54	-	-
Girls	31	46	31	46	-	-
Boys and Girls	68	100	68	100	-	-



TABLE NO. 2: EXTENT OF PARTIAL RECORDS ON SEED PROJECT FIRST GRADE STUDENTS

SCHOOLS	TOTAL STUDENTS IN PROJECT		TOTAL STUDENTS IN STUDY		TOTAL STUDENTS WITHOUT DATA	
	N	%	N	%	N	%
<u>BURNETT</u>						
Boys	50	63	50	63	-	-
Girls	30	37	30	37	-	-
Boys and Girls	80	100	80	100	-	-
<u>FREMONT</u>						
Boys	29	60	28	59	1	4
Girls	19	40	19	41	-	-
Boys and Girls	48	100	47	100	1	2
<u>HUNTERS POINT II</u>						
Boys	23	68	23	68	-	-
Girls	11	32	11	32	-	-
Boys and Girls	34	100	34	100	-	-
<u>J. SMITH</u>						
Boys	63	52	10	50	53	84
Girls	58	48	10	50	48	83
Boys and Girls	121	100	20	100	101	83

TABLE NO. 2: EXTENT OF PARTIAL RECORDS ON SEED PROJECT FIRST GRADE STUDENTS

SCHOOLS	TOTAL STUDENTS IN PROJECT		TOTAL STUDENTS IN STUDY		TOTAL STUDENTS WITHOUT DATA	
	N	%	N	%	N	%
<u>SIR FRANCIS DRAKE</u>						
Boys	49	46	49	46	-	-
Girls	56	54	55	54	1	2
Boys and Girls	105	100	104	100	1	1



TABLE NO. 3a

SEED PROJECT FIRST GRADE STUDENTS: ETHNIC COMPOSITION,
BY SCHOOL TYPE FOR ACADEMIC YEAR 1969-1970+

ETHNIC CLASSES	PUBLIC SCHOOLS (7)		PRIVATE SCHOOL (1)		TOTAL	
	N	%	N	%	N	%
Negro or Black	470	94	42	82	512	93
American Indian	1	--	--	--	1	--
Oriental	--	--	--	--	--	--
Spanish Surname	9	2	1	2	10	2
Other White ⁺	7	1	5	10	12	2
Others	15	3	3	6	18	3
TOTAL	502	90	51	10	553	100

+Source: SEED Office Staff Records

TABLE NO. 3b

HUNTERS POINT-BAYVIEW FIRST GRADE STUDENTS: ETHNIC COMPOSITION
BY SCHOOL TYPE FOR ACADEMIC YEAR 1968-1969+

ETHNIC CLASSES	PUBLIC SCHOOLS (7)		PRIVATE SCHOOL (1)		TOTAL	
	N	%	N	%	N	%
Negro or Black	556	91	50	60	606	87
American Indian	3	--	--	--	3 4	1
Oriental	1	--	3	4		
Spanish Surname	16	3	4	5	20	3
Other White	20	3	15	18	35	5
Others	17	3	11	13	28	4
TOTALS	613	88	83	12	696	100

TABLE NO. 4: SEED PROJECT FIRST GRADE STUDENTS' SEX:
FREQUENCY AND PROPORTIONAL DISTRIBUTIONS BY SCHOOL

SCHOOLS	BOYS		GIRLS		TOTAL	
	N	%	N	%	N	%
<u>ALL SCHOOLS</u>	308	54	259	46	568	100
<u>ALL HALLOWS</u>	25	42	33	58	58	100
<u>BAYVIEW</u>	32	60	21	40	53	100
<u>BRET HARTE</u>	37	54	31	46	68	100
<u>BURNETT</u>	50	63	30	37	80	100
<u>FREMONT</u>	29	60	19	40	48	100
<u>HUNTERS POINT II</u>	23	68	4	32	34	100
<u>JEDEDIAH SMITH</u>	63	52	58	48	121	100
<u>SIR FRANCES DRAKE</u>	49	47	56	53	105	100

TABLE NO. 5: SEED PROJECT FIRST GRADE STUDENTS' DECIMAL AGES:
 MEANS, STANDARD DEVIATIONS, FREQUENCY AND PROPORTIONAL DISTRIBUTIONS BY SCHOOL AND SEX

SCHOOL	TOTAL	MEAN	STANDARD DEVIATION	DECIMAL AGE CATEGORIES																					
				5-5.9 Yrs		6-6.9 Yrs		7-7.9 Yrs		8-8.9 Yrs		9-9.9 Yrs													
				N	%	N	%	N	%	N	%	N	%												
<u>ALL SCHOOLS</u>																									
Boys	298	7.1	.38	-	-	131	44	159	53	8	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Girls	256	7.1	.41	1	-	123	48	124	48	7	3	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Boys and Girls	554	7.1	.40	1	-	254	46	283	51	15	3	1	1	-	-	-	-	-	-	-	-	-	-	-	-
<u>ALL HALLOWS</u>																									
Boys	23	7.0	.43	-	-	10	43	13	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Girls	33	7.0	.51	1	3	17	52	15	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Boys and Girls	56	7.0	.47	1	2	27	48	28	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>BAYVIEW</u>																									
Boys	26	7.1	.42	-	-	10	38	16	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Girls	20	6.9	.24	-	-	14	70	6	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Boys and Girls	46	7.0	.37	-	-	24	52	22	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE NO. 5 (Continued)

