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ABSTRACT

An evaluation design for the San Jose Unified School District compensatory education program is presented in this memorandum. Implementation of the design is intended to determine the effects of the compensatory components and of family and cultural background on the achievement gains and attitude changes of students, thus providing a firmer basis for making decisions about the extent of compensatory education services necessary for disadvantaged Mexican Americans to achieve academic gains comparable to those of nondisadvantaged populations. The impact of economic changes on the community's large Mexican American population and implications of these changes for education are also discussed. Appendices include most of the instruments to be used in the evaluation. (JH)

MEMORANDUM
RM-5903-SJS
MAY 1969

AN EVALUATION DESIGN FOR SAN JOSE UNIFIED SCHOOL DISTRICT'S COMPENSATORY EDUCATION PROGRAM

M. L. Rapp, G. L. Brunner and E. M. Scheuer

PREPARED FOR:
SAN JOSE UNIFIED SCHOOL DISTRICT

The RAND Corporation
SANTA MONICA • CALIFORNIA

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The RAND Corporation

This study is presented as a competent treatment of the subject, worthy of publication. The Rand Corporation vouches for the quality of the research, without necessarily endorsing the opinions and conclusions of the authors.

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PREFACE

This Memorandum was prepared at the request of the San Jose Unified School District (SJUSD). It presents a design for the gathering of information about the current SJUSD compensatory education program and for the evaluation of the contributions its components make to student achievement. The results, it is hoped, will provide a firmer basis for making decisions about the kinds and amounts of compensatory services that will best serve disadvantaged students in San Jose schools.

During the preparation of this study, E. M. Scheuer was a member of the Management Sciences Department of The RAND Corporation, to which he remains a Consultant. He is now Associate Director, Professional Services Division, C-E-I-R, Inc., a subsidiary of Control Data Corporation.

SUMMARY

This Memorandum presents a design for the evaluation of the San Jose Unified School District (SJUSD) compensatory education program. The implementation of this design is intended to provide answers to four groups of questions:

1) Do different combinations of the compensatory components have differential effects on the achievement gains of the students? Are these effects further differentiated at different grade levels?

2) Do different combinations of the compensatory components have differential effects on the attitude changes of the students? Are these effects further differentiated at different grade levels?

3) How do familial and cultural backgrounds affect the achievement gains of students in the compensatory education program?

4) How do familial and cultural backgrounds affect the attitudinal changes of students in the compensatory education program?

Answers to the first two sets of questions should provide a firmer basis for making decisions about the extent of compensatory education services necessary for disadvantaged Mexican-Americans to achieve academic gains comparable to those of non-disadvantaged populations. These answers will be sought by examining scores on standardized achievement tests and other appropriate instruments. Additionally, a survey of family background characteristics will serve as input to the study.

Following an introductory overview of the design (Sec. I), Sec. II describes the economic characteristics of the San Jose area. This discussion focuses on the impact

of changes in the area's economy on the community's large Mexican-American population and some implications of these changes for education.

Section III briefly discusses the salient features of the design, while Sec. IV describes the instruments to be used in the evaluation. Section V details the regression and cross-tabular analyses to be used, and points out the difficulties associated with the interpretation of these data.

Section VI discusses in detail the survey to be conducted to collect background information on San Jose's Mexican-American population. The final section touches upon the inherent weaknesses of IQ test scores for the disadvantaged and the decision not to use individual ability measures in the evaluation design. Appendices A and B reproduce most of the instruments to be used in the evaluation.

ACKNOWLEDGMENTS

We wish to thank several of our RAND colleagues: Pat Katsky and Matt Reilly for their help in constructing the Questionnaire for the background survey; in particular, Reilly suggested gathering information about the status of various jobs in the community. For their help with the regression analysis, we thank John Derr, Kathleen Hall, and John Merck. Ralph Strauch's ideas concerning statistical inference were most helpful. Fred Finnegan redesigned the formats of all the data sheets to facilitate data processing. Finally, we thank Bill Doyle of the San Jose Unified School District, Tom Glennan, and Matt Reilly for their technical review of, and helpful suggestions concerning, an earlier version of the manuscript.

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I. INTRODUCTION: OVERVIEW OF THE EVALUATION DESIGN

PRIMARY OBJECTIVE

The San Jose Unified School District (SJUSD) provides compensatory education for about 2500 students, a majority of whom are Mexican-Americans. The major objective of this evaluation is to obtain adequate information for planning, designing, and implementing these compensatory education programs in the future. To accomplish this aim, two kinds of information are required: First, we need to know what effects the current program is having upon the academic performance and the attitudes toward school of the participants. Second, we need to know as much as possible about the personal and background characteristics of the participants so that future school experiences may be better adapted to their needs. The very existence of compensatory programs for the disadvantaged reflects the fact that the traditional curriculum has not provided them with successful educational experiences. Thus, the current design is intended to collect and analyze the kinds of information on which program changes can be based.

This evaluation of the current program attempts to determine the contribution of the different components to the students' academic achievement. Data will be collected about students' achievement gain, their teachers, teacher-aides, and school experiences. In addition to assessing the overall contribution of program components to student achievement, we will look for differential effects of program components, and combinations of components, at each grade level. A related analysis to assess the contribution of the compensatory components to attitude change will also be made.

The data to assess the effects of background characteristics on achievement will be gathered through an extensive survey of the families in one elementary school in which

enrollment is typical of those needing compensatory education. Children from about 350 families attend the school; since only about half of these are involved in the compensatory program, a natural comparison group is available.

SECONDARY OBJECTIVES

Secondary objectives--outside but closely related to the scope of the evaluation--will be served by the same data.

A questionnaire developed for the survey can serve at least two additional purposes: 1) to compare the present population with the stereotype that has evolved about Mexican-Americans in San Jose; 2) to furnish information about linguistic characteristics of the population that would have relevance for language programs.

An "Inventory of Observed Characteristics" of students completed by compensatory education teachers can also help to improve in-service training. We anticipate finding that differences in patterns of assets and liabilities as perceived by teachers will result in differences in student achievement gains. If this hypothesis is substantiated, the findings can be disseminated to all teachers.

A Parent Questionnaire, data for which will be collected by teachers from preschool through grade six, will provide information that can be used to strengthen school and community relationships.

LIMITS OF THE EVALUATION

Because this is not a planned, controlled statistical experiment, and because there is no control group, extreme care must be exercised in interpreting the results of this study, in particular the regression analyses. The results should be studied with the aid of sophisticated interpreters and should be considered tentative because of the limitations on the design.

Because no youngster can ethically be deprived of compensatory services in order to serve as a member of a control group, no statements about the absolute effects of the program are warranted. What will emerge is data about the relative effects of different combinations of compensatory components. This does not imply that such information is not in itself useful. On the contrary, it can provide a firmer basis than has been available in the past for making decisions about the value of these components, especially if current resource allocations are available by component. Such data can also suggest questions for further study.

If the absolute effects of the program are to be demonstrated, data about a comparable group of students who are not receiving compensatory education should be collected. For this purpose, students from another group of schools in SJUSD could be used.

Further problems of interpretation may arise because students with specific deficiencies will be assigned to components of the program designed to overcome these deficiencies. Therefore, when we measure the presence or absence of that component in the experience of the individual, we are simultaneously measuring the presence or absence of the deficiency. The data analyst will need to bear in mind this confounding of deficiency and treatment when interpreting the results of both the regression and the cross-tabular analyses.

Because of the design constraints and the properties of the data, we would recommend, in addition to the formal analyses, extensive data-snooping to gain further insights into the effectiveness of the program.

Although we have suggested the use of attitude measures at all grade levels, because of lack of experience with the instruments we do not propose using them as dependent variables in a regression analysis. We rely solely on cross-

tabular analysis for assessing the effects of compensatory education on attitude change.

Finally, we have not made use of any intelligence tests, but have relied solely on gains in academic achievement. We are aware that this precludes making any statement about the effects of the program on youngsters of varying ability; but because standard intelligence tests have not proven to be good estimators for the disadvantaged, and because we are uncertain about what they may be measuring in this particular population, it seems preferable to exclude them.

II. DESCRIPTION OF THE SAN JOSE AREA

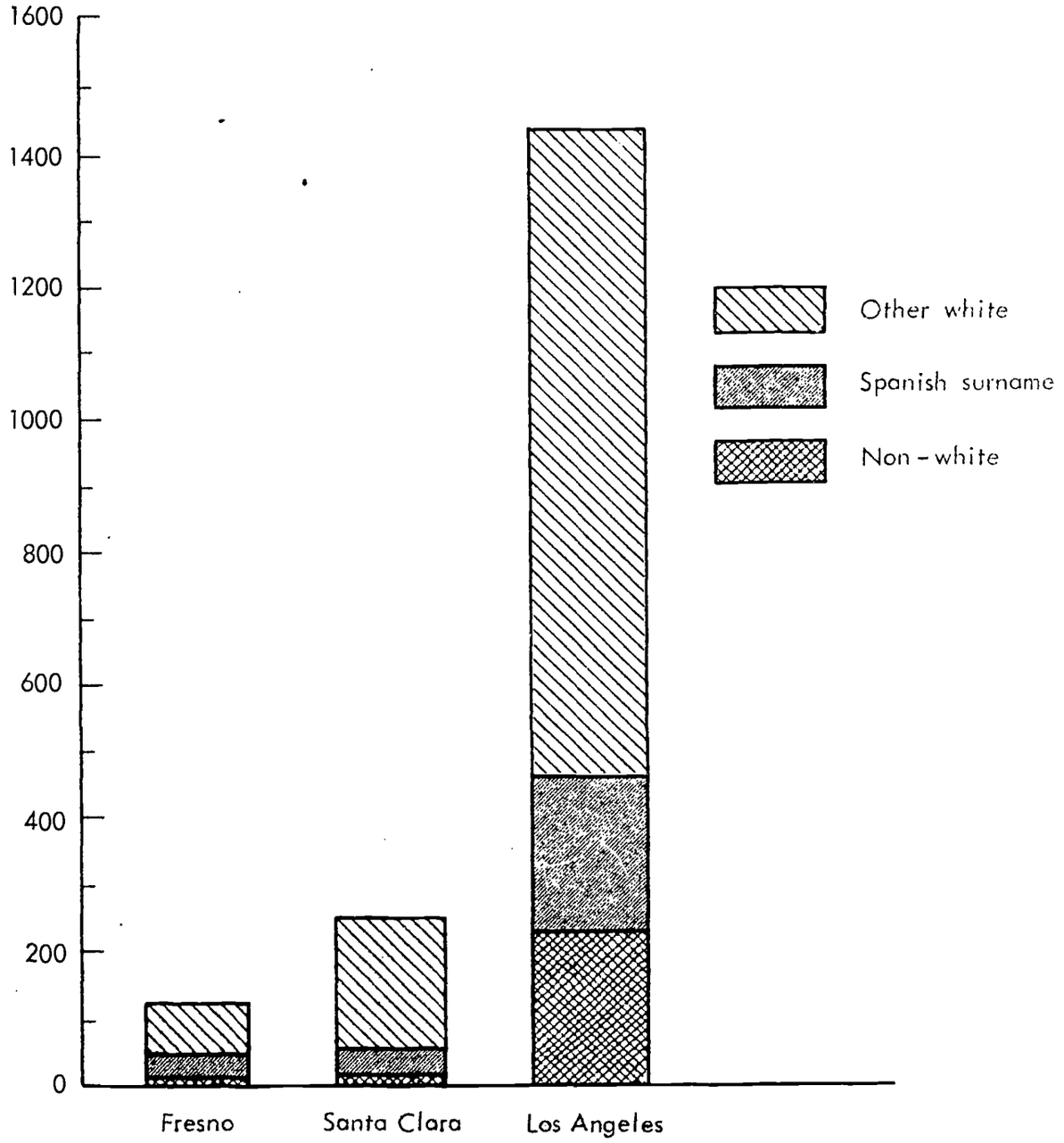
The San Jose Unified School District (SJUSD) is centrally located in an area characterized by two important features, both pertinent to the structuring of compensatory education programs. The first is a large Mexican-American minority; the second, an extremely rapid industrialization of the community. As with other disadvantaged minorities, the Mexican-Americans constitute a large sector of the compensatory education target group. Therefore, the program must be structured to their specific needs. The industrial change in the area has enlarged the range of vocational choices and increased chances of upward mobility. However, the promises inherent in the situation may never become realities without adequate educational programs for this minority group.

The three counties in California with the largest number of Spanish-surname pupils in kindergarten through twelfth grade are, in ascending order, Fresno, Santa Clara, and Los Angeles. Table 1 shows the size and ethnic composition of each. Members of minority groups are rarely evenly dispersed throughout the various residential areas of a county. The Spanish-surname population is no exception. Pockets appear where this minority constitutes a majority; e.g., the downtown area of San Jose. Here, in the poorer districts, about 70 percent of the pupils in public schools have Spanish surnames. Knowledge of such concentrations is not sufficient *per se* for the structuring of a good compensatory education program. Additional information is needed on the characteristics of this minority group described by such factors as strength of ties to Mexico, linguistic habits, and occupational patterns.

Considerable evidence exists to suggest that state-wide the Spanish surname population is growing and changing for two reasons. The first is an increase since the 1930s in emigration from Mexico to California rather than to other

Table 1[a]

ETHNIC COMPOSITION OF PUBLIC SCHOOL PUPILS (K-12)[b] OF THE COUNTIES OF FRESNO, SANTA CLARA, AND LOS ANGELES
(In 000)



[a]From Ref. 1, App. E.

[b]Includes school-age children receiving special education (e.g., the physically or mentally handicapped).

southwestern states. The second is a shift of Mexican-American residents from such states as Texas to California. Today California has the largest Mexican-born population of any state in the Union, and has almost surpassed Texas in the number of citizens born of native Mexican or mixed parentage.*

As mentioned above, these data are available only on a statewide basis. The impact of this influx of first and subsequent generation Mexican-Americans upon the San Jose Unified School District is to be determined by the background survey included in this evaluation. The extent of the change in the composition of this group is important because the compensatory education programs will require different emphases depending on the extent of bilingualism, the recency of immigration, and the degree of urbanization of the pupils' families.

The increased influx of Mexican-Americans has largely coincided with a period of general population and industry growth in California and in Santa Clara County--in particular, the San Jose area. Figure 1 shows the population increases between 1940 and 1967 for California, Santa Clara County, and the city of San Jose.

San Jose's population increase was accompanied by changes in the occupational structure of both the metropolitan area and the whole of Santa Clara County. The irrigated acreage, which has increased in the state as a whole and in such agricultural centers as Fresno County, decreased in Santa Clara County between 1954 and 1964 from 115,000 to 79,000 acres [3]. On the other hand, non-agricultural employment in the Standard Metropolitan Statistical Area of San Jose more than tripled between 1950 and 1966. As seen in Table 2, the great expansion of employment was due primarily to the

*Ref. 2, p. 54, Table 9.

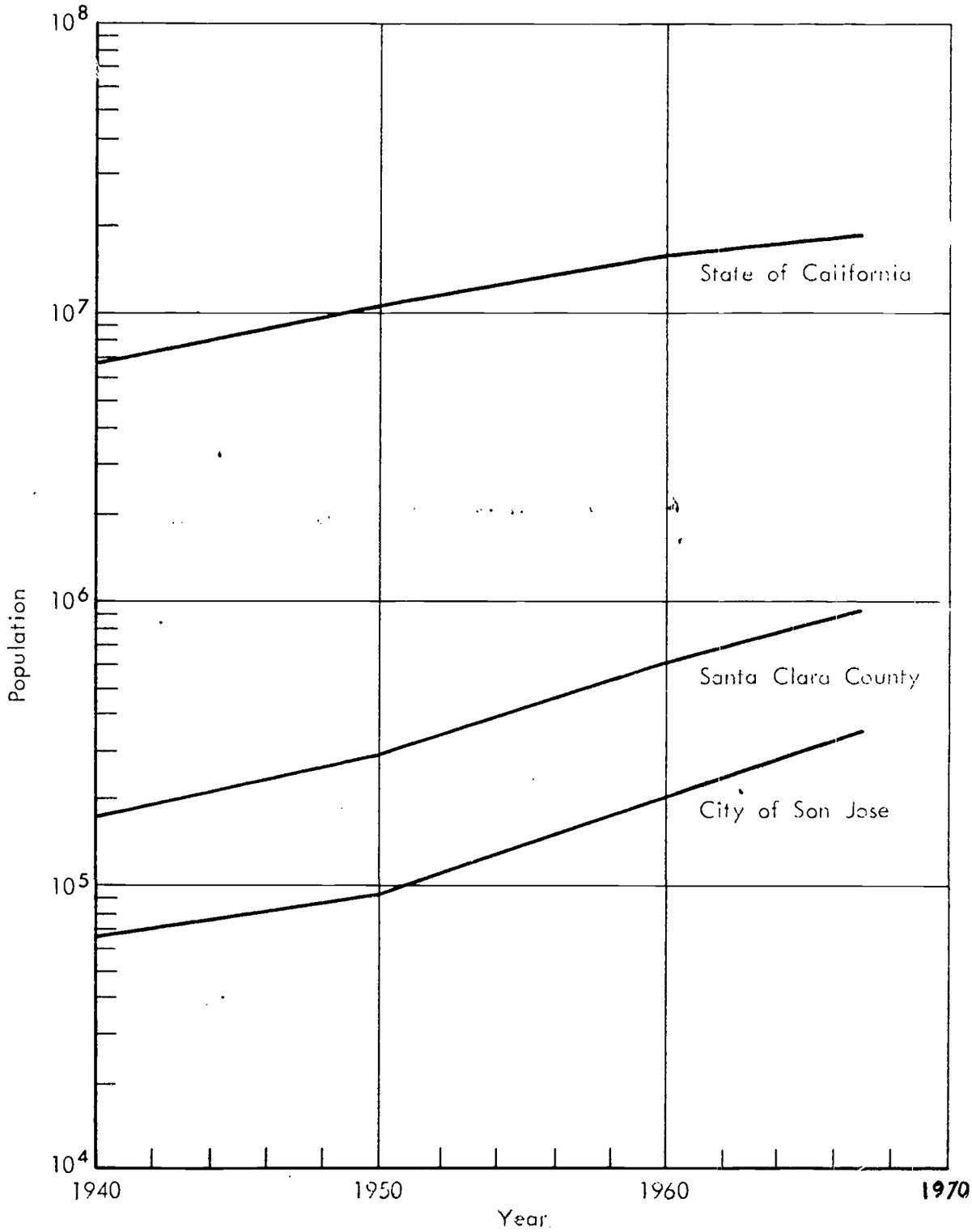


Fig. 1--Population Growth--State of California, Santa Clara County, City of San Jose