SCHOOL	TOTAL	MEAN	STANDARD DEVIATION	DECIMAL AGE CATEGORIES																				
				5-5.9 Yrs		6-6.9 Yrs		7-7.9 Yrs		8-8.9 Yrs		9-9.9 Yrs												
				N	%	N	%	N	%	N	%	N	%											
<u>BRET HARTE</u>																								
Boys	37	7.0	.26	-	51	18	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Girls	31	7.1	.41	-	52	13	42	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Boys and Girls	68	7.0	.33	-	51	31	46	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>BURNETT</u>																								
Boys	50	7.2	.40	-	36	30	60	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Girls	30	7.0	.45	-	63	9	20	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Boys and Girls	80	7.1	.42	-	46	39	49	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>FREMONT</u>																								
Boys	29	7.1	.34	-	45	16	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Girls	18	7.0	.25	-	44	10	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Boys and Girls	47	7.0	.31	-	45	26	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE NO. 5 (Continued)

SCHOOL	TOTAL	MEAN	STANDARD DEVIATION	DECIMAL AGE CATEGORIES																			
				5-5.9 Yrs		6-6.9 Yrs		7-7.9 Yrs		8-8.9 Yrs		9-9.9 Yrs											
				N	%	N	%	N	%	N	%	N	%										
<u>HUNTERS POINT II</u>																							
Boys	23	7.0	.30	-	-	14	61	9	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Girls	11	7.2	.67	-	-	6	55	4	36	-	-	-	-	1	9	-	-	-	-	-	-	-	-
Boys and Girls	34	7.0	.50	-	-	20	59	13	38	-	-	-	-	1	3	-	-	-	-	-	-	-	-
<u>J. SMITH</u>																							
Boys	61	7.1	.37	-	-	24	39	35	57	2	4	4	4	-	-	-	-	-	-	-	-	-	-
Girls	57	7.2	.38	-	-	19	33	36	63	2	4	4	4	-	-	-	-	-	-	-	-	-	-
Boys and Girls	118	7.2	.38	-	-	43	36	71	60	4	4	4	4	-	-	-	-	-	-	-	-	-	-
<u>SIR F. DRAKE</u>																							
Boys	49	7.1	.44	-	-	23	47	22	45	4	8	8	8	-	-	-	-	-	-	-	-	-	-
Girls	55	7.0	.37	-	-	24	44	30	55	1	1	1	1	-	-	-	-	-	-	-	-	-	-
Boys and Girls	104	7.1	.41	-	-	47	45	52	50	5	5	5	5	-	-	-	-	-	-	-	-	-	-



TABLE NO. 6

SEED PROJECT FIRST GRADE STUDENTS' ATTENDANCE: NUMBER OF FULL
DAYS IN PROGRAM, MEAN AND STANDARD DEVIATION
(TOTAL SCHOOL DAYS: 181)

SCHOOLS	N	MEAN	STANDARD DEVIATION
<u>ALL SCHOOLS</u>			
Boys	239	153.38	34.77
Girls	198	149.97	35.31
Boys and Girls	437	151.83	35.01
<u>ALL HALLOWS</u>			
Boys	24	169.96	3.10
Girls	32	168.00	7.08
Boys and Girls	56	168.84	5.76
<u>BAYVIEW</u>			
Boys	18	168.50	26.72
Girls	9	162.00	21.10
Boys and Girls	27	163.00	24.58
<u>BRET HARTE</u>			
Boys	37	158.58	21.81
Girls	31	147.94	41.41
Boys and Girls	68	153.72	32.43
<u>BURNETT</u>			
Boys	50	157.62	29.89
Girls	30	150.93	35.84
Boys and Girls	80	155.11	32.19
<u>FREMONT</u>			
Boys	28	149.50	47.34
Girls	19	155.00	23.46
Boys and Girls	47	151.72	39.22

TABLE NO. 6 (Continued)

SCHOOLS	N	MEAN	STANDARD DEVIATION
<u>HUNTERS POINT II</u>			
Boys	23	130.00	41.51
Girls	11	137.00	44.14
Boys and Girls	47	132.27	41.83
<u>J. SMITH</u>			
Boys	10	165.40	9.19
Girls	10	157.70	18.86
Boys and Girls	20	161.55	14.97
<u>SIR F. DRAKE</u>			
Boys	49	144.00	42.37
Girls	55	137.31	18.03
Boys and Girls	104	140.47	42.12

Note: The means and standard deviations have been rounded.