Table 2

EMPLOYMENT IN NON-AGRICULTURAL ESTABLISHMENTS IN THE STANDARD METROPOLITAN AREA OF SAN JOSE 1950-1966[a]

	1950		1960		1966	
	(000)	%	(000)	%	(000)	%
TOTAL	78.0	100.0	191.8	100.0	301.5	100.0
Construction	7.7	9.9	15.5	8.1	16.9	5.6
Mineral extractions	0.1	0.1	0.1	0.1	0.3	0.1
Manufacturing total	21.3	27.3	69.0	36.0	102.8	34.1
Non-durable						
Food and kindred products	10.7	13.7	12.5	6.5	13.1	4.3
Other non-durable	2.3	2.9	5.6	2.9	8.1	2.7
Durable						
Machinery except electrical	1.6	2.1	5.5	2.9	10.6	3.5
Electrical machinery, equipment and supplies	2.5	3.2	16.8	8.8	33.8	11.2
Transportation equipment and ordinance	0.6	0.8	20.7	10.8	27.9	9.3
Other durable	3.6	4.6	7.9	4.1	9.3	3.1
All Services	17.3	22.2	39.7	20.8	68.7	22.8
Trade, finance and real estate	19.9	25.5	40.9	21.4	63.8	21.2
Government	11.7	15.0	26.8	14.0	49.0	16.3

[a]Ref. 3, Table I-14 (1964); Table H-3 (1967).

establishment and expansion of durable goods manufacture. In 1950 food processing (e.g., canning) accounted for nearly 14 percent of non-agricultural employment and was the largest single manufacturing activity. By 1966 it accounted for only 4 percent, while the electrical machinery and equipment industry--with 11 percent of the labor force--had become the largest single manufacturing employer. Transportation and ordinance equipment, insignificant in 1950, had risen to second place in the manufacturing field, employing over 9 percent. Services, trade, finance and government, always important employers, have held their share over the years. In the course of 15 years, San Jose had changed from a food-processing center to a metropolitan area, concentrating on the manufacture of hard goods. Employment opportunities and educational and training requirements are now vastly different from what they were in 1950 (more so than in an area like Fresno).

In addition to diversified employment opportunities, the San Jose area has another characteristic that makes good compensatory education particularly relevant. Compared to some other areas in California, and particularly to other southwestern states such as Texas,* San Jose always has been a relatively "soft" area in terms of prejudice against the Mexican-American.† Therefore, given an education in high-level skills, good employment opportunities are available.

The San Jose Unified School District has about 35,000 students, 2500 of whom are involved in the compensatory education program during the current school year, 1968-1969. The outlay involved comes to 1.3 million dollars, 70 percent of which are federal funds. Table 3 shows the various programs now in operation, the cost of each, the number of

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*See Ref. 4, pp. 215-218; also, Ref. 5, p. 21.

†Discussions with Mr. William Doyle, Supervisor of Compensatory Education, San Jose Unified School District.

children participating in each, and the source of funds. The programs for which this evaluation has been designed are separated from those to which it is not applicable.

Since a large overlap exists in pupils receiving various compensatory services, the evaluation design assesses combinations of services, rather than programs by funding sources.

Table 3

COMPENSATORY EDUCATION PROGRAMS IN SJUSD

	Dollars (000)	Number of Pupils in Program	Source of Funds
Programs included in design			
ESEA Title I	752	2600	Federal
Senate Bill 28 Class reduction	131	1700	State
Head Start--36 weeks	14	17 (1 class)	Federal
Assembly Bill 1331 Pre-school	146	165	Federal (75%) State (25%)
Programs not included in design			
ESEA Title II	32	Not Applicable	Federal
Senate Bill 28 Demonstration	225	70	State
Head Start--Summer, 8 weeks	25	170	Federal

As can be seen from Table 3, the Federal government provides the major share of the funds through Title I of the *Elementary and Secondary Education Act (ESEA)* [6]. This title of the statute is designed to meet the special educational needs of children coming from low-income families. The average census-tract family income, as shown in the 1960 census and the number of local Aid to Dependent Children cases for the January preceding the program funding, defines the target areas. Nationwide, roughly one billion dollars per year has been distributed under this title since 1965.

Title II of ESEA provides for books and other teaching materials. Since these resources are not limited to program participants, no figure is given in the "number of pupils" column.

The OEO-funded Head Start Program is well known and need not be described here. The SJUSD has found it somewhat cumbersome to administer for two reasons. Among other requirements, the teacher must ascertain the specific family income for each child in order to determine the pupil's eligibility. Furthermore, the definition of parent participation is extremely rigid and limits the needed administrative flexibility. Since an alternative source for financing preschool education is available through Assembly Bill 1331 (Miller-Unruh Bill), the District is relying on it rather than on the Head Start programs for early childhood education.

The eligibility requirements of the Miller-Unruh Bill are more liberal than those for Head Start. To be eligible, children must be actual or "potential" AFDC recipients. The decision as to who is a "potential" recipient is made by the County Welfare Department. In addition, the guidelines give priority to those children coming from homes in which English is not the primary language [7]. Obviously, areas with large Mexican populations are primary targets.

California Senate Bill 28 funds have been provided under the McAteer Act of 1965. However, renewed funding for the next school year (1969-1970) is now contingent upon new legislation. The program has had two purposes. The first is to provide pilot and demonstration projects at the junior high school level. The SJUSD has had and continues to have such a program, known as Project R-3 (which is being evaluated separately). The second purpose has been to provide extra teachers at all grade levels in order to reduce the pupil-teacher ratio from 30:1 to 25:1. This part of SB 28 is included in the present evaluation design. Sixteen teachers were paid through this funding operation.

The distribution of compensatory education funds within SJUSD is in accord with state guidelines and the philosophy of the District itself. Both SJUSD and the State Department of Education prefer "saturation" programs that make the components of the compensatory program available to a selected portion of the eligible students, rather than spreading the funds, and therefore the benefits, thinly over a larger population. SJUSD has two high schools eligible for compensatory education services, but only one high school--together with its feeder elementary and junior high schools--was chosen for these programs.

III. THE EVALUATION DESIGN

In the interests of program planning and improvement, the San Jose Unified School District is currently undertaking an extensive investigation of their compensatory education program. Beyond evaluating the program, an attempt is being made to gather as much information as possible about its students, classroom activities, curriculum, and teachers.

Each year decisions must be made about which components of the compensatory education program should be continued and which, if any, discontinued. Up until now, because of insufficient experience with the program, decisions have been based on little more evidence than that the program seems to be working. Previous investigations have been confined to pre- and post-tests with such instruments as the Peabody Picture Vocabulary Test in preschool and kindergarten, and the California Achievement Tests from grade one on.

The question now is "Can the effects of the different components of the compensatory education program be sufficiently isolated to assess their contributions to achievement and attitude change?" The classroom will be the unit analyzed. The students can be described in terms of age, sex, and ethnic background; the teacher--and teacher-aide, if provided--in terms of age, sex, length and type of experience. The tasks performed by the teacher-aide can be characterized from the point of view of both the aide and the teacher. Finally, accurate records of classroom activities will furnish a relatively complete description of the experience that each child had.

In the SJUSD, the target population for the compensatory program is largely Mexican-American. In the target schools receiving these services, the proportion of Mexican-American youngsters ranges from 59 to 92 percent. The program affects about 2500 youngsters in grades kindergarten through high school and an additional 182 youngsters enrolled in the

preschool program. More than half of the youngsters receiving compensatory services are enrolled in grades 1 through 3, while only about 50 are in high school (and will not be included in the evaluation). Table 4 [8] shows a breakdown of the children receiving aid: col. 1 indicates the school; cols. 2-3, number of pupils preschool through grade 12; col. 4, percentage of Mexican-Americans in school; cols. 5-6, number and percentage of pupils in compensatory program. Table 5 gives a breakdown by grade of the number of youngsters receiving services.

STUDENT CHARACTERISTICS

The SJUSD description of student characteristics indicating a need for special educational assistance resembles that of any group of disadvantaged youngsters:

> Their classroom performance is significantly below grade level in reading; their performance is poor on standardized tests; they function at a low level of verbal performance; they perform poorly on standardized tests of intellectual ability; they have a negative attitude toward school and education; their occupational and educational aspiration level is low; the dropout rate is high; their absence rate is high; their attention span is short; and, as a group, they have many disciplinary problems.*

PROGRAM OBJECTIVES

Based on this description, the program objectives are spelled out as follows:

1) To improve classroom performance in reading beyond usual expectation.
2) To improve performance as measured by standardized performance tests.

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*Ref. 9, pp. 11-23 *passim*.

Table 4

CHILDREN RECEIVING COMPENSATORY EDUCATION SERVICES

SCHOOL YEAR 1968-1969 [8]

	No. of Pupils Preschool	No. of Pupils K-12	% Mexican-Americans K-12	No. of Pupils in Program Preschool-12	% of Pupils in Program Preschool-12
Elementary					
A. Darling	30	672	68.0	223	31.8
Belden	60	394	58.6	60	13.2
Gardner	32[a]	666	86.2	222	31.8
Grant	--	873	67.1	207	23.7
H. Mann	--	560	68.4	206	36.8
Jefferson	30	423	63.4	30	6.6
Longfellow	15	144	91.7	122	76.7
S. Olinder	--	711	73.8	324	45.6
Washington	15	940	75.4	326	34.1
	182	5383	71.8 Avg.	1720	30.9 Avg.
Junior High					
P. Burnett		715	59.7	130	18.2
T. Roosevelt		977	62.9	510	52.2
W. Wilson		710	72.8	182	25.6
		2402	64.9 Avg.	822	34.2 Avg.
Senior High					
San Jose		1490	60.9	47	3.2
Grand Total		9275	63.3 Avg.	2589	27.4

[a]Includes one all-year round Head-Start class of 17.

Table 5

CHILDREN RECEIVING COMPENSATORY EDUCATION SERVICES IN PUBLIC SCHOOLS AND PAROCHIAL SCHOOLS--BY GRADE[a]

Program Participants		
Grade	Enrolled in School	% of Participants
Preschool	182	6.6
Kindergarten	316	11.4
Grade 1	401	14.5
Grade 2	429	15.5
Grade 3	266	9.6
Grade 4	139	5.0
Grade 5	73	2.6
Grade 6	89	3.2
Grade 7	299	10.8
Grade 8	311	11.3
Grade 9	212	7.7
Grade 10	37	1.3
Grade 11	10	0.4
Grade 12	0	0.0
	2764	100.0

[a]Figures provided by Mr. William A. Doyle, San Jose Unified School District, San Jose, California.

3) To improve children's verbal functioning.
4) To improve performance as measured by standardized tests of intellectual ability.
5) To increase their expectation of success in school.
6) To improve their self-image.
7) To change in a positive direction their attitude toward school and education.
8) To raise their occupational and education levels.
9) To improve the holding power of school (to decrease the drop-out rate).
10) To improve average daily attendance.
11) To improve and increase attention span.
12) To reduce the rate and severity of disciplinary problems.*

PROGRAM COMPONENTS

The compensatory education program provides the following kinds of services:

1) Teacher-Aides;
2) Special remedial teachers;
3) Enrichment activities;
4) Study trips;
5) Computer-assisted math;
6) Language laboratories (on the secondary level);
7) Counseling services;
8) English as a second language;
9) Parent-Community involvement;
10) In-service training of teachers and aides.

This Memorandum is primarily concerned with the first eight of these components, whose effects as direct services to youngsters can be assessed. On the other hand, parent-community involvement and in-service training, while essential

*Ref. 9, p. 14ff.

ingredients of the program, are indirect services that at least need to be described if their contributions to student progress are to be assessed in the future.

PRESCHOOL PROGRAM

The district's preschool program is designed to compensate for social, economic, environmental, educational, and cultural circumstances that hamper the disadvantaged child's success in the regular school program.

This aim is translated into the following program objectives:

To help children:

1. Learn to work and play independently.
2. Learn to interact effectively with other children.
3. Develop self-identity.
4. Realize many opportunities to strive and succeed--physically, intellectually and socially.
5. Sharpen and widen language skills.
6. To seek answers to questions.*

DATA COLLECTION

Ethical considerations require that no child be deprived of any services he might otherwise receive in order to serve in a Control Group. This restriction results in a non-standard experimental situation, calling for *ad hoc* statistical treatment (detailed in Sec. V).

Within this framework, we have developed a data-collection procedure for describing each youngster in terms of his personal and (at one school) his family characteristics; the kinds of compensatory education experiences he receives, the teachers and aides who taught him; and his characteristics at the end of the program, including

*Ref. 10, p. 26.

cognitive gain. The details of the data-collection schedule are presented in Table 6.

Background Survey

Because of the need for background information on youngsters receiving compensatory education, the decision was made to conduct a rather extensive survey in an elementary school whose population is typical of the students receiving compensatory services in SJUSD. (A sample of families with children attending other schools will be surveyed in order to test the assumption that this school is typical.)

The Questionnaire to be used in the survey is described in Sec. VI (and reproduced as App. A) of this Memorandum, but it seems appropriate here to discuss its purposes.

The first is to determine whether the effects of background variables on a youngster's performance in the classroom can be identified. The section of the survey devoted to this purpose asks questions about the size of the family and the child's place within it; causes of absences from school; the socio-economic status of the family (including information about welfare dependency); whether there is an extended family pattern; closeness of cultural ties to Mexico; parental aspirations for the child; parental contact with the school; the language pattern of the home; and the family's reading habits.

Much of the literature on disadvantaged youngsters suggests that the above factors strongly influence their achievement. But much work remains to be done on such questions as: Does low income *per se* have a strongly damaging effect upon school achievement, or does such an impact occur only when the frequent concomitant of low income--viz., low parental educational level--is present? Does welfare dependency have more of an effect upon school achievement than that associated with equally low but earned

Table 6

DATA COLLECTION SCHEDULE

	Pre-school	K	1	2	3	4	5	6	7	8	9*	Source of Instrument other than SJUSD or RAND
Student Master File Data Form	x	x	x	x	x	x	x	x	x	x	x	
Parent Questionnaire	x	x	x	x	x	x	x	x				Cincinnati (adapted)
Goal Cards for Pre-kindergarten	xx											Cincinnati
Goal Cards for Pre-kindergarten - last part*		x										Cincinnati
Social Behavior Skills Checklist	xx	xx										Milwaukee
Teacher/Aide Task Report (Aides)	x	x	x	x	x	x	x	x	x	x	x	Cincinnati
Teacher/Aide Task Report (Teachers)	x	x	x	x	x	x	x	x	x	x	x	Cincinnati
Teacher Rating of the Aide	x	x	x	x	x	x	x	x	x	x	x	Oakland
Evaluation of In-Service Training	x	x	x	x	x	x	x	x	x	x	x	Oakland
Checklist of Parent Involvement	x	x	x	x	x	x	x	x	x			
Parents Comments on Preschool Class (in English and Spanish)	x	x										
Weekly Checklist of Classroom Activities	x											
Compensatory Services Provided Students			x	x	x	x	x	x	x	x	x	
Aptitudes Toward Self and School			xx	xx	xx							Cincinnati
California Achievement Test (CAT) (Reading, Math, and Language)			xx	xx	xx	xx	xx	xx	xx	xx	xx	
Student Survey				x	x	xx	xx	xx	xx	xx	xx	Cincinnati
Oral Language Skills Test				x	x	x	x	x	xx	xx	xx	
Teacher/Aide Survey Characteristics	x	x	x	x	x	x	x	x	x	x	x	
Background Survey	x	x	x	x	x	x	x					

One x means the data is to be collected or the form completed once during the year.

Two x's indicate pre- and post-data.

In-service training, parent involvement, checklist of classroom activities, and compensatory services provided students will be continuously recorded during the year.

*Since only 10 students in the 9th grade actually receive any compensatory education (English as a second language), no statistical analysis will be attempted.

Tested in kindergarten to follow-up on last year's preschool enrollees, but also administered to children who had no preschool.

The CAT given as pre-test in grade 1 serves as a measure of kindergarten gains. SJUSD is currently evaluating instruments appropriate to their objectives. A revision will be made next year for pre- and post-testing in kindergarten.

Two detailed questionnaires for interviews with every family having children in Washington school.

income status? This evaluation will try to provide some tentative answers to these questions.

A second purpose of the survey is related to but not directly concerned with the evaluation. Stereotypes about Mexican-Americans, many of which were formulated twenty or more years ago, are used in planning educational experiences for these children. It is important to know if Mexican-Americans with children in school conform to these stereotypes. Pertinent questions would address the mobility rate; the frequency of visits to and communication with Mexico; whether families from Mexico plan to stay in the United States or return to Mexico. In addition, data about the parents' view of, and expectations from, the school will be collected and used as an aid to improving school and community relationships.