TABLE NO. 7: SEED PROJECT FIRST GRADE STUDENTS' PERCENT FULL DAYS IN PROGRAM: MEANS, STANDARD DEVIATIONS, FREQUENCY AND PROPORTIONAL DISTRIBUTIONS, BY SCHOOLS AND SEX

SCHOOLS	N	MEAN %	STND DEV. %	PERCENT OF FULL DAYS IN PROGRAM															
				1 - 70		71 - 80		81 - 90		91 - 100									
				N	%	N	%	N	%	N	%								
<u>ALL SCHOOLS</u>																			
Boys	239	54.22	19.22	36	16	14	6	60	25	129	54								
Girls	198	82.37	19.51	34	19	21	11	45	23	98	49								
Boys and Girls	437	83.38	19.35	70	16	35	8	105	24	227	52								
<u>ALL HALLOWS</u>																			
Boys	24	93.38	1.84	-	-	-	-	-	-	24	100								
Girls	32	92.34	3.96	-	-	1	3	6	19	25	78								
Boys and Girls	56	92.79	3.24	-	-	1	2	6	11	49	87								
<u>BAYVIEW</u>																			
Boys	18	89.83	14.74	2	11	-	-	2	11	14	78								
Girls	9	89.00	11.64	1	11	-	-	2	22	6	67								
Boys and Girls	27	89.56	13.56	3	12	-	-	4	14	20	74								
<u>BRET HARTE</u>																			
Boys	37	87.05	12.14	4	11	4	11	9	24	20	54								
Girls	31	81.23	22.85	6	18	3	10	6	19	16	52								
Boys and Girls	68	84.40	17.93	10	13	7	10	15	22	36	53								

TABLE NO. 7 (Continued)

SCHOOLS	N	MEAN %	STND DEV. %	PERCENT OF FULL DAYS IN PROGRAM											
				1 - 70		71 - 80		81 - 90		91 - 100					
				N	%	N	%	N	%	N	%				
<u>BURNETT</u>															
Boys	50	86.52	16.53	7	14	2	4	12	24	29	58				
Girls	30	82.90	19.80	6	20	1	3	6	20	17	57				
Boys and Girls	80	85.16	17.79	13	16	3	4	18	22	46	57				
<u>FREMONT</u>															
Boys	28	82.04	26.05	4	15	1	4	8	29	15	54				
Girls	19	85.21	12.91	3	16	2	11	6	32	8	42				
Boys and Girls	47	83.32	21.58	7	14	3	6	14	30	23	49				
<u>HUNTERS POINT I</u>															
Boys	23	71.30	22.99	9	39	3	13	4	17	7	30				
Girls	11	75.09	24.28	3	27	2	18	2	18	4	36				
Boys and Girls	34	72.53	23.12	12	35	5	15	6	18	11	32				
<u>J. SMITH</u>															
Boys	10	90.90	5.17	-	-	-	-	6	60	4	40				
Girls	10	86.70	10.34	1	10	2	20	2	20	5	50				
Boys and Girls	20	88.80	8.24	1	5	2	10	8	40	9	45				

TABLE NO. 7 (Continued)

SCHOOLS	N	MEAN %	STND DEV. %	PERCENT OF FULL DAYS IN PROGRAM															
				1 - 70		71 - 80		81 - 90		91 - 100									
				N	%	N	%	N	%	N	%								
<u>SIR F. DRAKE</u>																			
Boys	49	79.14	23.45	10	20	4	8	19	39	16	33								
Girls	55	75.38	23.27	14	27	10	18	14	25	17	31								
Boys and Girls	104	77.15	23.32	24	24	14	13	33	32	33	32								

Note: The means and standard deviations have been rounded.



TABLE NO. 8: SEED PROJECT FIRST GRADE STUDENTS: TEACHER READING LEVEL ESTIMATE WITHIN CLASS, MEANS, STANDARD DEVIATIONS, FREQUENCY AND PROPORTIONAL DISTRIBUTIONS, BY SCHOOL AND SEX

SCHOOLS	N	MEAN	STND DEV.	READING LEVEL ESTIMATE WITHIN GRADE								
				ABOVE = 1		AT = 2		BELOW = 3				
				N	%	N	%	N	%			
<u>ALL SCHOOLS</u>												
Boys	221	2.4	.65	20	9	96	43	105	48			
Girls	191	2.2	.73	38	20	84	44	69	36			
Boys and Girls	412	2.3	.70	58	14	180	44	174	42			
<u>ALL HALLOWS</u>												
Boys	25	2.1	.44	1	4	20	80	4	16			
Girls	33	1.8	.64	10	30	19	58	4	12			
Boys and Girls	58	1.9	.58	11	19	39	67	8	14			
<u>BAYVIEW</u>												
Boys	4	2.0	1.56	2	50	-	-	2	50			
Girls	1	-	-	-	-	-	-	1	100			
Boys and Girls	5	2.2	1.02	2	40	-	-	3	60			
<u>BRET HARTE</u>												
Boys	37	2.3	.61	3	8	21	57	13	35			
Girls	31	2.2	.70	5	16	15	48	11	35			
Boys and Girls	68	2.2	.65	8	12	36	53	24	35			