The third purpose of the survey is to assess the language patterns of the relevant Mexican-American population. District personnel often refer to a bilingual population, but they are not really sure about 1) how extensively both Spanish and English are used, 2) which language(s) parents speak with their children, 3) the quality of either language as it is spoken. While these data will not be used in the evaluation, they have many implications for curriculum development.

Inventory of Observed Characteristics

Much has been written about the weaknesses of disadvantaged youngsters, and most curricula are planned to help overcome these weaknesses. But it has been pointed out recently that their special strengths are being overlooked [11-13]. Therefore, a collection of statements culled from the literature on disadvantaged youngsters* provided the basis for a questionnaire. In addition to

*In addition to the three previous citations [11-13], see Refs. 14-17.

strengths and weaknesses, differences in cognitive style and emotional response from the pattern of the majority are spelled out. These characteristics bear significant implications for the handling of children, and for techniques of teaching.

A questionnaire ("Inventory of Observed Characteristics") has been developed that will reveal, it is hoped, characteristics of a disadvantaged population that hitherto has been largely stereotyped.* This questionnaire lists 41 traits often attributed to youngsters in need of compensatory education services. The teachers will first be asked to check the frequency with which they observe each characteristic, and then to indicate whether they consider it to be an asset, liability, or merely an observed difference. Provision will be made for teachers to add characteristics not listed, but which they feel influence classroom performance. While these characteristics have no direct implications for the evaluation, they do have a strong bearing on program planning and improvement, especially in the area of in-service training for teachers.

DATA ANALYSES

To carry out this evaluation, several types of data analyses will be required with statistics tailored to the precision and quantity of the data bases. The following brief discussion of these analyses (detailed in Sec. V) touches on their purpose in the design.

We need to divide our consideration into two parts: 1) analyses associated with determinants of learning and attitude that are school related; and 2) determinants that are family and culture related.

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*The construction of this questionnaire was suggested by the Milwaukee evaluation of their Head Start Summer Program, 1965 [18]; and by an article by Patrick J. Groff [19].

The effects of the school situation on learning will be assessed by a regression analysis with academic gain as the dependent variable, and information about the compensatory components and teachers, plus the student's age, sex, and ethnic background as the independent variables.

An additional approach will be taken in trying to determine whether there are differential effects on learning produced by exposure to different components, or combinations of components, of the program. A related question will also be investigated: Do these effects differ from one grade level to another? We will be able to sort out the youngsters who have had each component and combination of components at each grade level. We can then compare achievement gains for each of these groups. This will be accomplished by cross-tabular analysis. For reasons discussed in Sec. V, we plan to use only the second approach to assess the effects of the school situation on attitude.

In analyzing the determinants of learning and attitude that are family and culture related, we will use a smaller sample: the children in compensatory education programs who attend one elementary school. An in-depth survey is planned of all the families whose children attend that school. (For a full discussion of the survey, see Sec. VI.) Regression analysis will be used with data from the survey as the independent variables. The dependent variable will be academic gain. Since only about half the students in the school are in compensatory programs--but background data will be collected on all the children--there will be a comparison group available.

IV. THE EVALUATIVE INSTRUMENTS

This section contains brief descriptions of each instrument used in the evaluation, and identifies in which analysis it will be found. (Page numbers following titles refer to copies of instruments reproduced in App. B.) For the sake of brevity, the analyses are referred to as follows:

Academic gain--the effect of components on student achievement.

Attitude change--the effect of components on student attitudes.

Background--the effect of background variables on student achievement.

1) *Student Master File Data* form (p. 84) is being developed for use throughout the SJUSD. Student Master File Data cards will be initiated for each student entering the school system. His identifying number will remain unchanged as long as he is in a District school. This identifying number will be used on all data collected about a student during the evaluation. Since the card will be updated each time a student transfers to another school, it provides a mechanism for double-checking school records. (The cards will be used for the first time in this evaluation.)

2) *Parent Questionnaire* (p. 85) contains 14 questions relating to parents' views of the school and expectations for their children. It also touches on the amount of parent participation in school activities, and their contacts with the school. It will be conducted by pre-school through sixth-grade teachers. The information will be used primarily to assess and strengthen school-community relationships. There are no plans for incorporating the data in any of the analyses.

3) *Goal Card for Pre-Kindergarten* (pp. 86-92) (developed for the Cincinnati Head Start Program) measures skills and abilities deemed important to success in kindergarten. The test yields scores in cognitive skills, language facility, listening skills, social skills, physical coordination, and mental alertness. It will be administered on an individual basis by a psychologist. Used as a pre- and post-test it will provide a measure of academic gain. In addition to the evaluative function, it will be used to determine areas in which the preschool program needs strengthening.

4) The last part of the *Goal Card for Pre-Kindergarten* (pp. 91-92), which deals largely with social skills, will be administered in the kindergarten as a measure of the previous year's preschool program.

5) *Social Behavior Skills Checklist* (p. 93) (Milwaukee) provides measures of a youngster's ability to participate in a classroom situation, including his play habits, relationship to adults, use of language, and use of manipulative materials. It will be filled out by his teacher at the beginning and end of the school term in preschool and kindergarten. The checklist will act as a surrogate for measuring attitude change.

6) *Teacher/Aide Task Report* (pp. 94-95) (Cincinnati) lists 29 functions often performed in the classroom by teacher-aides. Also indicated is the frequency with which each task is performed (on a five-point scale from Never to Always). This checklist will be filled out independently by both teachers and their aides in grades preschool through nine. A measure of the congruence between teacher and aide responses has been developed for use in analyses of academic gain and attitude change (see Sec. V, pp. 39-40).

7) *Teacher Rating of the Aide* (p. 96) (developed in Oakland, Calif.) is a seven-question form for assessing

an aide's willingness to perform assignments, her interaction with children, interest, and initiative. Each question answered in the affirmative also requires a frequency check (Occasionally, Frequently, Always). Each teacher in grades preschool through nine who has an aide will complete the rating form. It will be used in the analyses of academic gain and attitude change.

8) *Evaluation of In-Service* (p. 97) (Oakland, Calif.), to be completed by all participants after each session, will be used for program improvement; but the data will not be included in the analyses.

9) *Checklist of Parent Involvement* (not reproduced) will record each parent's participation in the preschool program. These data will be used in analysis of both academic gain and attitude change.

10) *Parents Comments on Preschool Class* (in English and Spanish) (pp. 98-99) will be used for program improvement, but not in the analyses.

11) *Weekly Checklist of Classroom Activities* (not reproduced) will provide the Preschool Program Director with detailed information about each of the classes, but will not be used in data analyses.

12) *Compensatory Services Provided Students* (not reproduced) will record in grades one through nine of the program components in which each student participated. This information will be used to determine if there are differential effects (i.e., academic gain and/or attitude change) on students attributable to the components, or combinations thereof, to which they were exposed.

13) *Attitudes Toward Self and School (Grades 1-3)* (pp. 100-101) (Cincinnati) consists of 18 questions read by the teacher to the class. The answer sheet shows sets of smiling and frowning faces, a pair for each question, that the children mark according to their feelings about the

questions. It will be administered as a pre- and post-test in grades one through three, and will be the dependent variable in the analysis of attitude change.

14) *California Achievement Test* (not reproduced) in reading, math, and language--administered in grades one through nine as pre- and post-test--will be used as the dependent variable in the analysis of academic gain.

15) *Student Survey* (p. 102) (Cincinnati) consists of 25 Yes or No questions about students' feelings toward school, their aspirations, and their parents' involvement with their school work. It will be administered as a pre- and post-test in grades four through nine, and will be the dependent variable in the analysis of attitude change.

16) *Oral Language Skills* test (p. 103) elicits responses to five questions. The questions are on tape, and the student's responses are recorded on another tape. A pre-test will be analyzed by a speech therapist for both quantity and quality of response. In addition to yielding an evaluative score, the test will be used as a diagnostic instrument so that individual programs may be adapted to each student's needs. A post-test will be administered in the same way, and the differences between the two scores will be used as a measure of academic gain for students in the seventh, eighth, and ninth grades who are enrolled in the language-laboratory component.

17) *Inventory of Observed Characteristics* (pp. 104-108) comprises 41 adjectives and short phrases culled from the literature describing the disadvantaged child. All teachers in compensatory programs will estimate the observed frequency of each characteristic in their classes and indicate whether they consider each to be an asset, a liability, or simply a difference. If our hypothesis that differences in perceived patterns of assets and liabilities result in differences in student achievement is supported, the results

may influence the in-service training. Scoring procedures will then be established so that the Inventory may be used in future evaluations.

V. THE DATA ANALYSIS

Data will be collected and analyzed in accordance with the previously stated objectives of the evaluation: 1) to learn what effects the current compensatory program is having upon a) the academic performance, and b) the attitudes toward school of the participants; 2) to relate students' backgrounds to their academic performance.

A technique well suited to the study of the determinants of academic performance is stepwise regression. Regression is a statistical procedure to relate a dependent variable (such as achievement gain) to a set of independent or predictor variables (such as which compensatory components a student received, or some quantitative description of his family background). In the simplest regression situation, the dependent variable is expressed as a weighted linear combination of the predictor variables. That is, if Y denotes the dependent variable and $(X_1, \ldots, X_p)$ denotes the predictor variables, then

$$Y = \beta_1 X_1 + \ldots + \beta_p X_p + \varepsilon$$

where ε is an error term, and some of the weights (the β's) may be zero reflecting the relative unimportance of the corresponding predictor variables. More complicated, non-linear functions could also be considered but do not seem appropriate for the present purposes.

The statistical estimation problem associated with regression is to obtain a set of regression coefficients (the weights assigned to the predictor variables), and to determine if the regression equation is an adequate description for the supposed relation between the dependent variable and the predictor variables.

In the stepwise regression procedures, only tentative consideration is given to relating the dependent variable to the entire set of predictor variables. One seeks to extract from the entire set of predictor variables the smallest subset that achieves an adequate description of the dependent variable, and thereby to exclude from consideration those predictor variables unimportant for this purpose.*

Two computer programs to accomplish stepwise regression are program BMD02R of the Biomedical Computer Programs [27] and program STEPR of the IBM System/360 Scientific Subroutine Package [28].†

Draper and Smith [20] give an excellent discussion of regression generally and of stepwise regression in particular. (This reference is useful to anyone with an elementary understanding of calculus.) They state that stepwise regression is the best variable-selection procedure (among those they discuss) and recommend its use. They go on to say, however, that

> . . . stepwise regression can easily be abused by the 'amateur' statistician [and that] sensible judgment is still required in the initial selection of [predictor] variables and in the critical examination of the model through examination of residuals [i.e., the difference between the observed dependent variables and the corresponding value predicted by the regression equation]. It is easy to rely too heavily on the automatic selection performed in the computer.**

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*It is a property of stepwise regression that the order in which variables enter the analysis plays no role in determining the final regression equation. (See Ref. 20, p. 171.) We mention this because of the controversy surrounding the "Coleman Report" [21] on this score; see, e.g., Ref. 22 and responses and rejoinders thereto [23-26].

†The BMD02R program can accommodate a total of 80 variables--counting dependent and predictor, and including all combinations of predictor variables. The STEPR program can handle 119 variables on the IBM 7044 and up to 250 variables with double-precision arithmetic on a 512K IBM 360/65.

**Ref. 20, p. 172.

We note that residuals can be simply displayed in each of the two stepwise regression computer programs cited above.

The dependent variable in this study is gain in grade level. In the absence of a control group, this gain in grade level is measured relative to the students under study and not with respect to the gains of a comparable set of students receiving only the standard school curriculum. Students with comparable socio-economic backgrounds to those students in the Title I schools are available in other schools in the SJUSD. We recommend constituting a control group from these schools in a future study and giving this group the same pre- and post-tests as the Title I students.

Relative measures of gain are not being denigrated here. On the contrary, with proper interpretation they can provide valuable insights into the benefits of the present program, suggest guidelines for future programs, and raise questions for further study.

Note that the predictor variables selected by the stepwise regression as achieving a good description of gain in academic performance are not necessarily those with the greatest educational effect. For example, a predictor variable may be inversely related to educational gain.

When the final regression equation has been obtained--i.e., the equation that contains only those predictor variables having a significant explanatory effect for gain in academic performance--it can be used as follows. Given the values of the significant predictor variables (those that occur in the final regression equation) for a particular student, one calculates the predicted gain in academic performance.* Rather than placing any emphasis on the particular predicted gain, we suggest that the individual

*Change in academic performance is measured by change in grade placement (as determined from a standardized test such as the California Achievement Test) between the end and beginning of the school year.

be classified as one with high, low, or average achievement gain. These categories may, provisionally, be defined by: high achievement gain--1 year's growth or more in grade placement; low achievement gain--less than six months' growth; average achievement gain--between six months and a year's growth in grade placement.

A word on the interpretation of the final regression equation: The data gathered in this study are not the product of a planned, controlled statistical experiment; i.e., no systematic matching of students and compensatory components was made. Rather, the data reflect for each student whatever components he received. This is a consequence of the ethical consideration that no student be deprived of any program component he might otherwise receive in order that he serve as a subject or control in an experiment. We have no quarrel whatever with this constraint, but merely wish to point out that this can lead to problems of interpretation. It may well be that students having specific educational or social deficiencies will be assigned certain components of the compensatory program. Hence when we measure the presence or absence of that component in the experience of the individual, we are simultaneously measuring the presence or absence of some academic or social deficiency. There seems to be no way around this problem short of a random assignment of components to students--a procedure ruled out in the present instance. We must stress further that randomness cannot be demonstrated by merely ruling out obvious or conscious sources of bias. Rather, a positive requirement for the analyst is to insure that the procedures used did indeed yield randomness [29]. Thus, extreme care must be used in interpreting the results of this study. They should be considered as guides to formulating hypotheses about and gaining insight into the value of various combinations of compensatory components; but not as the definitive, final word on the subject.

With these caveats in mind, we proceed to discuss 1) the analysis of the effect of the school-related factors on achievement gain and on attitude change, and 2) the analysis of the effect of background characteristics on achievement gain and attitude change.

THE EFFECT OF SCHOOL-RELATED FACTORS

This discussion of the analysis of the effect of school-related variables upon academic gain focuses on stepwise regression procedures, with some mention of "data-snooping" via cross-tabulations. Because of lack of experience with the instruments used to assess attitude change, we hesitate to use them as dependent variables in a regression. Rather we would rely on cross-tabular analysis in this first exposure to these instruments, learning what we can about attitude change, and at the same time assessing their usefulness for subsequent studies.

We assume that the school-related factors pertinent to a student can be described by a vector of predictor variables $(X_1,\ldots,X_p)$. The stepwise regression procedure determines the smallest subset of these predictor variables that gives an adequate description of the dependent variable, gain in academic performance. The scope of the predictor variables is indicated in Table 7. Note that most are dichotomous, or so-called "dummy," variables, i.e., they take on the value 1 if a certain criterion is satisfied and take on the value 0 otherwise. For example, a dummy variable indicating sex could be coded to take on the value 1 if male and 0 if female; a series of dummy variables, D_1, D_2, D_3 indicating which of three schools attended could be set up as follows:

$$D_1 = \begin{cases} 1 & \text{if the student attends school 1} \\ 0 & \text{otherwise,} \end{cases}$$

$$D_2 = \begin{cases} 1 & \text{if the student attends school 2} \\ 0 & \text{otherwise,} \end{cases}$$

$$D_3 = \begin{cases} 1 & \text{if the student attends school 3} \\ 0 & \text{otherwise.} \end{cases}$$

Another series of dummy variables indicating which of two services received could be coded as:

$$D_4 = \begin{cases} 1 & \text{if the student received service 1} \\ 0 & \text{otherwise,} \end{cases}$$

$$D_5 = \begin{cases} 1 & \text{if the student received service 2} \\ 0 & \text{otherwise.} \end{cases}$$

Note that new dummy variables reflecting simultaneous events can now be defined as products of those already set up. For example, consider $D_6 = D_3D_5$. Clearly, D_6 takes on the value 1 if and only if the student attends school 3 *and* received component 2; otherwise, D_6 is zero. Extensions of this device to indicate the simultaneous occurrence of more than two events are made analogously.

Table 7

SCHOOL-RELATED VARIABLES

Description of Variable	Value of Variable
Grade[a]	A separate dichotomous variable for each grade from pre-kindergarten through 9. $X_1 = \begin{cases} 1 & \text{if student is in pre-kindergarten} \\ 0 & \text{otherwise} \end{cases}$ $X_2 = \begin{cases} 1 & \text{if student is in kindergarten} \\ 0 & \text{otherwise} \end{cases}$ . . . $X_{11} = \begin{cases} 1 & \text{if student is in grade 9} \\ 0 & \text{otherwise} \end{cases}$
Compensatory program component	A separate dichotomous variable for each component. $X_{12} = \begin{cases} 1 & \text{if teacher-aide is used in student's class} \\ 0 & \text{otherwise} \end{cases}$ $X_{13} = \begin{cases} 1 & \text{if student gets special remedial teaching} \\ 0 & \text{otherwise} \end{cases}$ $X_{14} = \begin{cases} 1 & \text{if student gets enrichment activities} \\ 0 & \text{otherwise} \end{cases}$

[a]We intend that the regression analysis be run grade-by-grade; i.e., a separate regression for each grade. (However, if the sample size is too small in some grade, adjacent grades could be aggregated for joint analysis.) Thus only one of the variables X_1 through X_{11} will ordinarily be in any regression.