TABLE NO. 8: (Continued)

SCHOOLS	N	MEAN	STND DEV.	READING LEVEL ESTIMATE WITHIN GRADE								
				ABOVE = 1		AT = 2		BELOW = 3				
				N	%	N	%	N	%			
<u>BURNETT</u>												
Boys	50	2.4	.70	6	12	18	36	26	52			
Girls	30	2.0	.83	10	33	10	33	10	33			
Boys and Girls	80	2.3	.77	16	20	28	35	36	45			
<u>FREMONT</u>												
Boys	27	2.6	.57	1	4	8	30	18	67			
Girls	19	2.5	.70	2	11	5	26	12	63			
Boys and Girls	46	2.6	.62	3	7	13	28	30	65			
<u>HUNTERS POINT II</u>												
Boys	21	2.7	.46	-	-	6	29	15	71			
Girls	11	2.6	.51	-	-	4	36	7	64			
Boys and Girls	32	2.7	.47	-	-	10	31	22	69			
<u>J. SMITH</u>												
Boys	10	2.2	.63	1	10	6	60	3	30			
Girls	10	2.2	.63	1	10	6	60	3	30			
Boys and Girls	20	2.2	.62	2	10	12	60	6	30			

TABLE NO. 8: (Continued)

SCHOOLS	N	MEAN	STND DEV.	READING LEVEL ESTIMATE WITHIN GRADE							
				ABOVE = 1		AT = 2		BELOW = 3			
				N	%	N	%	N	%		
<u>SIR F. DRAKE</u>											
Boys	47	2.4	.71	6	13	17	36	24	51		
Girls	55	2.2	.71	9	16	25	45	21	38		
Boys and Girls	102	2.3	.71	15	15	42	41	45	44		

TABLE NO. 9: SEED PROJECT FIRST GRADE STUDENTS: READING SUMMATIVE GRADE FOR TERM, MEANS, STANDARD DEVIATIONS, FREQUENCY AND PROPORTIONAL DISTRIBUTIONS, BY SCHOOL AND SEX

SCHOOLS	N	MEAN	STND DEV.	SUMMATIVE GRADES								
				2 = Very Good		3 = Satisfactory		4 = Improvement Needed				
				N	%	N	%	N	%			
<u>ALL SCHOOLS</u>												
Boys	214	3.1	.74	52	24	97	45	65	30			
Girls	182	2.9	.72	56	31	87	48	39	21			
Boys and Girls	396	3.0	.73	108	27	184	46	104	26			
<u>ALL HALLOWS</u>												
Boys	25	2.9	.81	9	36	9	36	7	28			
Girls	33	3.0	.83	13	39	8	24	12	36			
Boys and Girls	58	2.9	.85	22	38	17	29	19	33			
<u>BAYVIEW</u>												
Boys	4	3.0	.82	1	25	2	50	1	50			
Girls	1	3.0	-	-	-	1	100	-	-			
Boys and Girls	5	3.0	.71	1	20	3	60	1	20			
<u>BRET HARTE</u>												
Boys	37	3.0	.62	7	19	23	62	7	19			
Girls	31	2.9	.60	7	23	20	65	4	13			
Boys and Girls	68	3.0	.61	14	21	43	63	11	16			

TABLE NO. 9 (Continued)

SCHOOLS	N	MEAN	STND DEV.	SUMMATIVE GRADES								
				2 = Very Good		3 = Satisfactory		4 = Improvement Needed				
				N	%	N	%	N	%			
<u>BURNETT</u>												
Boys	50	3.2	.74	9	18	21	42	20	40			
Girls	30	2.8	.76	12	40	12	40	6	20			
Boys and Girls	80	3.1	.77	21	26	33	41	26	32			
<u>FREMONT</u>												
Boys	27	3.2	.83	7	26	8	30	12	44			
Girls	19	2.8	.60	5	26	12	63	2	11			
Boys and Girls	46	3.0	.76	12	26	20	43	14	30			
<u>HUNTERS POINT II</u>												
Boys	22	2.9	.83	9	41	7	32	6	27			
Girls	11	2.9	.83	4	36	4	36	3	27			
Boys and Girls	33	2.9	.82	13	39	11	33	9	27			
<u>J. SMITH</u>												
Boys	10	3.1	.57	1	10	7	70	2	20			
Girls	10	3.3	.68	1	10	5	50	4	40			
Boys and Girls	20	3.2	.62	2	10	12	60	6	30			



TABLE NO. 9 (Continued)

SCHOOLS	N	MEAN	STND DEV.	SUMMATIVE GRADES							
				2 = Very Good		3 = Satisfactory		4 = Improvement Needed			
				N	%	N	%	N	%		
<u>SIR F. DRAKE</u>											
Boys	39	3.0	.71	9	23	20	51	10	26		
Girls	46	2.9	.67	13	28	25	54	8	17		
Boys and Girls	85	3.0	.69	22	26	45	53	18	21		

TABLE NO. 10: SEED PROJECT FIRST GRADE STUDENTS: READING ACHIEVEMENT STANINE SCORES, MEANS, STANDARD DEVIATIONS, FREQUENCY AND PROPORTIONAL DISTRIBUTIONS WITHIN GRADE LEVELS, BY SCHOOL AND SEX

SCHOOLS	N	MEANS	STND DEV.	GRADE LEVEL STANINE SCORE CATEGORIES													
				BELOW 1 - 3		AT 4 - 6		ABOVE 7 - 9									
				N	%	N	%	N	%								
<u>ALL SCHOOLS</u>																	
Boys	280	3.3	2.06	175	62	76	27	29	10								
Girls	235	3.7	2.23	122	52	78	33	35	15								
Boys and Girls	515	3.52	2.14	297	58	154	30	64	12								
<u>ALL HALLOWS</u>																	
Boys	25	3.4	1.80	14	56	9	36	2	8								
Girls	33	3.8	1.88	17	52	13	39	3	9								
Boys and Girls	58	3.6	1.84	31	53	22	38	5	9								
<u>BAYVIEW</u>																	
Boys	27	2.6	1.34	22	81	4	15	4	3								
Girls	18	3.3	1.47	10	56	8	44	-	-								
Boys and Girls	45	2.9	1.41	32	71	12	27	1	2								
<u>BRET HARTE</u>																	
Boys	37	3.6	1.92	19	51	15	41	3	8								
Girls	30	4.1	1.75	10	33	16	53	4	13								
Boys and Girls	67	3.8	1.85	29	43	31	46	7	10								

TABLE NO. 10 (Continued)

SCHOOLS	N	MEANS	STND DEV.	GRADE LEVEL STANINE SCORE CATEGORIES									
				BELOW 1 - 3		AT 4 - 6		ABOVE 7 - 9					
				N	%	N	%	N	%				
<u>BURNETT</u>													
Boys	48	4.7	2.13	15	31	23	48	10	21				
Girls	29	5.7	2.35	6	21	10	34	13	45				
Boys and Girls	77	5.1	2.25	21	27	33	43	23	30				
<u>FREMONT</u>													
Boys	26	3.0	1.54	17	65	9	35	-	-				
Girls	17	3.8	1.44	5	29	11	65	1	6				
Boys and Girls	43	3.3	1.53	22	51	20	47	1	2				
<u>HUNTERS POINT II</u>													
Boys	22	1.8	.73	21	95	1	5	-	-				
Girls	11	2.2	.75	10	91	1	9	-	-				
Boys and Girls	33	1.9	.75	31	94	2	6	-	-				
<u>J. SMITH</u>													
Boys	51	3.6	2.51	33	65	7	14	11	22				
Girls	46	3.4	2.58	30	65	9	20	7	15				
Boys and Girls	97	3.5	2.53	63	65	16	16	18	19				

TABLE NO. 10 (Continued)

SCHOOLS	N	MEANS	STND DEV.	GRADE LEVEL STANINE SCORE CATEGORIES								
				BELOW 1 - 3		AT 4 - 6		ABOVE 7 - 9				
				N	%	N	%	N	%			
<u>SIR F. DRAKE</u>												
Boys	44	2.68	1.81	34	77	8	18	2	5			
Girls	50	3.12	2.30	34	68	9	18	7	14			
Boys and Girls	94	2.92	2.09	68	72	17	18	9	10			

TABLE NO. 11

SEED PROJECT FIRST GRADE STUDENTS: READING ACHIEVEMENT GRADE EQUIVALENT SCORES, MEANS AND STANDARD DEVIATIONS, BY SCHOOLS AND SEX

SCHOOLS	N	MEANS	STANDARD DEVIATIONS
<u>ALL SCHOOLS</u>			
Boys	278	1.70	.51
Girls	236	1.77	.48
Boys and Girls	514	1.73	.50
<u>ALL HALLOWS</u>			
Boys	26	1.52	.26
Girls	19	1.63	.29
Boys and Girls	45	1.57	.27
<u>BAYVIEW</u>			
Boys	26	1.53	.26
Girls	19	1.63	.29
Boys and Girls	45	1.57	.27
<u>BRET HARTE</u>			
Boys	37	1.72	.38
Girls	30	1.82	.35
Boys and Girls	67	1.76	.37
<u>BURNETT</u>			
Boys	48	2.07	.79
Girls	29	2.20	.62
Boys and Girls	77	2.12	.73
<u>FREMONT</u>			
Boys	26	1.59	.27
Girls	17	1.71	.26
Boys and Girls	43	1.64	.27