Table 7--Continued

Description of Variable	Value of Variable
	$X_{15} = \begin{cases} 1 & \text{if student takes study trips} \\ 0 & \text{otherwise} \end{cases}$
	$X_{16} = \begin{cases} 1 & \text{if student gets computer-assisted math instruction} \\ 0 & \text{otherwise} \end{cases}$
	$X_{17} = \begin{cases} 1 & \text{if student uses language labs (secondary level only)} \\ 0 & \text{otherwise} \end{cases}$
	$X_{18} = \begin{cases} 1 & \text{if student gets counseling services} \\ 0 & \text{otherwise} \end{cases}$
	$X_{19} = \begin{cases} 1 & \text{if student participates in "English as a Second Language" program} \\ 0 & \text{otherwise} \end{cases}$
Hours per day of resource teacher	X_{20} The average number of hours per day of a resource teacher's time that the student gets
"Congruence" between teacher and aide	X_{21} A percentage measure to be described below
School	A separate dichotomous variable for each school
	X_{22} Anne Darling
	X_{23} Gardner

Table 7--Continued

Description of Variable	Value of Variable
	X_{24} Grant X_{25} Horace Mann X_{26} Longfellow X_{27} Selma Olinder X_{28} Washington X_{29} Peter Burnett X_{30} Woodrow Wilson
Age	X_{31} Age in years
Sex	$X_{32} = \begin{cases} 1 & \text{if male} \\ 0 & \text{if female} \end{cases}$
Ethnic background	$X_{33} = \begin{cases} 1 & \text{if Spanish surname} \\ 0 & \text{otherwise} \end{cases}$ $X_{34} = \begin{cases} 1 & \text{if other white} \\ 0 & \text{otherwise} \end{cases}$ $X_{35} = \begin{cases} 1 & \text{if non-white} \\ 0 & \text{otherwise} \end{cases}$
Teacher	A separate dichotomous variable for each teacher. We will not make the assignment here

Products of dichotomous variables play an important role in the analysis. For example, products of variables selected from X_{12} through X_{19} reflect all combinations of compensatory components actually experienced; products of grade, school, and teacher variables define particular classes (although in elementary grades there is usually a unique correspondence between teacher and class), etc.*

In setting up the combinations of variables to be examined, it will be useful to see how many students received each of the combinations as well as how many received only the separate components. If it turns out that all students received a combination of components i and j but none (or few) received only i or j, but not both, then one should probably enter the combination (i,j) as a variable into the regression without also entering i and j as separate variables.

The measure of congruence between the teacher and her aide, X_{21}, is obtained by comparing the responses made by the teacher and by the aide on the Check List of Aide Duties. This check list contains 29 questions, each allowing one of 5 responses--Never, Seldom, Usually, Most of the Time, Always. Labeling these responses 1, 2, 3, 4, 5, respectively, denoting the teacher response on question i by t_i, and the aide response by a_i, we define X_{21} by

$$X_{21} = 100 \frac{116 - \sum_{i=1}^{29} |t_i - a_i|}{116} .$$

Obviously, if teacher and aide agree on each of the 29 questions, then X_{21} will equal 100; if they disagree to the

*We cannot foresee all possible questions. Indeed, we recognize that certain questions will only be suggested after the data are available. Rather than foreclose the range of inquiry, we prefer to indicate techniques useful for any analysis.

largest extent on each question (i.e., one says "never" and the other says "always"), then X_{21} will equal zero. For shades of agreement between these extremes, X_{21} will range between zero and 100.

In addition to the regression analysis, certain questions can also be investigated by using cross-tabular analysis. For example, one can aggregate all students who have had one set of compensatory experiences and compare their achievement gain with all students who have had a different set of compensatory experiences. In the same way, one can compare achievement gain between any meaningful pair of dimensions. One could also identify all the different combinations of program components that actually occurred and rank them according to the mean gain in academic achievement. For many purposes, this process may provide considerable insight into the value of the various combinations of compensatory components, and suggest areas for further investigation.

MEASURING ATTITUDE CHANGE

Three instruments will be used for measuring attitude change. The Social Behavior Skills Checklist will be used as a surrogate for attitude change at pre-kindergarten and kindergarten levels. The Attitude Toward Self and School instrument will serve in grades one, two, and three; and the Student Survey will be used in grades four through nine.

Attitude is a difficult concept to define qualitatively, let alone to measure reliably. Thus to equate the responses on the instruments with attitude change is tenuous at best. For example, it is not clear that the measures of attitude form a scale with equal intervals; i.e., a change in attitude beginning at one point on an attitude scale does not necessarily have the same significance as the same change beginning at a different point on the scale.

We have raised questions about the measurement of attitude, questions to which we do not pretend to have answers. Recognizing inherent difficulties of interpretation, we provide a scale on which to measure attitude and attitude change for each of the three instruments.

Social Behavior Skills Checklist

There are 29 items to be checked "never," "seldom," "occasionally," "usually," "frequently," or "always." "Always" is ranked high for items having positive value; "never" is ranked high for those having negative value. Five points are assigned for the most desired performance on each item, dropping by one point to zero for the least desired performance on each item. Additionally, five points are assigned if the child knows his name; zero if not. This scoring is shown in parentheses on a copy of the Checklist (Fig. 2). We score each checklist by adding all the points and taking the ratio of this sum to the maximum score, 150. Expressed as a percentage, this yields a score ranging from 0 to 100. Attitude change is measured by taking the difference in the scores achieved on the two occasions, but keeping the initial value in mind.

The Attitudes Toward Self and School Instrument

This instrument is included herein as Fig. 3. The questions are read to the students, who indicate a favorable response by marking the smiling face, an unfavorable response by marking the frowning face. Question 13 does not apply as students in grades 1-3 do not receive report cards; so there remain 17 questions. Each response sheet shall be scored by taking the ratio to 17 of the number of smiling faces marked. Attitude change is measured by taking the difference in the scores achieved on the two occasions, but keeping the initial value in mind. One would expect attitude

SCHOOL NUMBER _____ (1-3)
A.M. 1 P.M. 2 _____ (4)
TEACHER NAME _____ TEACHER NUMBER _____ (5-7)
STUDENT NUMBER _____ (8-15)
STUDENT NAME _____ DATE _____ (16-21)
(Mo/Day/Year)

PLEASE CIRCLE APPROPRIATE RESPONSE CODE FOR EACH ITEM.

	Never	Seldom	Occasionally	Usually	Frequently	Always	Card Column
1. Relationship to adults:							
a. Cries	1(5)*	2(4)	3(3)	4(2)	5(1)	6(0)	(22)
b. Seeks to be near adult	1(5)	2(4)	3(3)	4(2)	5(1)	6(0)	(23)
c. Avoids or withdraws from adult	1(5)	2(4)	3(3)	4(2)	5(1)	6(0)	(24)
d. Fails to respond to adult	1(5)	2(4)	3(3)	4(2)	5(1)	6(0)	(25)
2. Play habits:							
a. Watches	1(5)	2(4)	3(3)	4(2)	5(1)	6(0)	(26)
b. Parallel play	1(0)	2(1)	3(2)	4(3)	5(4)	6(5)	(27)
c. Plays by himself	1(5)	2(4)	3(3)	4(2)	5(1)	6(0)	(28)
d. Cooperative play	1(0)	2(1)	3(2)	4(3)	5(4)	6(5)	(29)
e. Initiates play activities	1(0)	2(1)	3(2)	4(2)	5(4)	6(5)	(30)
f. Hyperactive	1(5)	2(4)	3(3)	4(2)	5(1)	6(0)	(31)
3. Personal health:							
a. Takes care of own toilet needs (i.e., washes hands)	1(0)	2(1)	3(2)	4(3)	5(4)	6(5)	(32)
b. Practices personal health habits	1(0)	2(1)	3(2)	4(3)	5(4)	6(5)	(33)
4. Use of language:							
a. Makes his wants known through speech	1(0)	2(1)	3(2)	4(3)	5(4)	6(5)	(34)
b. Converses with other children	1(0)	2(1)	3(2)	4(3)	5(4)	6(5)	(35)
c. Identifies objects by name	1(0)	2(1)	3(2)	4(3)	5(4)	6(5)	(36)
5. Responses to social situations:							
a. Fallows directions	1(0)	2(1)	3(2)	4(3)	5(4)	6(5)	(37)
b. Is shy and retiring	1(5)	2(4)	3(3)	4(2)	5(1)	6(0)	(38)
c. Seeks help	1(5)	2(4)	3(3)	4(2)	5(1)	6(0)	(39)
d. Is aggressive	1(5)	2(4)	3(3)	4(2)	5(1)	6(0)	(40)
6. Shows interest in:							
a. Stories and poems	1(0)	2(1)	3(2)	4(3)	5(4)	6(5)	(41)
b. Visual aids	1(0)	2(1)	3(2)	4(3)	5(4)	6(5)	(42)
c. Classroom environment	1(0)	2(1)	3(2)	4(3)	5(4)	6(5)	(43)
7. Uses manipulative materials:							
a. Paint	1(0)	2(1)	3(2)	4(3)	5(4)	6(5)	(44)
b. Clay	1(0)	2(1)	3(2)	4(3)	5(4)	6(5)	(45)
c. Blocks	1(0)	2(1)	3(2)	4(3)	5(4)	6(5)	(46)
d. Puzzles	1(0)	2(1)	3(2)	4(3)	5(4)	6(5)	(47)
e. Crayons	1(0)	2(1)	3(2)	4(3)	5(4)	6(5)	(48)
f. Paste	1(0)	2(1)	3(2)	4(3)	5(4)	6(5)	(49)
g. Scissors	1(0)	2(1)	3(2)	4(3)	5(4)	6(5)	(50)

8. Knows his name: YES 1(5) NO 2(0) (51)

DATA TYPE PRE 01 POST 02 (79-80)

* Numbers in parentheses refer to scoring; the other numbers are keypunch instructions.

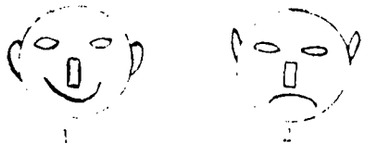
Fig. 2--Social Behavior Skills Checklist

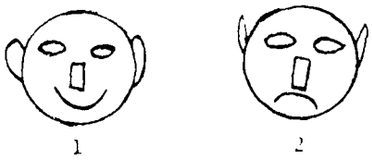
Teacher Name _____

Student Name _____

School Number _____ (1-3)
Grade 1 2 3 (circle one) (4)
Teacher Number _____ (5-7)
Student Number _____ (8-15)
Date _____ (15-21)
(Mo/Day/Year)

MARK THE NOSE OF THE FACES YOU CHOOSE — Card Column

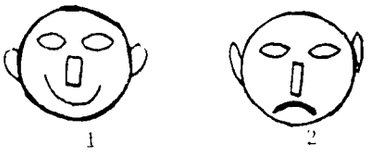
1. How do you feel about growing up and getting older?  (22)

2. How do you feel when it's time to get up and go to school?  (23)

3. How do you feel when you have a chance to learn something new?  (24)

4. How do you feel when you think about going home after school each day?  (25)

5. How do you feel when the teacher tells you to get out your books and begin to work?  (26)

6. How do you feel when you think about how fast you learn?  (27)

7. How do you feel when the teacher says that she is going to give a test?  (28)

8. How do you feel about how healthy and strong you are?  (29)

Fig. 3--Attitude Towards Self and School (Grades 1-3)

Card Column

9. How do you feel about how well you read? (30)

10. How do you feel about the way the neighbors treat you? (31)

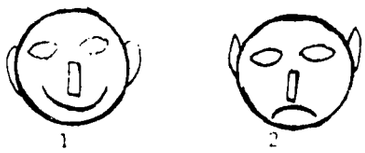
11. How do you feel about how you look and the kind of face you have? (32)

12. How do you feel about the way the other children treat you? (33)

13. How do you feel when you get your report card and take it home? (34)

14. How do you feel about how much you know? (35)

15. How do you feel about how well you do arithmetic? (36)



16. How do you feel when you think about next year in school? (37)

17. How do you feel about the way your teacher treats you? (38)

18. How do you feel when the teacher says that it's your turn to read out loud before the group? (39)

Data Type 05 06 (79-80)

Fig. 3--Continued

change as measured by this instrument to be positively correlated with academic progress.

The Student Survey

This instrument is included herein as Fig. 4. There are 25 questions; however, because of ambiguity in interpretation, we ignore the response to question 7, leaving 24 questions on which to base a score. This survey is scored by taking the ratio to 24 of the total of "yes" responses to questions 1-6, 8-19, 21-23, and 25; and "no" responses to questions 20 and 24. Attitude change is measured by taking the difference in the scores achieved on the two occasions, but keeping the initial value in mind.

Effects of Background-Related Factors

The approach to the analysis of the effect of background related factors upon academic gain and attitude change is the same as for the effect of school-related factors. We use stepwise regression for analyzing academic gain, and cross-tabulation for analyzing attitude change (see "The Effect of School-Related Factors," p. 34ff.).

Analogous to the discussion of the school-related factors, we assume that the background-related factors pertinent to a student can be described by a vector of background-related predictor variables $(X_1,\ldots,X_p)$. Stepwise regression is used to determine the smallest set of predictor variables that gives an adequate description of the dependent variable, gain in academic performance. The predictor variables (listed in Table 8) are keyed to The Background Questionnaire (see Sec. VI), and are grouped according to its subheadings.

Table 8 (pp. 48-56) thus comprises a complete list of the background-related factors whose influence upon academic achievement gain we wish to investigate. The comments made

Teacher Name _____ School Number _____ (1-3)

Student Name _____ Grade 4 5 6 7 8 9 (circle one) (4)

Teacher Number _____ (5-7)

Student Number _____ (8-15)

Date _____ (16-21)
(Mo./Day/Year)

	Circle Appropriate Response		Card Column
	Yes	No	
1. Do you like school?	1	2	(22)
2. Do you need more help from your teacher?	1	2	(23)
3. Do you read books from a library?	1	2	(24)
4. Do you like your school?	1	2	(25)
5. Do you enjoy field trips?	1	2	(26)
6. Do field trips help you in schoolwork?	1	2	(27)
7. Do you get along better outside of school than in school?	1	2	(28)
8. Would you like to spend more time at school?	1	2	(29)
9. Are you satisfied with the grades on your report card?	1	2	(30)
10. Do you worry about your schoolwork?	1	2	(31)
11. Are you doing better in your schoolwork this year?	1	2	(32)
12. Do you look forward to coming to school each morning?	1	2	(33)
13. Do you talk about school at home?	1	2	(34)
14. Has someone from home ever talked to your teachers?	1	2	(35)
15. Do you get praise at home for good schoolwork?	1	2	(36)
16. Do you think you will graduate from high school?	1	2	(37)
17. Do you hope to go to college?	1	2	(38)
18. Do you talk at home about what kind of job or career you will have after you are out of school?	1	2	(39)
19. Do you read more than is required by your schoolwork?	1	2	(40)
20. Do you think your teachers usually expect too much of you?	1	2	(41)
21. Do your teachers think you are doing well in your schoolwork?	1	2	(42)
22. Do your parents think you are doing well in your schoolwork?	1	2	(43)
23. Do you think you could do well in any school subject if you studied hard enough?	1	2	(44)
24. Are your lowest grades usually your teacher's fault?	1	2	(45)
25. Do you think you could do well in any kind of job you choose?	1	2	(46)

Pre 03 Post 04 (79-80)

Fig. 4--Student Survey

about the analysis of the influence of school-related factors on achievement gain and attitude change (see p. 34ff.) are relevant here as well.

OTHER ANALYSES

We recognize that as the data become available and are examined, other analyses may recommend themselves. Although we have suggested analyzing separately the effects of school-related and background-related factors upon achievement gain, these two groups of factors interact, and it may be desirable to analyze their joint effect. In order to keep the number of variables within the limitations of the mathematical procedures and of existing computer programs, it may be necessary to prune out certain factors in such analyses.

No experimental design was possible in this data-gathering effort; in particular, no control group has been provided. However, in the case of the background-related factors, there is a *comparison* group available. The background questionnaire is to be administered to every family in one school, while our analysis is limited to children in Title I programs. Thus the families of children in this school not participating in Title I programs, and the children themselves, provide groups with which comparisons can be made. We stress that because of the fortuitous, rather than planned, way in which the two groups are to be formed, any inferences made about differences in certain characteristics should be considered tentative. Statements about statistical significance of any differences are inappropriate.

Table 8

BACKGROUND-RELATED VARIABLES

Description of Variable	Value of Variable
Iaa.[a] Number of children living at home	$X_1 = \begin{cases} 1 & \text{if one child is living at home} \\ 0 & \text{otherwise} \end{cases}$
	$X_2 = \begin{cases} 1 & \text{if two children are living at home} \\ 0 & \text{otherwise} \end{cases}$
	$X_3 = \begin{cases} 1 & \text{if three children are living at home} \\ 0 & \text{otherwise} \end{cases}$
	$X_4 = \begin{cases} 1 & \text{if between 4 and 7 children are living at home} \\ 0 & \text{otherwise} \end{cases}$
	$X_5 = \begin{cases} 1 & \text{if 8 or more children are living at home} \\ 0 & \text{otherwise} \end{cases}$
Iaf. Child's job pattern	$X_6 = \begin{cases} 1 & \text{if child has earned no money during the past year} \\ 0 & \text{otherwise} \end{cases}$

[a]This numbering is keyed to the source of the information on the questionnaire.

Table 8--Continued

Description of Variable	Value of Variable
	$X_7 = \begin{cases} 1 & \text{if child works occasionally} \\ 0 & \text{otherwise} \end{cases}$
	$X_8 = \begin{cases} 1 & \text{if child works regularly} \\ 0 & \text{otherwise} \end{cases}$

Note: X_7 and X_8 are of no interest in themselves. The products $(1-X_6)X_7$ and $(1-X_6)X_8$ convey the desired information and only they should enter the regression equation.