TABLE NO. 11 (Continued)

SCHOOLS	N	MEANS	STANDARD DEVIATIONS
<u>HUNTERS POINT II</u>			
Boys	21	1.39	.12
Girls	11	1.47	.14
Boys and Girls	32	1.42	.13
<u>J. SMITH</u>			
Boys	51	1.76	.53
Girls	46	1.72	.61
Boys and Girls	97	1.74	.56
<u>SIR F. DRAKE</u>			
Boys	44	1.56	.33
Girls	50	1.65	.44
Boys and Girls	94	1.60	.70

Note: The means and standard deviations have been rounded.

TABLE NO. 12

SEED PROJECT FIRST GRADE CLASSES: MONTHLY ACHIEVEMENT RATE

SCHOOL/TEACHER	STUDENTS N	MEAN GRADE EQUIVALENT SCORE	MONTHS: N		MONTHLY ACHIEVEMENT RATE Y-X
			ACHIEVEMENT Y	INSTRUCTION X	
<u>ALL SCHOOLS</u>	514	1.73	7.30	8.00	.91
<u>ALL HALLOWS</u>		1.72	7.20	8.00	.90
(1) Teacher No. 002	29	1.71	7.10	8.00	.89
(2) Teacher No. 003	29	1.62	6.20	8.00	.78
<u>BAYVIEW</u>		1.57	5.70	8.00	.71
(1) Teacher No. 010	22	1.50	5.00	8.00	.63
(2) Teacher No. 011	23	1.64	6.40	8.00	.80
(3) Teacher No. 012	-	No Data	-	-	-
<u>BRET HARTE</u>		1.76	7.60	8.00	.95
(1) Teacher No. 022	20	1.77	7.70	8.00	.96
(2) Teacher No. 023	24	1.91	9.10	8.00	1.14
(3) Teacher No. 024	23	1.60	6.00	8.00	.75
<u>BURNETT</u>					
(1) Teacher No. 034	24	1.71	7.10	8.00	.89
(2) Teacher No. 035	13	2.88	18.80	8.00	2.35
(3) Teacher No. 036	25	2.14	11.40	8.00	1.43

TABLE NO. 12 (Continued)

SCHOOL/TEACHER	STUD- ENTS N	MEAN GRADE EQUI- VALENT SCORE	MONTHS: N		MONTHLY ACHIEVE- MENT RATE Y-X
			ACHIEVE- MENT Y	INSTRUC- TION X	
<u>BURNETT (continued)</u>					
(4) Teacher No. 037	15	2.09	10.09	8.00	1.26
<u>FREMONT</u>					
(1) Teacher No. 046	21	1.64	6.40	8.00	.80
(2) Teacher No. 047	22	1.75	7.50	8.00	.94
		1.54	5.40	8.00	.68
<u>HUNTERS POINT II</u>					
(1) Teacher No. 055	13	4.20	4.20	8.00	.53
(2) Teacher No. 056	19	1.41	4.10	8.00	.51
		1.42	4.20	8.00	.53
<u>J. SMITH</u>					
(1) Teacher No. 063	16	1.74	7.40	8.00	.93
(2) Teacher No. 064	18	1.86	8.60	8.00	1.08
(3) Teacher No. 065	18	2.52	15.20	8.00	1.90
(4) Teacher No. 066	19	1.52	5.20	8.00	.65
(4) Teacher No. 066	17	1.43	4.30	8.00	.54
+ (5) Teacher No. 067	9	1.58	5.80	8.00	.73
(6) Teacher No. 068	18	1.47	4.70	8.00	.59

TABLE NO. 12 (Continued)

SCHOOL/TEACHER	STUD- ENTS N	MEAN GRADE EQUI- VALENT SCORE	MONTHS: N		MONTHLY ACHIEVE- MENT RATE $Y \div X$
			ACHIEVE- MENT Y	INSTRUC- TION X	
<u>SIR F. DRAKE</u>		1.60	6.00	8.00	.75
(1) Teacher No. 077	15	2.05	10.50	8.00	1.31
(2) Teacher No. 078	22	1.33	3.30	8.00	.41
(3) Teacher No. 079	19	1.77	7.70	8.00	.96
(4) Teacher No. 080	21	1.53	5.30	8.00	.66
(5) Teacher No. 081	17	1.48	4.80	8.00	.60

+Split classes of first and second graders

TABLE NO. 13: SEED PROJECT SCHOOLS: TEACHER WITHIN-GRADE CAPACITY ESTIMATES OF SEED PROJECT FIRST GRADE STUDENTS AND SEED PROJECT FIRST GRADE STUDENTS' STANINE SCORES CLASSIFIED BY WITHIN-GRADE LEVEL GROUPS - CHI SQUARE TEST OF ASSOCIATION AND CONTINGENCY COEFFICIENT C OF CORRELATION. FOR ALL SCHOOLS AND BY SCHOOLS

SCHOOL	CALCULATIONS				CRITERIA					
	N	Chi Sq.	df	Cont. Coef. (C)	H ₀ = Chi Sq.	df	alpha	s/ns	C _{max}	C/C _{max}
<u>ALL SCHOOLS</u>	376	105.31	4	.47	13.28	4	.01	S	.82	57
<u>ALL HALLOWS</u>	59	15.59	4	.46	13.28	4	.01	S	.82	58
<u>BAYVIEW</u>	NO DATA ON TEACHER WITHIN-GRADE CAPACITY ESTIMATES FROM TWO OUT OF THREE CLASSES									
<u>BRET HARTE</u>	67	45.16	4	.64	13.28	4	.01	S	.82	73
<u>BURNETT</u>	77	22.07	4	.47	13.28	4	.01	S	.82	57
<u>FREMONT</u>	43	16.76	4	.53	13.28	4	.01	S	.82	65
<u>HUNTERS POINT II</u>	32	2.27	4	-	13.28	4	.01	NS	-	-
<u>J. SMITH</u>	19	13.95	4	.65	13.28	4	.01	S	.82	79
<u>SIR F. DRAKE</u>	79	16.49	4	.41	13.28	4	.01	S	.82	50

TABLE NO. 14: SEED PROJECT FIRST GRADE STUDENTS' DECIMAL AGE:
 MANN-WHITNEY U TEST TO DETERMINE WHETHER THE BOYS
 AND GIRLS DIFFERED SIGNIFICANTLY WITH RESPECT TO
 DECIMAL AGE

SCHOOL	MANN-WHITNEY U	z	SEX		CRITERION	
			M	F	z	sig/ns
<u>ALL SCHOOLS</u>	31142.000	-1.007	278	236	2.31	NS
<u>ALL HALLOWS</u>	393.500	- .307	25	33	2.31	NS
<u>BAYVIEW</u>	213.000	- .803	26	19	2.31	NS
<u>BRET HARTE</u>	555.000	-	37	30	-	NS
<u>BURNETT</u>	607.000	- .948	48	29	2.31	NS
<u>FREMONT</u>	149.000	-1.849	26	117	2.31	NS
<u>HUNTERS POINT II</u>	87.500	-1.221	21	11	2.31	NS
<u>J. SMITH</u>	1131.000	- .308	51	46	2.31	NS
<u>SIR F. DRAKE</u>	1004.500	- .739	44	50	2.31	NS

TABLE NO. 15: SEED PROJECT FIRST GRADE STUDENTS' NUMBER OF FULL DAYS IN PROGRAM:
 MANN-WHITNEY U TEST TO DETERMINE WHETHER BOYS AND GIRLS DIFFERED
 SIGNIFICANTLY WITH RESPECT TO ATTENDANCE

SCHOOL	MANN-WHITNEY U	z	SEX		CRITERION	
			M	F	z .01	sig/ns
<u>ALL SCHOOLS</u>	21962.500	-1.293	239	198	2.31	NS
<u>ALL HALLOWS</u>	358.500	- .424	24	32	2.31	NS
<u>BAYVIEW</u>	60.000	0.00	18	9	-	NS
<u>BRET HARTE</u>	550.500	- .283	37	31	2.31	NS
<u>BURNETT</u>	676.000	- .736	50	30	2.31	NS
<u>FREMONT</u>	232.000	- .738	28	19	2.31	NS
<u>HUNTERS POINT II</u>	112.000	- .534	23	11	2.31	NS
<u>J. SMITH</u>	39.500	0.00	10	10	-	NS
<u>SIR F. DRAKE</u>	1199.000	- .967	49	55	2.31	NS

TABLE NO. 16: SEED PROJECT FIRST GRADE STUDENTS' READING ACHIEVEMENT STANINE SCORES:
 MANN-WHITNEY U TEST TO DETERMINE WHETHER BOYS AND GIRLS DIFFERED SIGNI-
 FICANTLY WITH RESPECT TO STANINE SCORES

SCHOOL	MANN-WHITNEY U	z	SEX		CRITERION	
			M	F	z .01	sig/ns
<u>ALL SCHOOLS</u>	29281.500	-2.186	280	235	2.31	NS
<u>ALL HALLOWS</u>	351.500	- .977	25	33	2.31	NS
<u>BAYVIEW</u>	172.000	-1.714	27	18	2.31	NS
<u>BRET HARTE</u>	469.000	-1.100	37	30	2.31	NS
<u>BURNETT</u>	516.500	-1.903	48	29	2.31	NS
<u>FREMONT</u>	154.000	-1.707	26	17	2.31	NS
<u>HUNTERS POINT II</u>	88.500	-1.454	22	11	2.31	NS
<u>J. SMITH</u>	1188.500	- .402	51	46	2.31	NS
<u>SIR F. DRAKE</u>	1027.000	- .569	44	50	2.31	NS