Iai.	Sex of child	$X_9 = \begin{cases} 1 & \text{if child is male} \\ 0 & \text{if child is female} \end{cases}$
	Mother's aspiration for boy	$X_{10} = \begin{cases} 1 & \text{if "doctor" or "lawyer" is chosen} \\ 0 & \text{otherwise} \end{cases}$
		$X_{11} = \begin{cases} 1 & \text{if "officer in armed forces" or "priest or minister" is chosen} \\ 0 & \text{otherwise} \end{cases}$
		$X_{12} = \begin{cases} 1 & \text{if "farmer with own farm" or "enlisted man in armed forces" is chosen} \\ 0 & \text{otherwise} \end{cases}$
		$X_{13} = \begin{cases} 1 & \text{if "automobile mechanic" is chosen} \\ 0 & \text{otherwise} \end{cases}$

Table 8--Continued

Description of Variable	Value of Variable
	$X_{14} = \begin{cases} 1 & \text{if "construction worker" or "farm laborer" is chosen} \\ 0 & \text{otherwise} \end{cases}$

Note: Variables X_{10} through X_{14} will enter the regression only as their product with X_9. Similarly, variables X_{15} through X_{19} will enter the regression only as their product with $(1-X_9)$.

Mother's aspiration for girl	$X_{15} = \begin{cases} 1 & \text{if "teacher" or "children's doctor" is chosen} \\ 0 & \text{otherwise} \end{cases}$
	$X_{16} = \begin{cases} 1 & \text{if "librarian" or "social worker" is chosen} \\ 0 & \text{otherwise} \end{cases}$
	$X_{17} = \begin{cases} 1 & \text{if "secretary" or "dental technician" is chosen} \\ 0 & \text{otherwise} \end{cases}$
	$X_{18} = \begin{cases} 1 & \text{if "nurse's aide" is chosen} \\ 0 & \text{otherwise} \end{cases}$
	$X_{19} = \begin{cases} 1 & \text{if "housewife" or "cannery worker" is chosen} \\ 0 & \text{otherwise} \end{cases}$
Iba. Does the child play mostly with his siblings? [of interest only if $X_1 = 0$]	$X_{20} = \begin{cases} 1 & \text{if yes} \\ 0 & \text{if no} \end{cases}$

Table 8--Continued

Description of Variable	Value of Variable
Ibc. Does the child tend to play away from home with other children?	$X_{21} = \begin{cases} 1 & \text{if yes} \\ 0 & \text{if no} \end{cases}$
Ibd. Does the child often bring friends home?	$X_{22} = \begin{cases} 1 & \text{if yes} \\ 0 & \text{if no} \end{cases}$
Ibf. Does the child like to talk to adults?	$X_{23} = \begin{cases} 1 & \text{if yes} \\ 0 & \text{if no} \end{cases}$
Ibi. Has the child been absent more than five times last month?	$X_{24} = \begin{cases} 1 & \text{if no} \\ 0 & \text{if yes} \end{cases}$
If $X_{24} = 1$, were the absences all due to illness?	$X_{25} = \begin{cases} 1 & \text{if yes} \\ 0 & \text{if no} \end{cases}$
If $X_{24} = 1$, were the absences all due to the fact that the child was needed at home?	$X_{26} = \begin{cases} 1 & \text{if yes} \\ 0 & \text{if no} \end{cases}$
If $X_{24} = 1$, were the absences due to reasons other than illness or being needed at home?	$X_{27} = (1-X_{25})(1-X_{26})$ [This variable will be created by *transgeneration* within the computer program.]

Note: X_{25}, X_{26}, and X_{27} will enter the regression only as their product with $1-X_{24}$.

Table 8--Continued

Description of Variable		Value of Variable
IIIaa.	Number of adults, other than the child's siblings over 18, who live in the home	$X_{28} = \begin{cases} 1 & \text{if one adult} \\ 0 & \text{otherwise} \end{cases}$
		$X_{29} = \begin{cases} 1 & \text{if two adults} \\ 0 & \text{otherwise} \end{cases}$
		$X_{30} = \begin{cases} 1 & \text{if more than two adults} \\ 0 & \text{otherwise} \end{cases}$
IIIaj.	The highest educational level achieved by *any* adult in the home	$X_{31} = \begin{cases} 1 & \text{if this level does not exceed completion of elementary school} \\ 0 & \text{otherwise} \end{cases}$
		$X_{32} = \begin{cases} 1 & \text{if this level is at least completion of elementary school, but not more than secondary school} \\ 0 & \text{otherwise} \end{cases}$
		$X_{33} = \begin{cases} 1 & \text{if this level is beyond completion of high school} \\ 0 & \text{otherwise} \end{cases}$
IIIak.[b]	Does the child's family make trips away from San Jose?	$X_{34} = \begin{cases} 1 & \text{if yes} \\ 0 & \text{if no} \end{cases}$

[b]Variables X_{35} through X_{48} appear in the regression only as their product with X_{34}.

Table 8--Continued

Description of Variable	Value of Variable
1. Are these trips to visit family?	$X_{35} = \begin{cases} 1 & \text{if yes} \\ 0 & \text{otherwise} \end{cases}$
	$X_{36} = \begin{cases} 1 & \text{if no} \\ 0 & \text{otherwise} \end{cases}$
	$[X_{36} = 1-X_{35}]$
2. What is the geographical area to which you travel?	$X_{37} = \begin{cases} 1 & \text{if Mexico} \\ 0 & \text{otherwise} \end{cases}$
	$X_{38} = \begin{cases} 1 & \text{if Southwestern states (i.e., Ariz., N.M., Nev., Texas)} \\ 0 & \text{otherwise} \end{cases}$
	$X_{39} = \begin{cases} 1 & \text{if California} \\ 0 & \text{otherwise} \end{cases}$
	$X_{40} = \begin{cases} 1 & \text{if other U.S. than Calif., Ariz., N.M., Nev., or Texas} \\ 0 & \text{otherwise} \end{cases}$
	$X_{41} = \begin{cases} 1 & \text{if non-U.S. other than Mexico} \\ 0 & \text{otherwise} \end{cases}$
3. How many trips away from San Jose in the last two years?	$X_{42} = \begin{cases} 1 & \text{if 1 or 2 trips} \\ 0 & \text{otherwise} \end{cases}$

Table 8--Continued

Description of Variable	Value of Variable
	$X_{43} = \begin{cases} 1 & \text{if 3 or more trips} \\ 0 & \text{otherwise} \end{cases}$
4. How long are these trips?	$X_{44} = \begin{cases} 1 & \text{if the trips last about a week} \\ 0 & \text{otherwise} \end{cases}$
	$X_{45} = \begin{cases} 1 & \text{if the trips last about a month} \\ 0 & \text{otherwise} \end{cases}$
	$X_{46} = \begin{cases} 1 & \text{if the trips last more than a month} \\ 0 & \text{otherwise} \end{cases}$
5. If the trips occur during the school year, does the child go with you?	$X_{47} = \begin{cases} 1 & \text{if yes} \\ 0 & \text{otherwise} \end{cases}$
[Note: $X_{48} = 1 - X_{47}$]	$X_{48} = \begin{cases} 1 & \text{if no} \\ 0 & \text{otherwise} \end{cases}$
IVaa. What language do you usually speak with this child?	$X_{49} = \begin{cases} 1 & \text{if Spanish} \\ 0 & \text{otherwise} \end{cases}$
	$X_{50} = \begin{cases} 1 & \text{if English} \\ 0 & \text{otherwise} \end{cases}$
[Note: $X_{51} = (1-X_{49})(1-X_{51})$]	$X_{51} = \begin{cases} 1 & \text{if neither English nor Spanish} \\ 0 & \text{otherwise} \end{cases}$

Table 8--Continued

Description of Variable	Value of Variable
IVab. Does the child usually answer you in the same language?	$X_{52} = \begin{cases} 1 & \text{if yes} \\ 0 & \text{if no} \end{cases}$
IVac. What language do you usually speak with other adults in the home?	$X_{53} = \begin{cases} 1 & \text{if Spanish} \\ 0 & \text{otherwise} \end{cases}$
	$X_{54} = \begin{cases} 1 & \text{if English} \\ 0 & \text{otherwise} \end{cases}$
	$X_{55} = \begin{cases} 1 & \text{if neither English nor Spanish} \\ 0 & \text{otherwise} \end{cases}$
[Note: $X_{55} = (1-X_{53})(1-X_{54})$]	
IVae. Does any adult in the home speak more than one language?	$X_{56} = \begin{cases} 1 & \text{if yes} \\ 0 & \text{if no} \end{cases}$
IVaf. Is your husband required to speak English on his job?	$X_{57} = \begin{cases} 1 & \text{if yes} \\ 0 & \text{if no} \end{cases}$
IVag. Do you read more than one language?	$X_{58} = \begin{cases} 1 & \text{if yes} \\ 0 & \text{if no} \end{cases}$
IVai. Do you or does some member of the household have a library card?	$X_{59} = \begin{cases} 1 & \text{if yes} \\ 0 & \text{if no} \end{cases}$

Table 8--Continued

Description of Variable		Value of Variable
Vaa.	Is any adult in the household currently employed?	$X_{60} = \begin{cases} 1 & \text{if yes} \\ 0 & \text{if no} \end{cases}$
Vaa.	If $X_{60} = 1$, is any employed person male?	$X_{61} = \begin{cases} 1 & \text{if yes} \\ 0 & \text{if no} \end{cases}$
Vab,ad.	Is the family income above the OEO poverty guideline?	$X_{62} = \begin{cases} 1 & \text{if yes} \\ 0 & \text{if no} \end{cases}$
Vac.	Do Public Assistance or Social Security benefits come into the household?	$X_{63} = \begin{cases} 1 & \text{if yes} \\ 0 & \text{if no} \end{cases}$

VI. THE BACKGROUND SURVEY

The purposes of the survey have been explained above (see pp. 20-22). This section explains in greater detail: 1) how the answers to various groups of questions fit into the design; 2) which responses will be coded for use in the regression analysis (outlined in Sec. V); and 3) which will be left uncoded and used for qualitative description of the population, and which are included to provide information the SJUSD can use directly, quite apart from the evaluation design. Following this detailed analysis, the proposed method of standardization is discussed.

The questions have been designed with a particular segment--the Mexican-American--of the disadvantaged population in mind. Too often all members of a group considered to labor under especially great cultural and economic handicaps are viewed as having the same characteristics. The fact that a disadvantaged group consists of a number of sub-groups--each with its own special attitudes, traditions, and ties--is overlooked or insufficiently stressed. The emphasis is on the characteristics that distinguish this group from the middle class. Yet a disadvantaged society is probably even less homogeneous than the vast group called the middle class; the two being frequently separated from each other only by an ever-changing annual income line. Compensatory education, in order to be successful, has to be based on the characteristics of a specific pupil population. What Ruth Landes has pointed out regarding counselors is relevant for all who work with the disadvantaged:

> School counselors are mediators between whole cultures, as well as between a particular school and families. Receptiveness to cultural factors need not oblige counselors to approve of alien culture patterns if such patterns defeat school goals; they must, however, comprehend them as points of orientation and departure for pupils inheriting them. The school must understand that the pupil is tied to his community,

> and will not be led far from it if his community exists under prejudice, or if its traditional values and practices vary greatly from the public school norms. . . .
>
> It is a mixed human bag brought by law to study in public schools: an aggregation of culturally diverse and disassociated learnings, self-awareness and sufferings, often torn from customary settings. All parties to the educational task must reckon with these human conditions.*

The answers to the Questionnaire will, it is hoped, not only show the special characteristics that distinguish disadvantaged Mexican-Americans in San Jose from other members of the downtown school population, but also give a picture of the spectrum of subgroups that exist within this cultural body.

The questions are grouped into five sections:

I. Parent's View of Child
II. Parent's View of School
III. Family History
IV. Language Patterns
V. Economic Background

Those questions under section II. ("Parent's View of School") are asked primarily to gather information with which the SJUSD will try to strengthen school-community relationships, and will not be coded for use in the regression analysis. Only a few questions of this kind fall under the other headings.

The first section ("Parent's View of Child") is designed primarily to ascertain the vital statistics of all children in the family, those still at home as well as those who have already left. However, only information on the former will be coded. Information on the latter may or may not prove useful for qualitative descriptions of the population, depending on whether different patterns emerge for

*Ref. 14, p. 67.

different types of families. The presence of a male child over 18 will be indicated, since in a fatherless household he may act as a father substitute.

The second design purpose of section I. is to probe for any relationship between size of family and the parent's perception of the child as an individual. In families with many children, parental attention may be more diffused, and distinctions made among offspring may not be readily apparent. If this tendency does indeed exist, poor and large families may suffer more from it, since the mother's workload is not likely to be alleviated by paid help (although it may be relieved by other adults in an extended family situation).

To test for differences in perception, the mother is asked to choose an occupational aspiration for a child from a prepared list. However, the list is open-ended--i.e., an "other" category is provided. The mother will also be asked to indicate if the preference is one expressed by the youngster. Different choices of occupations for different children, particularly if the mother elaborates on her reason for the choice, would indicate perception of each child as an individual.

For this parental choice of vocational aspiration to be used as a method for determining that children are clearly distinguished as individuals, the family must have two or more children; and these must be old enough to make the choices seem plausible. For the population of the elementary school under study, the probability of fulfilling the condition of there being more than one child per family seems high, since the number of students is nearly three times that of the families represented. In addition, parental aspirations for secondary school children from these families will also be gathered.

We hope to isolate the role of status in the mother's choices. Is she likely to choose occupations consistent

with her concept of status rather than with the child's perceived ability and preferences? Because of the method used to construct the choice table, choosing different vocations for different children does not eliminate the possibility of status influence. It lists more than one profession or job for what we have designated as a given status category. For instance, Table IIa--"Mother's Aspirations for Boy" (p. 77)--lists lawyer or doctor, priest or minister or officer in armed forces (each group equivalent on the status scale); and construction worker or farm laborer (considered equivalent). To assess the mother's independence from status considerations in making choices for her children's future, we need to know her own concepts of the relative status of these occupations within the community. Therefore, after indicating a choice for each child, she is asked to rate the occupations according to the esteem in which she and her friends hold them. These ratings will not be coded. But in each instance they will be compared to the choices made for each child to see whether her selections coincided predominantly with her concepts of status. The achievement scores of the children will help to distinguish realistic from unrealistic, and possibly status-influenced, parental choices.

Questions on the play patterns of each child, whether at home or away from home, will be coded and used as another measure of the parent's ability to distinguish each child realistically. These will also serve as indications of whether the family is a rather closed universe or readily admits outsiders.

Finally, frequency of, and reasons for, absences from school will be coded. In many studies the number of absences is considered to be an indicator of attitudes towards school. However, since young children are seldom free agents, absences may not always indicate their dislike of or indifference toward school. For instance, a sixth grader who is the oldest of

five children may have to stay home to attend to younger siblings while the mother keeps a doctor's appointment or vists the welfare office. For this reason, the *cause* of excessive absences must be established.

As indicated above, the second section ("Parent's View of School") is primarily for SJUSD information. District personnel need to know what the community expects from the schools, what kinds of contact the parents would like to have with them, and whether they feel that their children's education compares favorably with theirs.

Only some parts of section III. ("Family History") will be used in the regression analysis; the remainder will be tabulated. In the latter category belong such items as the degree of relationship in the home between the adults and the children, the place of birth and residence prior to coming to California, and the extent of education of each adult. Coded for the regression analysis will be the number of adults in the family, and the highest level of education among them. Also shown will be whether there is a male among the adults; and, if so, whether he is the father of the children. It is assumed that if the present husband is not the father of one or all of the children, he will, nevertheless, act in *loco parentis*. Also coded will be the number of visits away from San Jose, the reasons for these visits, and the lengths of stay. Information is provided on the inclusion of children in the travels (if the trips are taken during the school term).

What will emerge from the coded information is whether we are dealing with an extended family or with a one-parent home with no other adults present. The highest educational level achieved by any member of the household will give a point of reference for the extent to which a child can expect to receive help with his school work. But this is only a rough indicator, since functional literacy is imperfectly related to the amount of schooling received.

The pattern of visits away from home will help to identify the degree of connection with the Mexican background. The strength of these ties is not necessarily indicated by visits to Mexico alone. There are areas in the United States (e.g., sections of Arizona, New Mexico, and Texas) that exhibit a considerably stronger Mexican flavor than most areas in California.* Therefore, the coding is based on the assumption of a continuum of "Mexico-like" environment--with Mexico at one end and the United States (excepting the Southwestern states and California) on the other. Because of the presence of other foreign-born residents in the San Jose area, the coding provides a "non-U.S. other than Mexico" category. The "Mexican" regions of the United States roughly outlined above ignore such variables as differences among Mexican-American communities within California and the existence of such enclaves in places like Chicago and Detroit. However, since migration into California apparently originates mostly in Mexico and the Southwestern states, and family visits are likely to be made to places of origin, failure to use smaller geographical divisions is not likely to be detrimental.

Although the Questionnaire records each adult's place of birth, it is not coded. This information is being collected to give the SJUSD some idea of family migration patterns (e.g., are families migrating from Mexico taking up permanent residence; if so, which generations are remaining).

The authors do not hypothesize that close cultural affinity with the Mexican background should have a deleterious effect on scholastic achievement. Children from an environment with such strong cultural ties may or may not

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*Although Texas is usually included among the South Central States, for the purposes of this analysis it should be grouped with New Mexico and Arizona, since the Mexican-American populations in these three states are similar.

show more or less uniform achievement patterns. However, should a negative correlation between strong cultural ties and scholastic achievement emerge, it might be indicative of a need to restructure the compensatory education programs to take account of such ties. With proper programs, differences in cultures can be exploited to advantage in the educational system rather than representing stumbling blocks.

"Language Patterns" (section IV.) will be used mainly to establish the extent of bilingualism in the home. The coding will indicate the main language used in the household, and the extent of bilingualism of the children and the adults separately. It will also give some indication of the reading material used in the home by recording the possession of library cards.