TABLE NO. 17

SEED PROJECT SCHOOLS: FIRST GRADE STUDENTS' ATTENDANCE AND
 READING STANINE SCORES --- CHI SQUARE TEST OF ASSOCIATION
 AND CONTINGENCY COEFFICIENT C OF CORRELATION

		STANINE READING SCORES		TOTAL
		3.5+	3.4-	
FULL DAYS IN PROGRAM	152+	4 ^a	1 ^b	5
	151-	0	3 ^c	3
TOTAL		4	4	8

a = All Hallows
 Bret Harte
 Burnett
 J. Smith

b = Bayview

c = Fremont
 Hunters Point 2
 Sir F. Drake

CHI SQUARE TEST

chi sq = 4.800

H₀=chi sq = 3.842
 (.05, 1 df)

CONTINGENCY
 COEFFICIENT C

C = .61

C/C_{max} = .61/.71

= 85% (2x2)

TABLE NO. 18

SEED PROJECT SCHOOLS: CLASS SIZE AND MONTHLY READING ACHIEVEMENT RATES -- KRUSKAL-WALLIS ONE WAY ANALYSIS OF VARIANCE BY RANKS, H

GROUP A (Class Size: 20+)			GROUP B (Class Size: 19-)		
CLASS SIZE	MONTHLY READING ACHIEVEMENT RATE	RANK	CLASS SIZE	MONTHLY READING ACHIEVEMENT RATE	RANK
29	.77	14	19	.96	18.5
29	.71	11	19	.65	8
25	1.43	24	19	.53	3
24	1.14	21	18	.59	5
24	.89	16	18	1.90	25
23	.75	13	17	.60	6
23	.80	15	17	.54	4
22	.63	7	16	1.08	20
22	.41	1	15	1.31	23
22	.68	10	15	1.26	22
21	.94	17	13	2.35	26
21	.66	9	13	.51	2
20	.96	18.5	9	.73	12
TOTAL R ²		176.5 31152.25			174.5 30450.25

$$H = [12/N (N + 1)] [\sum R^2/n_j] - 3(N + 1)$$

$$H = (.017) (4738.6) - 81$$

$$H = - .44 (1 \text{ df})$$

$$H_0 = \text{chi sq.} = 6.64, .01, 1 \text{ df.}$$

TABLE NO. 19

A COMPARISON OF GRADE EQUIVALENT SCORES ON THE STANFORD READING ACHIEVEMENT EXAMINATION (FORM W) BETWEEN SEED PROJECT FIRST GRADE STUDENTS (1969-1970) AND FIRST GRADE STUDENTS OF PRIOR ACADEMIC YEAR (1968-1969), BOTH TESTS GIVEN IN MAY OF ACADEMIC YEAR

SCHOOLS	SEED PROJECT FIRST GRADE STUDENTS		PRIOR YEAR FIRST GRADE STUDENTS	
	N	MEAN GRADE EQUIVALENT SCORE	N	MEAN GRADE EQUIVALENT SCORE
BAYVIEW	45	1.57	46	1.73
BRET HARTE	67	1.76	59	1.68
BURNETT	77	2.12	51	1.69
FREMONT	43	1.64	47	1.58
HUNTERS POINT II	33	1.42	25	1.41
J. SMITH	97	1.74	65	1.39
SIR F. DRAKE	94	1.60	72	1.59

Note: Mean Grade Equivalent Scores have been rounded.

TABLE NO. 20

SEED PROJECT FIRST GRADE STUDENTS' AND PRIOR YEAR FIRST GRADE STUDENTS' GRADE EQUIVALENT SCORES ON STANFORD READING ACHIEVEMENT EXAMINATION (FORM W): KRUSKAL-WALLIS ONE WAY ANALYSIS OF VARIANCE TEST BY RANKS - H.

SCHOOLS	SEED PROJECT FIRST GRADE STUDENTS		PRIOR YEAR FIRST GRADE STUDENTS	
	RANK	MEAN GRADE EQUIVALENT SCORE	RANK	MEAN GRADE EQUIVALENT SCORE
BAYVIEW	4	1.57	11	1.73
BRET HARTE	13	1.76	9	1.68
BURNETT	14	2.12	10	1.69
FREMONT	8	1.64	5	1.58
HUNTERS POINT II	3	1.42	2	1.41
J. SMITH	12	1.74	1	1.39
SIR F. DRAKE	7	1.60	6	1.59
TOTAL RANKS	61		44	
RANKS ²	3721		1936	

$$H = [12/N(N + 1)] [\sum R^2/n_j] - 3(N + 1)$$

$$H = (.571) (808.14) - 45$$

$$H = 416.45 (1 \text{ df})$$

$$H_0 = \text{chi sq.} = 6.64, .01, 1 \text{ df.}$$