In addition, the interviewers are asked to indicate on their observation schedules (discussed below) the quality of the language used in the interview. The schedule provides for rating the quality of grammar and the extent of the vocabulary used on a continuous scale.

Because of the problem of invasion of privacy, the "Economic Background" questions (under section V.) are not quite as specific as one would like. The respondent is simply asked if her children would qualify for the Head Start program according to the eligibility requirements set forth by the OEO non-farm income schedule. The answer will indicate the family's income relative to the poverty line. Another question will ascertain whether the household receives any welfare payments. These two answers will be coded. Also included in the coding will be information on the employment of any member of the family, and whether the wage-earner is a male. Occupational information will be tabulated.

After completion of the Questionnaire, the interviewers are asked to fill out an observation schedule. Aside from the questions about the language and its characteristics,

used in the interview, they are asked to indicate the willingness of the respondent to answer questions and to indicate those, if any, that appeared to cause concern or reluctance to answer. The observation schedule serves several purposes. It makes it possible to identify answers that may not be completely reliable, because the respondent was worried by the question. It also serves as a check on the interviewers. Those who persistently find their respondents reluctant or worried may need more training in interviewing techniques, or may need to be replaced.

Interviewers will be briefed on the use of the Questionnaire. After each has conducted at least two interviews, a discussion session will be held to cover any problems and to initiate any necessary procedural changes.

It is anticipated that the interviews will average about one hour in length. Where necessary, interpreters will be provided. In all families, only the mother will be interviewed--thus eliminating the possibility of having to resolve conflicting viewpoints between the parents. For this reason, interviewers will be instructed to visit homes as much as possible during the day.

VII. A FINAL CONSIDERATION: INTELLIGENCE MEASURES

Acting on the assumption that early steps taken to prevent failure are more effective than later remedial measures to overcome accumulated deficits in achievement, the SJUSD allocates the major part of its compensatory education funds to the preschool and elementary grades.

This philosophy of early intervention seems, on the surface, to be a good one; but it must be validated against the future performance of the youngsters vis-a-vis similar non-participating students. Because of the unreliability of intelligence tests in assessing the ability of disadvantaged youngsters--partly due to their vocabulary limitations and lack of exposure to the middle-class experiences and concepts with which the tests are heavily weighted, and partly due to their non-competitive attitude toward test-taking--we are forced to rely upon performance data for making judgments about their capabilities.

Celia Heller succinctly states the dangers inherent in IQ test scores while suggesting a constructive use for them in designing school programs for Mexican-American youngsters:

> A kind of self-fulfilling prophecy may be operating in the case of the Mexican-American children's failure to develop necessary capacities and skills for advancement in school. If the I.Q. scores of these children, as compared with those of Anglo-Americans, were treated as indicators of initial disadvantages in terms of orientation and skills necessary for effective functioning in our society, then school programs probably could be designed to overcome these initial differences. But teachers tend to approach these scores as signs of fixed limits in innate ability.*

Until such time as IQ scores can be viewed in the way in which Miss Heller suggests, it is probably better not

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*Ref. 30, p. 91.

to administer them to the disadvantaged. Such thinking has had an influence on educational decision-making, as evidenced by an article in the *Los Angeles Times* of 31 January 1969 headlined "Testing of IQs in L.A. Primary Grades Banned" (which we quote at length to support our own decision not to use individual ability measures in this evaluation design):

> IQ tests were banned in the primary grades of the Los Angeles city school system Thursday in an attempt to prevent children from being erroneously labeled as unintelligent because of a language handicap in understanding the tests.
>
> The Board of Education's unanimous action was founded largely on recent findings which show that in many cases the classroom performance of children is based on the expectations of teachers.
>
> If teachers are provided with results of intelligence quotient (IQ) tests, tagging pupils as particularly smart or dull, the academic achievement of the children is remarkably similar--even though the IQs may subsequently be proved wrong, the studies show.
>
> The difficulties with IQ tests are experienced most often by minority youngsters who have problems with the English-language tests. But other pupils with language deficiencies also are affected, researchers reported . . .*

Undoubtedly, not taking account of individual ability results in attributing all achievement gain to the effects of the compensatory education program. As long as this is done with full awareness, however, it seems to provide a better basis for program decision-making than relying on inappropriate ability measures.

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*Ref. 31, Pt. I, p. 1, col. 1.

Appendix A

QUESTIONNAIRE

I. Parent's View of Child

(There are two tables: Table I for children living at home; Table IV for children not at home. The questions are arranged so that Table I will be filled out in its entirety first.)

Table I questions:

aa. Would you give me the names of your children who are now living at home?

ab. What are their ages? (Ask for sex here, if the names do not clearly indicate whether it is a boy or a girl.)

ac. Which grade is each child in? (Give school if other than Washington.)

ad. If any of the children are not in school,

1. Which grade did they complete?
2. Give name of school, if in San Jose. (Otherwise, just give name of state in U.S. or country outside U.S.)
3. When did they graduate or leave school?

ae. Did any of your children have preschool experience? (Explain that this does not include kindergarten. There was no public preschool program prior to 1964, and it is not very likely that any of these children would have been in private preschool programs. However, if the mother has been working, they may have been in day-care centers. Indicate day-care center where applicable as a separate category.)

1. Name of child.
2. Name of school, if in San Jose. (Otherwise, give name of state.)
3. Dates of attendance.

af. Do any children now in school earn money or have they earned money during the past year?

1. Name or number of child or children._____
2. Type of work--regularly, occasionally._____

ag. Do any of the children not in school work?

1. Name or number of child or children._____

2. Description of job._____

ah. Are any children living with you who have not always lived with you? (Indicate if mother's own child who rejoined family after prolonged absence.)

(Table I is now complete. Go to Table IIA. Provide mother with one sheet for each boy, at that time marking the name of the boy on the top of each sheet.)

ai. Will you indicate how you feel about the jobs listed for_____?
Name or Number

aj. If the job or kind of work you would like_____ Name
_____ to do is not on this sheet, will you
or Number
tell me what it is?

(Go to Table IIb. Mark the name of each girl on each sheet.)

ak. Will you indicate how you feel about the jobs listed for _____?
Name or Number

al. If the job or kind of work you would like _____ Name
_____ to do is not on this sheet, will you
or Number
tell me what it is?

am. Would you like your daughters to work before being married or to have a specific job skill or professional training, even though married?

an. What job would you and your friends respect most highly for a man? _____

ao. What job, least highly? _____

(Show Table IIIa)

ap. Would you give me the respect ratings for these jobs?

aq. What job would you and your friends respect most highly for a woman? _____

ar. What job, least highly? _____

as. Would you give me the respect ratings for these jobs?

at. Are there any jobs on these lists that you feel your child might not obtain because of prejudice?_____

au. Are there any jobs you did not name for the same reason? _____

(You will not need Tables IIa, IIb, IIIa, and IIIb for the rest of the interview. Go to Table IV (children not living at home).)

av. If you have any children not living at home, what are the

1. Names of boys; names of girls?
2. Ages?
3. Date/dates of departure/departures from family?
4. Number married?
5. Where born?

aw. Where did they attend school? (If in San Jose, give name of school. If elsewhere, check column of state of Mexico or other non-U.S. country.)

ax. What jobs do those who work hold? _____

(Table IV is now completed.)

ba. Do your children play mostly with each other? _____

bb. Is one of them more likely to play with other children? Name of child or children. _____

bc. Do they all tend to play away from home and with other children?

bd. Do they often bring their friends home?

be. Is one of them more likely to remain at home? Name of child. _____

bf. Do they like to talk to adults?

bg. Is one of them less likely to do so? Name of child. _____

bh. Is one of them more likely to do so? Name of child. _____

bi. Which of your children has been absent more than five times last month?

1. Because of illness: Names _____
2. Needed at home: Names _____
3. Other reasons: Names _____

II. Parent's View of the School

aa. What would you like the school to do for your children?

1. Teach them better: in which subjects or by teaching new subjects?_____

_____

2. Do any children need help: in which subject? (Interviewer can use number of child/children to minimize writing.)_____

_____

3. Would you like the school to influence behavior at home: (use names or numbers of children if mother indicates such choices).

(a) To be more helpful to parents._____

(b) To get along better with brothers and sisters._____

(c) To be less bossy._____

(d) To think better of themselves._____

(e) To be neater._____

(f) Do you have other suggestions?_____

_____

4. Would you like the school to influence behavior outside school and home:

(a) To talk more with adults._____

(b) To be less shy._____

(c) To respect authority more._____

(d) To make more friends._____

(e) To make different friends._____

(f) Do you have other suggestions?_____

5. Provide them with new experiences:

(a) Visits to new places._____

(b) Reading, play, and sports materials._____

_____

(c) Demonstrating skills needed for different jobs._____

(d) Do you have other suggestions?_____

_____

ab. What would you like the school to do for you?

1. Let you know more about how your child is getting along._____

2. Let you know about jobs for your children.

_____

3. Let you know more about what is going on in the community:

(a) Health care._____

(b) Libraries._____

(c) Parks and swimming pools._____

(d) Schooling possibilities for yourself (night classes, adult education, occupational training)._____

(e) Job opportunities for yourself._____

_____

(f) Other._____

ac. With what school personnel have you had contact: nurse, teacher, counselor, principal? (Interviewer can underline those chosen.) Or other:_____

_____

ad. Would you like to have more contact with the school? With which person?_____

ae. Would you like to be a teacher-aide?

(a) Volunteer_____

(b) For pay_____

af. What do you think of the PTA?_____

ag. Do you feel that your child's school offers better opportunities than you have had? (In which of the five is the improvement the greatest?)

1. In subject offered:_____

2. In the qualities of teachers:_____

3. In different teaching methods:_____

4. In enforcing discipline:_____

5. Through field trips and other activities:_____

_____

(Go to Table V.)

III. Family History

aa. What adults, other than children over 18 who have been covered in Table I, are currently living in the home?_____

ab. What is each adult's family relationship, if any, to the children?_____

ac. What is each adult's age?_____

ad. Where was each adult born? (Give name of state for U.S., name of country for non-U.S.)_____

ae. How long has each adult lived in San Jose?_____

af. Where did each adult live before coming to San Jose? (Give name of state for U.S., name of country for non-U.S.)_____

ag. Have you been married before? If yes, when did your present husband join the family?_____

ah. When did the other adults join this family?_____

ai. Where did each adult attend school?_____

aj. What grade in school or year in college did each adult complete?_____

(You have now completed Table V.)

ak. Do you make trips away from San Jose?_____

1. For family visits?_____

2. Where?_____
(city, state for U.S., country for non-U.S.)

3. How many times in the last two years?_____

4. How long do you usually stay?

(a) A week._____

(b) A month._____

(c) More than a month._____

5. If you visit when school is in session, do the children go with you?_____

al. With whom would you be inclined to discuss family problems?

1. Friend._____

2. Teacher._____

3. Social Worker._____

4. Doctor._____

5. Priest._____

6. Minister._____

7. Other._____

IV. Language Pattern

aa. What language do you usually speak with your children? _____

ab. Do they usually answer you in the same language?

_____

ac. What language do you usually speak with other adults in the home?

1. Your husband. _____

2. Other adults. _____

ad. If you speak more than one language, how did you learn your second language?

1. Night school. _____

2. Talking to other people. _____

3. Other ways. _____

ae. Does any other adult speak more than one language? (Give name or relationship.) _____

af. Is your husband required to speak English on the job? _____

ag. Do you read more than one language? How did you learn the second language?

1. Night school. _____

2. By yourself. _____

3. Other. _____

ah. What do you like to read?

1. Magazines. _____

2. Newspapers. _____

3. Books. _____

ai. Do you have a library card? _____

aj. Which other members of the household have library cards? _____

V. Economic Background

aa. Would you tell me the names and occupations of each adult in the house?

Name _____ Occupation _____

Name _____ Occupation _____

Name _____ Occupation _____

Name _____ Occupation _____

ab. Would you tell me whether your children are or would have all been eligible for Head Start programs (Interviewer will use OEO schedule, indicating the appropriate line for family size.)

_____

ac. When you looked at this chart, did you include in your income any Public Assistance or Social Security benefits? _____

ad. If you did, would you exclude these from your calculations and tell me whether this would change the Head Start eligibility? _____

ae. Do you feel that any adult in the house ever has been turned down for a job because of:

1. A membership in a minority group? _____

2. Language difficulties? _____

af. Did this take place in San Jose or in another place? _____

ag. Are you planning to move to another area? _____

1. The place of your birth. _____ (state for U.S., country for non-U.S.)

2. Where other family members live. _____ (state for U.S., country for non-U.S.)

3. Where your husband might find other work.

_____ (state for U.S., country for non-U.S.)

4. Would you move before or after the children finish schooling? _____

_____

5. Do you send money to help members of the family not living with you? _____

_____

INTERVIEWER'S OBSERVATION SCHEDULE

I. Language Pattern of Home

a. In what language did you conduct the interview? _____

b. Quality of grammar No mistakes _____ Many mistakes

c. Vocabulary Extensive _____ Monosyllabic

d. If interview was conducted in Spanish, was there evidence of some knowledge of English?

None _____ Fair amount _____

II. Attitude of Respondent

a. Were questions answered readily? _____

b. Were the overall responses monosyllabic or quite verbal? _____

_____

c. Was information volunteered? _____

In answer to what questions? _____

_____

d. What questions caused hesitations? _____

_____

e. What questions caused uneasiness or belligerence? _____

_____

III. Other comments and Observations

Table I

CHILDREN LIVING AT HOME

Name	Grade	Age	Sex	For Children not in Washington School: Name of School	Children not in School		Preschool Exp.		Type of Job Held		For Children Who have not Always Lived with Respondent: Origin—If U.S. give State; if Outside U.S., give Country Date of joining Family
					Grade Completed	Date of School Departure	School Name	Attendance Dates	Those in School	Those Not in School	
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											

Name _____

Table IIa

MOTHER'S ASPIRATION FOR BOY

1.	Automobile mechanic	No	_____	Yes
2.	Farmer with own farm	No	_____	Yes
3.	Construction worker	No	_____	Yes
4.	Officer in armed forces	No	_____	Yes
5.	Enlisted man in armed forces	No	_____	Yes
6.	Doctor (physician)	No	_____	Yes
7.	Priest or minister	No	_____	Yes
8.	Farm laborer	No	_____	Yes
9.	Lawyer	No	_____	Yes
10.	Other	No	_____	Yes

Name _____

Table IIb

MOTHER'S ASPIRATION FOR GIRL

1.	Nurse's aide	No	_____	Yes
2.	Secretary	No	_____	Yes
3.	Housewife	No	_____	Yes
4.	Librarian	No	_____	Yes
5.	Dental technician	No	_____	Yes
6.	Teacher	No	_____	Yes
7.	Social worker	No	_____	Yes
8.	Cannery worker	No	_____	Yes
9.	Children's doctor	No	_____	Yes
10.	Other	No	_____	Yes

Table IIIa

COMMUNITY'S RESPECT FOR GIVEN MALE JOBS

1.	Automobile mechanic	Least	_____	Most
2.	Farmer with own farm	Least	_____	Most
3.	Construction worker	Least	_____	Most
4.	Officer in armed forces	Least	_____	Most
5.	Enlisted man in armed forces	Least	_____	Most
6.	Doctor (physician)	Least	_____	Most
7.	Priest or minister	Least	_____	Most
8.	Farm laborer	Least	_____	Most
9.	Lawyer	Least	_____	Most
10.	Other	Least	_____	Most

Table IIIb

COMMUNITY'S RESPECT FOR GIVEN FEMALE JOBS

1.	Nurse's aide	Least	_____	Most
2.	Secretary	Least	_____	Most
3.	Housewife	Least	_____	Most
4.	Librarian	Least	_____	Most
5.	Dental technician	Least	_____	Most
6.	Teacher	Least	_____	Most
7.	Social worker	Least	_____	Most
8.	Cannery worker	Least	_____	Most
9.	Children's doctor	Least	_____	Most
10.	Other	Least	_____	Most

Table IV

CHILDREN NOT LIVING AT HOME

Name	Age	Sex	School Attended, if in San Jose	Check if Married	Date of Departure from Home	If Working, Type of Job Held	Place of Birth: State in U.S., or Name of Foreign Country
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							

Table V

ADULTS IN THE HOME

	Names and/or Relationship	Age	Sex	Where Born	How Long in San Jose	Previous Residence Before Coming to San Jose	Year Adult Joined Family	Where Attended School	Grade Completed
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									

Appendix B

THE EVALUATIVE INSTRUMENTS

STUDENT MASTER FILE DATA (SP 1005)

DATE _____ SCHOOL _____

STUDENT NO. _____ SCH. CODE _____ GRADE LEV. _____

CHECK ONE: NEW _____ (0) CHANGE _____ (1) DELETE _____ (2)

CARD 1

STUDENT NAME _____
Last First Mi.

DATE OF BIRTH _____ SEX _____ BIRTH VERIF. _____

SIB STATUS _____ of _____ ETHNIC BACKGROUND _____

TEACHER OR COUNSELOR: NO. _____ NAME _____

DISTRICT OF RESIDENCE _____ INSTRUCTIONAL PROG. _____

CARD 2

STUDENT FORMER NAME _____

MAILING ADDRESS _____
Street City Zip

CARD 3

PHONE _____

PARENT OR GUARDIAN _____ REL. CODE ___
Mr., Mrs., etc. First Last

STUDENT BIRTHPLACE _____

CARD 4

FATHER INFO: FIRST NAME _____ OCCUPATION _____

ED. LEV. _____ MARITAL STATUS _____ LIVING? _____

MOTHER INFO: FIRST NAME _____ OCCUPATION _____

ED. LEV. _____ MARITAL STATUS _____ LIVING? _____

CARD 5

LAST SCHOOL ATTENDED _____

CITY & STATE _____ DATE LEFT _____

CARD 6

TRANSFER TO _____
School name or other destination.

_____
City State

DATE TRANSFERRED OUT _____ CODE _____ REASON _____

DATE RETURNED _____ CODE _____

PARENT QUESTIONNAIRE

Data to be picked up by teacher

School_____ Date:_____

Student Name_____ M_F_ Interviewer_____

Student Number_____ Location of Interview

Parent or Guardian School__House__Other___

Grade: PS K 1 2 3 4 5 6
__ _ _ _ _ _ _ _

---

1. What do you expect from the school for your child?
2. Does your child like school? What particularly____?
3. Do you think your child will finish high school?
4. Do you think your child will go go college?
5. What kind of a job would you like to see him get when he is grown up?
6. Has the school helped you to do more things with your child?
7. Has the school helped your child in getting along with people?
8. Have you been encouraged to participate in school activities?
9. Are you in any way active in the school?
10. Do you like your child's school?
11. Would you like to know more about your child's school?
12. Does your child get along well with other students in school?
13. Do you like your child's friends?
14. Have you felt free to talk to the school nurse about any health problems your child may have had?

To be filled out by teacher during parent interview.

15. Interviewer's Comments

_____

_____

_____

Title I Form A

GOAL CARD FOR PRE KINDERGARTEN

TEACHERS NAME_____

STUDENT NAME_____

School Number_____ (1-3)
Teacher Number_____ (4-5)
Student Number_____ (6-13)
Date of Test_____ (14-18)

Tested Qualities	Circle Appropriate Response			
A. Physical Coordination:	Poor Performance	Acceptable Performance	Exceptional Performance	Card 1 Column
1. Can throw a large ball_____	1	2	3	(19)
2. Can bounce a ball_____	1	2	3	(20)
3. Can walk a balance board_____	1	2	3	(21)
4. Can jump rope_____	1	2	3	(22)
5. Can pedal a tricycle_____	1	2	3	(23)
6. Can string beads_____	1	2	3	(24)
B. Relationship of People and Things:	Right	Wrong		
Ask child to touch his: (first choice taken)				
7. eyes_____	1	2		(25)
8. nose_____	1	2		(26)
9. head_____	1	2		(27)
10. ear_____	1	2		(28)
11. neck_____	1	2		(29)
12. mouth_____	1	2		(30)
13. arm_____	1	2		(31)
14. leg_____	1	2		(32)
15. hand_____	1	2		(33)
16. finger_____	1	2		(34)
17. hair_____	1	2		(35)
18. foot_____	1	2		(36)
19. knee_____	1	2		(37)

	Right	Wrong	Card 1 Column
Ask child to point to picture of:			
20. mother	1	2	(38)
21. sister	1	2	(39)
22. father	1	2	(40)
23. brother	1	2	(41)
24. doll baby	1	2	(42)
Ask child to point to the:			
25. fireman	1	2	(43)
26. nurse	1	2	(44)
27. farmer	1	2	(45)
Ask child to point to the:			
28. mailman	1	2	(46)
29. policeman	1	2	(47)
30. doctor	1	2	(48)
Ask child to point to the:			
31. moon	1	2	(49)
32. stars	1	2	(50)
33. sun	1	2	(51)
Ask child to point to the:			
34. rain	1	2	(52)
35. snow	1	2	(53)
36. clouds	1	2	(54)
Ask child to point to the:			
37. grapes	1	2	(55)
38. banana	1	2	(56)
39. apple	1	2	(57)

	Right	Wrong	Card 1 Column
Ask child to point to the:			
40. potato_____	1	2	(58)
41. carrot_____	1	2	(59)
42. Peas_____	1	2	(60)
Ask child to point to the:			
43. rabbit_____	1	2	(61)
44. fish_____	1	2	(62)
45. turtle_____	1	2	(63)
Ask child to point to the:			
46. squirrel_____	1	2	(64)
47. lion_____	1	2	(65)
48. elephant_____	1	2	(66)
Ask child to point to the:			
49. doll_____	1	2	(67)
50. ball_____	1	2	(68)
51. top_____	1	2	(69)
		Data Code 13 & 14	(79-80)

	Right	Wrong	Card 2 Column
C. Auditory Discrimination:			
Look at two pictures in row_____ See the pictures of the_____and_____ Ask child to point to the:			
52. mouse_____	1	2	(19)
53. bear_____	1	2	(20)
54. tomato_____	1	2	(21)
55. kitten_____	1	2	(22)

	Right	Wrong	Card 2 Column
D. Concepts of size:			
Ask child to tell (have three objects)			
56. biggest_____	1	2	(23)
57. smallest_____	1	2	(24)
58. lightest_____	1	2	(25)
59. heaviest_____	1	2	(26)
E. Concepts of color			
Ask child to tell color (have three color cards)			
60. red_____	1	2	(27)
61. blue_____	1	2	(28)
62. yellow_____	1	2	(29)
F. Manipulation of materials:			
63. Ask child to put a five piece puzzle together_____	1	2	(30)
G. Arithmetic Skills:			
Ask child to count from a group of objects			
64. 1-5_____	1	2	(31)
65. 6-10_____	1	2	(32)
Ask child to count by rote			
66. 1-20_____	1	2	(33)
H. Concepts of location and space:			
Ask child to point to the:			
67. squirrel that is under the board_____	1	2	(34)
68. airplane that is in the air_____	1	2	(35)
69. bird that is out of the cage_____	1	2	(36)
70. boxes that are closed_____	1	2	(37)

	Right	Wrong	Card 2 Column
I. Concepts of shape:			
Ask child to point to the thing that is the same shape as this one			
71. △ _____	1	2	(38)
72. ○ _____	1	2	(39)
73. ▭ _____	1	2	(40)
J. Listening Skills:			
Ask child to point to the picture of:			
74. the boy with his dog_____	1	2	(41)
75. the girl who is putting the ball into the box_____	1	2	(42)
76. the truck that is stopped at the traffic light_____	1	2	(43)

	Observed Qualities	Seldom	Occasionally	Usually	Frequently	Always	Card 2 Column
K.	77. Is able to follow simple directions	1	2	3	4	5	(44)
	78. Asks appropriate questions	1	2	3	4	5	(45)
	79. Listens attentively and responds	1	2	3	4	5	(46)
	80. Reasonable attention span	1	2	3	4	5	(47)
L.	Language Ability:						
	81. Speaks clearly in simple senteces	1	2	3	4	5	(48)
	82. Communicates his ideas	1	2	3	4	5	(49)
	83. Takes part in discussions	1	2	3	4	5	(50)
	84. Enunciates and pronounces clearly	1	2	3	4	5	(51)
	85. Talks about things he sees	1	2	3	4	5	(52)
	86. Talks about things he does	1	2	3	4	5	(53)
M.	Social Awareness:						
	87. Answers to his name	1	2	3	4	5	(54)
	88. Calls others by name	1	2	3	4	5	(55)
	89. Knows his belongings	1	2	3	4	5	(56)
	90. Likes to help others	1	2	3	4	5	(57)
	91. Can dress himself	1	2	3	4	5	(58)
	92. He is liked by his peers	1	2	3	4	5	(59)
	93. He is a leader	1	2	3	4	5	(60)
	94. He is a follower	1	2	3	4	5	(61)
	95. He is a "loner"	1	2	3	4	5	(62)
	96. He waits for his turn	1	2	3	4	5	(63)

	Seldom	Occasionally	Usually	Frequently	Always	Card 2 Column
97. He hesitates to participate	1	2	3	4	5	(64)
98. He shares toys and crayons	1	2	3	4	5	(65)
99. He assumes responsibility	1	2	3	4	5	(66)

Data Code 13 & 14 (79-80)

SOCIAL BEHAVIOR SKILLS CHECKLIST

TEACHER NAME _____

STUDENT NAME _____

SCHOOL NUMBER _____ (1-3)
A.M. 1 P.M. 2 _____ (4)
TEACHER NUMBER _____ (5-7)
STUDENT NUMBER _____ (8-15)
DATE _____ (16-21)
(Mo/Day/Year)

PLEASE CIRCLE APPROPRIATE RESPONSE CODE FOR EACH ITEM.

	Never	Seldom	Occasionally	Usually	Frequently	Always	Card Column
1. Relationship to adults:							
a. Cries	1	2	3	4	5	6	(22)
b. Seeks to be near adult	1	2	3	4	5	6	(23)
c. Avoids or withdraws from adult	1	2	3	4	5	6	(24)
d. Fails to respond to adult	1	2	3	4	5	6	(25)
2. Play habits:							
a. Watches	1	2	3	4	5	6	(26)
b. Parallel play	1	2	3	4	5	6	(27)
c. Plays by himself	1	2	3	4	5	6	(28)
d. Cooperative play	1	2	3	4	5	6	(29)
e. Initiates play activities	1	2	3	4	5	6	(30)
f. Hyperactive	1	2	3	4	5	6	(31)
3. Personal health:							
a. Takes care of own toilet needs i.e. washes hands	1	2	3	4	5	6	(32)
b. Practices personal health habits	1	2	3	4	5	6	(33)
4. Use of language:							
a. Makes his wants known through speech	1	2	3	4	5	6	(34)
b. Converses with other children	1	2	3	4	5	6	(35)
c. Identifies objects by name	1	2	3	4	5	6	(36)
5. Responses to social situations:							
a. Follows directions	1	2	3	4	5	6	(37)
b. Is shy and retiring	1	2	3	4	5	6	(38)
c. Seeks help	1	2	3	4	5	6	(39)
d. Is aggressive	1	2	3	4	5	6	(40)
6. Shows interest in:							
a. Stories and poems	1	2	3	4	5	6	(41)
b. Visual aids	1	2	3	4	5	6	(42)
c. Classroom environment	1	2	3	4	5	6	(43)
7. Uses manipulative materials:							
a. Paint	1	2	3	4	5	6	(44)
b. Clay	1	2	3	4	5	6	(45)
c. Blocks	1	2	3	4	5	6	(46)
d. Puzzles	1	2	3	4	5	6	(47)
e. Crayons	1	2	3	4	5	6	(48)
f. Paste	1	2	3	4	5	6	(49)
g. Scissors	1	2	3	4	5	6	(50)

8. Knows his name: YES 1 NO 2 (51)

DATA TYPE PRE 01 POST 02 (79-80)

TEACHER/AIDE TASK REPORT

SCHOOL NUMBER_____ (1-3)
DATE_____ (4-9)
(Mo/Day/Year)

How often did you perform the following tasks?
(Please circle one for each item)

	Never	Seldom	Usually	Most of the time	Always	
1. Check attendance.	1	2	3	4	5	(10)
2. Collect money.	1	2	3	4	5	(11)
3. Fill out forms that teacher would normally do.	1	2	3	4	5	(12)
4. Assist with children's arrival and dismissal.	1	2	3	4	5	(13)
5. Assist with restroom and hand washing.	1	2	3	4	5	(14)
6. Prepare lunch.	1	2	3	4	5	(15)
7. Pin on lunch envelopes and notes.	1	2	3	4	5	(16)
8. Prepare paint and clay.	1	2	3	4	5	(17)
9. Clean easel.	1	2	3	4	5	(18)
10. Clean clay tables.	1	2	3	4	5	(19)
11. Cut paper.	1	2	3	4	5	(20)
12. Clean up after work period.	1	2	3	4	5	(21)
13. Assist in care of bulletin board.	1	2	3	4	5	(22)
14. Take part of class for outdoor play while teacher works with group indoors.	1	2	3	4	5	(23)
15. Assist during outdoor play periods with entire class and teacher.	1	2	3	4	5	(24)
16. Help individaul pupils during play time with puzzles, games, etc.	1	2	3	4	5	(25)
17. Read to individual or small groups.	1	2	3	4	5	(26)
18. Help individual pupils who have difficulty handling scissors, paste, crayons, etc., during group work.	1	2	3	4	5	(27)
19. Go on excursions with teacher and class.	1	2	3	4	5	(28)
20. Assist in special school program.	1	2	3	4	5	(29)
21. Duplicate work sheets, notes to parents, etc.	1	2	3	4	5	(30)
22. Set up projectors, tape recorders, phonograph, etc.	1	2	3	4	5	(31)
23. Assist classroom teacher when a problem situation arises.	1	2	3	4	5	(32)
24. Leave room for official errands.	1	2	3	4	5	(33)
25. Go to child's home for permission slip signature.	1	2	3	4	5	(34)
26. Play games - Tell or read stories when teacher has special assignment which takes her from her class.	1	2	3	4	5	(35)
27. Take pupils home in emergency situations.	1	2	3	4	5	(36)
28. Attend child study group.	1	2	3	4	5	(37)
29. Attend P.T.A. meeting.	1	2	3	4	5	(38)

CARD CODE 08 (79-80)

1. Give one suggestion for improving your work in the classroom.

2. What other duties are you doing that have not been listed?

3. What activity would you have liked to have done but didn't get to do? (use reverse side)

TEACHER/AIDE TASK REPORT

SCHOOL NUMBER _____ (1-3)
DATE _____ (4-9)
(Mo/Day/Year)

How often did your aide perform the following tasks? (Please circle one for each item)	Never	Seldom	Usually	Most of the time	Always	Card Column
1. Check attendance.	1	2	3	4	5	(10)
2. Collect money.	1	2	3	4	5	(11)
3. Fill out forms that teacher would normally do.	1	2	3	4	5	(12)
4. Assist with children's arrival and dismissal.	1	2	3	4	5	(13)
5. Assist with restroom and hand washing.	1	2	3	4	5	(14)
6. Prepare lunch.	1	2	3	4	5	(15)
7. Pin on lunch envelopes and notes.	1	2	3	4	5	(16)
8. Prepare paint and clay.	1	2	3	4	5	(17)
9. Clean easel.	1	2	3	4	5	(18)
10. Clean clay tables.	1	2	3	4	5	(19)
11. Cut paper.	1	2	3	4	5	(20)
12. Clean up after work period.	1	2	3	4	5	(21)
13. Assist in care of bulletin board.	1	2	3	4	5	(22)
14. Take part of class for outdoor play while teacher works with group indoors.	1	2	3	4	5	(23)
15. Assist during outdoor play periods with entire class and teacher.	1	2	3	4	5	(24)
16. Help individual pupils during play time with puzzles, games, etc.	1	2	3	4	5	(25)
17. Read to individual or small groups.	1	2	3	4	5	(26)
18. Help individual pupils who have difficulty handling scissors, paste, crayons, etc., during group work.	1	2	3	4	5	(27)
19. Go on excursions with teacher and class.	1	2	3	4	5	(28)
20. Assist in special school program.	1	2	3	4	5	(29)
21. Duplicate work sheets, notes to parents, etc.	1	2	3	4	5	(30)
22. Set up projectors, tape recorders, phonograph, etc.	1	2	3	4	5	(31)
23. Assist classroom teacher when a problem situation arises.	1	2	3	4	5	(32)
24. Leave room for official errands.	1	2	3	4	5	(33)
25. Go to child's home for permission slip signature.	1	2	3	4	5	(34)
26. Play games - Tell or read stories when teacher has special assignment which takes her from her class.	1	2	3	4	5	(35)
27. Take pupils home in emergency situations.	1	2	3	4	5	(36)
28. Attend child study group.	1	2	3	4	5	(37)
29. Attend P.T.A. meeting.	1	2	3	4	5	(38)

CARD CODE 07 (79-80)

1. Give one suggestion for improving your aides work in the classroom.

2. What other duties is your aide doing that have not been listed?

3. What activity would you have liked her to do but she didn't get to do?
(Use reverse side)

TEACHER RATING OF AIDE

Please check (✓) either Yes or No in the appropriate box immediately following each question below. Please respond to every item. If your response is Yes to any of the items, place a check (✓) mark in one of the boxes under the YES column to indicate the manner in which your Aide performed these duties.

School_____ School Number _____ (1-3)

Teacher's Name_____ Teacher Number_____ (4-6)

Has Your Aide:	NO	YES			Card Column
		Occa-sionally	Fre-quently	Always	
1. Been able to interact positively with children?	0	1	2	3	(7)
2. Willingly accepted all assignments?	0	1	2	3	(8)
3. Accepted suggestions and guidance freely?	0	1	2	3	(9)
4. Shown interest in their work?	0	1	2	3	(10)
5. Exhibited on-the-job growth?	0	1	2	3	(11)
6. Shown initiative in the performance of routine duties?	0	1	2	3	(12)
7. Been Punctual and maintained good attendance?	0	1	2	3	(13)

SCHOOL_____

Name of person filling out form_____

Data Type 12 (79-80)

EVALUATION OF IN-SERVICE

NAME: _____ DATE: _____

Area of service (check one)

Teacher ___
Teacher Aide ___
Counselor ___

Grade level of teaching (check one)

P.S. ___
K-3 ___
4-6 ___
7-9 ___
10-12 ___

Other _____

Event: _____

Date _____

Location: _____

1. The ideas and information which were presented were: (check one)
   Generally new to me; __ Some ideas were new, some I already had; ___
   Few ideas were new to me; _____ Nothing was new to me; _____
2. From which part of the program did you gain the most useful information or help?
   Speaker _____ Discussion Group ____ Other _____
3. The information and ideas presented were: (check one)
   Very helpful ____ Helpful ____ Of some help ____ Of little help ____
   Of no help _____
4. What one idea or item of information did you gain from this meeting?

   _____
   _____
   _____

5. Have you suggestions on how this meeting might have been improved?

   _____
   _____
   _____

6. Have you suggestions for topics or speakers for future in-service meetings?

   _____
   _____
   _____

Title I Form F

PARENTS COMMENTS ON PRESCHOOL CLASS

San Jose Unified School District
1331 Preschool Education Project

1. When your child joined the preschool class, what did you hope he would get out of it?

2. What did your child gain from the class?

3. What do you think he needs the most help in?

4. Did he change in any of the following ways:

	Good Before	Better Now	Not Improved
1. Being at ease when away from mother			
2. Feeling important and self-confident			
3. Doing things for himself (independence)			
4. More skillful in use of his body (climbing, balancing)			
5. More skillful in use of his hands (carrying things, drawing)			
6. Learning to talk instead of hit			
7. Willingness to take turns and share			
8. Wants to talk and ask about things, being curious			
9. Controlling his emotions and feelings			
10. Respecting the rights of others			
11. Recognizing some colors and differences between objects (large, small, round, flat)			
12. Enjoyment of books and stories			
13. Liking for new foods			
14. Getting along with other children			
15. Getting along in the family			
16. Speaking more English			
17. Listens more carefully and can follow simple directions			

5. What did you enjoy most about your part in the class?

6. Did you get any new ideas from the class or the teacher that you find helpful?

7. How could the class be improved another year?

COMENTARIO PRE-ESCOLAR PARA PADRES

San Jose Unified School District - Preschool 1331

ESCUELA _____

I. ¿Cuando su niño empezó la clase pre-escolar, qué resultado esperaba usted?

II. ¿Qué resultado mas significante ha notado usted? (¿Qué ha aprendido su niño en esta clase?)

III. ¿En qué cree usted que su niño necesita mas ayuda?

IV. ¿Ha cambiado su niño en una de las siguientes maneras? (Favor de marcar (x) la palabra que mejor indica el cambio)

		no tenéa problemas anteriormente	ha mejorado	no ha mejorado
1.	Está contento lejos de su mamá			
2.	Es independiente (hace cosas por si mismo)			
3.	Se siente importante y seguro de si mismo			
4.	Usa sus manos con abilidad (cargando cosas, dibujo)			
5.	Tiene abilidad en el uso de su cuerpo pará trepar, balancear, etc.			
6.	Pregunta por cosas en lugar de pegar			
7.	Tiene la abilidad de esperar su turno y de compartir con los otros			
8.	Controla sus emociones y sentimientos			
9.	Respeta los derechos ajenos			
10.	Reconoce los colores y la diferencia de unos objetos a otros (grande, chico, redondo, plano)			
11.	Goza los libros y las historias infantiles			
12.	Le gusta probar diferentes comidas			
13.	Se lleva bien con los demas niños			
14.	Se illeva bien con la familia			
15.	Escucha atentamente y sigue instrucciones fáciles			

V. ¿Qué es lo que mas ha gozado usted de esta clase?

VI. ¿Obtuvo usted algunas nuevas ideas de la clase o de la maestra que le pueda servir ahora o en el futuro?

VII. ¿Quiere usted sugerir algo para mejorar la clase el año que viene?

ATTITUDE TOWARDS SELF AND SCHOOL (GRADES 1-3)

Teacher Name_____

Student Name_____

School Number_____ (1-3)
Grade 1 2 3 (circle one) (4)
Teacher Number_____ (5-7)
Student Number_____ (8-15)
Date_____ (15-21)
(Mo/Day/Year)

MARK THE NOSE OF THE FACES YOU CHOOSE — Card Column

1. How do you feel about growing up and getting older? (22)

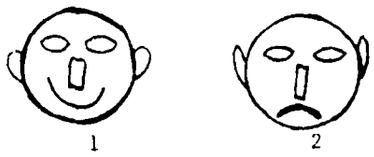
2. How do you feel when it's time to get up and go to school? (23)

3. How do you feel when you have a chance to learn something new? (24)

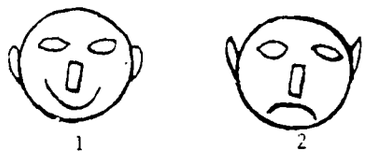
4. How do you feel when you think about going home after school each day? (25)

5. How do you feel when the teacher tells you to get out your books and begin to work? (26)

6. How do you feel when you think about how fast you learn? (27)



7. How do you feel when the teacher says that she is going to give a test? (28)



8. How do you feel about how healthy and strong you are? (29)

Card Column

9. How do you feel about how well you read? (30)

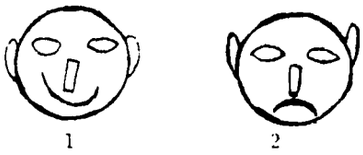
10. How do you feel about the way the neighbors treat you? (31)

11. How do you feel about how you look and the kind of face you have? (32)

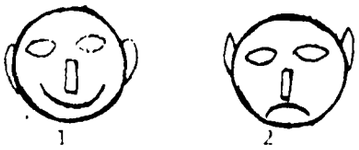
12. How do you feel about the way the other children treat you? (33)

13. How do you feel when you get your report card and take it home? (34)

14. How do you feel about how much you know? (35)

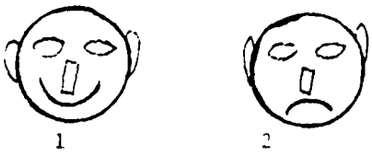


15. How do you feel about how well you do arithmetic? (36)



16. How do you feel when you think about next year in school? (37)

17. How do you feel about the way your teacher treats you? (38)



18. How do you feel when the teacher says that it's your turn to read out loud before the group? (39)

Data Type 05 06 (79-80)

STUDENT SURVEY

Teacher Name _____ School Number _____ (1-3)

Student Name _____ Grade 4 5 6 7 8 9 (circle one) (4)

Teacher Number _____ (5-7)

Student Number _____ (8-15)

Date _____ (16-21)
(Mo./Day/Year)

	Circle Appropriate Response Yes	No	Card Column
1. Do you like school?	1	2	(22)
2. Do you need more help from your teacher?	1	2	(23)
3. Do you read books from a library?	1	2	(24)
4. Do you like your school?	1	2	(25)
5. Do you enjoy field trips?	1	2	(26)
6. Do field trips help you in schoolwork?	1	2	(27)
7. Do you get along better outside of school than in school?	1	2	(28)
8. Would you like to spend more time at school?	1	2	(29)
9. Are you satisfied with the grades on your report card?	1	2	(30)
10. Do you worry about your schoolwork?	1	2	(31)
11. Are you doing better in your schoolwork this year?	1	2	(32)
12. Do you look forward to coming to school each morning?	1	2	(33)
13. Do you talk about school at home?	1	2	(34)
14. Has someone from home ever talked to your teachers?	1	2	(35)
15. Do you get praise at home for good schoolwork?	1	2	(36)
16. Do you think you will graduate from high school?	1	2	(37)
17. Do you hope to go to college?	1	2	(38)
18. Do you talk at home about what kind of job or career you will have after you are out of school?	1	2	(39)
19. Do you read more than is required by your schoolwork?	1	2	(40)
20. Do you think your teachers usually expect too much of you?	1	2	(41)
21. Do your teachers think you are doing well in your schoolwork?	1	2	(42)
22. Do your parents think you are doing well in your schoolwork?	1	2	(43)
23. Do you think you could do well in any school subject if you studied hard enough?	1	2	(44)
24. Are your lowest grades usually your teacher's fault?	1	2	(45)
25. Do you think you could do well in any kind of job you choose?	1	2	(46)

Pre 03 Post 04 (79-80)

ORAL LANGUAGE SKILLS

NAME _____ SCHOOL _____ 1968-69 TOTAL

NUMBER _____

1. WHAT ARE YOUR FAVORITE TV PROGRAMS AND WHY DO YOU LIKE THEM?	NO. OF PROGRAMS 0 1 2	NO. OF REASONS 0 1 2	USE OF DESCRIPTIONS 0 1 2	
2. HOW MANY BROTHERS AND SISTERS DO YOU HAVE AND WHAT DO THEY DO?	NO. OF SIBLINGS YES NO 1 0	WHAT THEY DO YES NO 1 0	Use of DESCRIPTIONS 0 1 2	
3. WHAT WOULD YOU LIKE TO CHANGE ABOUT YOUR SCHOOL?	NO. OF THINGS CHANGED OR 0 1 2 Not		Use of DESCRIPTIONS 0 1 2	
4. WHAT DID YOU LIKE ABOUT THE LAST FIELD TRIP YOU TOOK?	NAME THE TRIP YES NO 1 0	Number of ITEMS LIKED OR DISLIKED 0 1 2	Use of DESCRIPTIONS 0 1 2	
5. DO YOU LIKE ROCK AND ROLL MUSIC, WHY?	DIRECT RESPONSE YES NO 1 0	Number of REASONS 0 1 2	Use of DESCRIPTIONS 0 1 2	
			TOTAL	

STUTTERS	SOUNDS SUBSTITUTION OR OMISSIONS	ACCENT
Mild Severe	Mild Severe	Mild Severe

TITLE I

INVENTORY OF OBSERVED CHARACTERISTICS

DIRECTIONS

Following is a list of characteristics which are often attributed to children in need of compensatory education services:

Part 1. Please indicate by circling the appropriate box the proportion of children in your class who exhibit each characteristic.

Part 2. After you have done Part 1, please mark whether you consider each characteristic to be an asset in the classroom, a liability, or simply a difference in behavior which does not affect classroom performance.

Part 3. If any characteristics have been omitted from this list which you think have an important bearing on the classroom performance of this population, please list them on the sheet provided. For each characteristic listed, please indicate whether you consider it to be an asset, liability, or difference. If you care to do so, it would be helpful if you explained what the effect of these characteristics is on classroom performance.

School _____

Teacher _____

INVENTORY OF OBSERVED CHARACTERISTICS

Teacher Name _____

School Number _____ (1-3)

Teacher Number _____ (4-6)

Grade PreSch., K,1,2,3,4,5,6,7,8,9 (7)

Date _____ (8-13)
Mo./Day/year

PLEASE CIRCLE APPROPRIATE RESPONSES

Card Column

1. Learns in a physical or motoric fashion
   None 1 | A Few 2 | About ½ 3 | Many 4 | All 5 (14)
   Asset 1 | Liability 2 | Difference 3 (15)

2. Thrives on rules and order
   None 1 | A Few 2 | About ½ 3 | Many 4 | All 5 (16)
   Asset 1 | Liability 2 | Difference 3 (17)

3. Likes excitement
   None 1 | A Few 2 | About ½ 3 | Many 4 | All 5 (18)
   Asset 1 | Liability 2 | Difference 3 (19)

4. Displays Initiative
   None 1 | A Few 2 | About ½ 3 | Many 4 | All 5 (20)
   Asset 1 | Liability 2 | Difference 3 (21)

5. Attention wanders when adults are talking
   None 1 | A Few 2 | About ½ 3 | Many 4 | All 5 (22)
   Asset 1 | Liability 2 | Difference 3 (23)

6. Proud
   None 1 | A Few 2 | About ½ 3 | Many 4 | All 5 (24)
   Asset 1 | Liability 2 | Difference 3 (25)

7. Oriented toward the practical and realistic
   None 1 | A Few 2 | About ½ 3 | Many 4 | All 5 (26)
   Asset 1 | Liability 2 | Difference 3 (27)

8. Rarely volunteers
   None 1 | A Few 2 | About ½ 3 | Many 4 | All 5 (28)
   Asset 1 | Liability 2 | Difference 3 (29)

9. Does not know how to take tests
   None 1 | A Few 2 | About ½ 3 | Many 4 | All 5 (30)
   Asset 1 | Liability 2 | Difference 3 (31)

10. Polite
   None 1 | A Few 2 | About ½ 3 | Many 4 | All 5 (32)
   Asset 1 | Liability 2 | Difference 3 (33)

11. Quick in judging peoples' facial expressions
   None 1 | A Few 2 | About ½ 3 | Many 4 | All 5 (34)
   Asset 1 | Liability 2 | Difference 3 (35)

PLEASE CIRCLE APPROPRIATE RESPONSES

							Card Column
12.	Superstitious	None 1	A Few 2	About ½ 3	Many 4	All 5	(36)
		Asset 1	Liability 2	Difference 3			(37)
13.	Lacks flexibility in mental sets	None 1	A Few 2	About ½ 3	Many 4	All 5	(38)
		Asset 1	Liability 2	Difference 3			(39)
14.	Passive	None 1	A Few 2	About ½ 3	Many 4	All 5	(40)
		Asset 1	Liability 2	Difference 3			(41)
15.	Style is slow and cautious	None 1	A Few 2	About ½ 3	Many 4	All 5	(42)
		Asset 1	Liability 2	Difference 3			(43)
16.	Avoids confrontation by agreeing readily	None 1	A Few 2	About ½ 3	Many 4	All 5	(44)
		Asset 1	Liability 2	Difference 3			(45)
17.	Self-reliant and independent	None 1	A Few 2	About ½ 3	Many 4	All 5	(46)
		Asset 1	Liability 2	Difference 3			(47)
18.	Tends to act out feelings	None 1	A Few 2	About ½ 3	Many 4	All 5	(48)
		Asset 1	Liability 2	Difference 3			(49)
19.	Thinking tends to be concrete	None 1	A Few 2	About ½ 3	Many 4	All 5	(50)
		Asset 1	Liability 2	Difference 3			(51)
20.	Impulsive	None 1	A Few 2	About ½ 3	Many 4	All 5	(52)
		Asset 1	Liability 2	Difference 3			(53)
21.	Suspicious of new ideas	None 1	A Few 2	About ½ 3	Many 4	All 5	(54)
		Asset 1	Liability 2	Difference 3			(55)
22.	Tendency to daydream	None 1	A Few 2	About ½ 3	Many 4	All 5	(56)
		Asset 1	Liability 2	Difference 3			(57)
23.	Confused by permissiveness	None 1	A Few 2	About ½ 3	Many 4	All 5	(58)
		Asset 1	Liability 2	Difference 3			(59)
24.	Responds to respect rather than "love" from the teacher	None 1	A Few 2	About ½ 3	Many 4	All 5	(60)
		Asset 1	Liability 2	Difference 3			(61)

CIRCLE APPROPRIATE RESPONSES

							Card Column
25.	Required many examples before seeing a point or arriving at a conclusion	None 1	A Few 2	About ½ 3	Many 4	All 5	(62)
		Asset 1	Liability 2	Difference 3			(63)
26.	Agressive	None 1	A Few 2	About ½ 3	Many 4	All 5	(64)
		Asset 1	Liability 2	Difference 3			(65)
27.	Not given to self-blame or self-criticism	None 1	A Few 2	About ½ 3	Many 4	All 5	(66)
		Asset 1	Liability 2	Difference 3			(67)
28.	Does not know how to relate to the teacher	None 1	A Few 2	About ½ 3	Many 4	All 5	(68)
		Asset 1	Liability 2	Difference 3			(69)
29.	Shows great responsiveness to new experiences	None 1	A Few 2	About ½ 3	Many 4	All 5	(70)
		Asset 1	Liability 2	Difference 3			(71)
30.	Is not competitive	None 1	A Few 2	About ½ 3	Many 4	All 5	(72)
		Asset 1	Liability 2	Difference 3			(73)
31.	Intolerant	None 1	A Few 2	About ½ 3	Many 4	All 5	(74)
		Asset 1	Liability 2	Difference 3			(75)
32.	Unable to extract from the particular the characteristics of the general	None 1	A Few 2	About ½ 3	Many 4	All 5	(76)
		Asset 1	Liability 2	Difference 3			(77)

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Card Two

33.	Physical and visual rather than aural	None 1	A Few 2	About ½ 3	Many 4	All 5	(14)
		Asset 1	Liability 2	Difference 3			(15)
34.	Logic tends to be inductive rather than deductive	None 1	A Few 2	About ½ 3	Many 4	All 5	(16)
		Asset 1	Liability 2	Difference 3			(17)
35.	Does not respond well to being challenged	None 1	A Few 2	About ½ 3	Many 4	All 5	(18)
		Asset 1	Liability 2	Difference 3			(19)
36.	Has patience and resolute courage	None 1	A Few 2	About ½ 3	Many 4	All 5	(20)
		Asset 1	Liability 2	Difference 3			(21)

37.	Easy to involve through role-playing	None 1	A Few 2	About ½ 3	Many 4	All 5	(22)
		Asset 1	Liability 2	Difference 3			(23)
38.	Once involved, works tenaciously for long stretches.	None 1	A Few 2	About ½ 3	Many 4	All 5	(24)
		Asset 1	Liability 2	Difference 3			(25)
39.	Does not know how to ask and answer questions	None 1	A Few 2	About ½ 3	Many 4	All 5	(26)
		Asset 1	Liability 2	Difference 3			(27)
40.	Responds to teacher's kindness, personal attention and assistance	None 1	A Few 2	About ½ 3	Many 4	All 5	(28)
		Asset 1	Liability 2	Difference 3			(29)
41.	Slow, Careful, patient, persevering	None 1	A Few 2	About ½ 3	Many 4	All 5	(30)
		Asset 1	Liability 2	Difference 3			(31)
42.		None 1	A Few 2	About ½ 3	Many 4	All 5	(32)
		Asset 1	Liability 2	Difference 3			(33)
43.		None 1	A Few 2	About ½ 3	Many 4	All 5	(34)
		Asset 1	Liability 2	Difference 3			(35)
44.		None 1	A Few 2	About ½ 3	Many 4	All 5	(36)
		Asset 1	Liability 2	Difference 3			(37)
45.		None 1	A Few 2	About ½ 3	Many 4	All 5	(38)
		Asset 1	Liability 2	Difference 3			(39)
46.		None 1	A Few 2	About ½ 3	Many 4	All 5	(40)
		Asset 1	Liability 2	Difference 3			(41)
47.		None 1	A Few 2	About ½ 3	Many 4	All 5	(42)
		Asset 1	Liability 2	Difference 3			(43)
48		None 1	A Few 2	About ½ 3	Many 4	All 5	(44)
		Asset 1	Liability 2	Difference 3			(45)

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