

COMPREHENSIVE SURVEY OF NEWHALL AND CONTIGUOUS
SCHOOL DISTRICTS

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CHAPTER I
STATEMENT OF THE PROBLEM AND THE ORGAN-
IZATION AND LOCATION OF NEWHALL AND CON-
TIGUOUS SCHOOL DISTRICTS

The aim of the chapter. The aim of this chapter is to state the problem and to explain the organization and location of Newhall, Castaic Union, Felton, Honby, New Era and Saugus School Districts, all of which are in the northern part of Los Angeles County, California, and are contiguous to one another.

Statement of the problem. In this survey a study is made of the organization and administration, teaching staff, curriculum, measurement of achievement and intelligence of the pupils, buildings and grounds, and costs in their different phases in the above named districts, all of which are independent in the elementary field, but a part of the Los Angeles City High School District. An attempt is made to make recommendations in a scientific manner for the best type of school organization for the districts studied in the survey.

The organization. Each of these six elementary school districts is a separate legal unit unto itself and is governed by its local board of trustees. Castaic Union is a union of Castaic and Live Oak Districts and is governed by a board of five members as is provided in the California School Laws relating to union school districts. Each of the other five

districts has but a three member board of school trustees, which is also provided in the California School Laws. Each school has the eight grade plan of organization.

These schools are under the supervision of the county superintendent of schools who has assigned direct supervision to a rural supervisor for all the small independent schools in the northern part of Los Angeles County. One of the assistant superintendents of schools visits each of these schools once or twice yearly in addition to frequent visits of the rural supervisor. A representative of the visual education department of the county superintendent of schools gladly goes to any of the schools when given a special request by the board of trustees, principal, or teacher to give assistance in promoting visual education in the schools. Other supervision is given in a limited way by the full time teaching principals of Newhall, Castaic Union, and Saugus Schools in their respective districts. The health department of the county offers only such service as vaccination and other forms of immunization in the schools gratis to all parents who will give written consent for the county health department to administer such service. However, all the children as well as all adults living in the county are given free chest examinations at the health centers of the county. This service can be obtained at San Fernando, one of the county's health centers. But two of the districts in the survey have health service through a district school nurse, Newhall having her services six days a month and Saugus but one. This expense is met from the funds of the dis-

tricts having such service.

Location of the schools. The six school districts in this survey lie mainly between the Ridge, the state highway over which is spoken of as the Ridge Route, and the range of mountains just north of San Fernando Valley. Newhall, the largest school in the group, has eight teachers. It is located nine miles north of San Fernando on the main line of the Southern Pacific Railroad. Saugus has two teachers and is but two miles north of Newhall. It is also on the main line of the Southern Pacific Railroad and is a junction for the Southern Pacific Line to Ventura extends out from here. Castaic Union, with three teachers, is ten miles north of Newhall on the Ridge Route where a new highway under construction extends from the present one to points north. New Era is located in Boquet Canyon, six and a half miles northeast of Newhall. Honby School is also six and a half miles northeast of Newhall on the Mint Canyon highway. Felton is five miles west of Newhall in Pico Canyon in the Standard Oil Company territory. The last three schools have but one teacher each.

The high school situation. All high school students in these elementary districts go by bus to the San Fernando High School, which is under the Los Angeles City School System. Pupils living in Castaic Union, Honby, and New Era Districts are required to leave their homes by six thirty in the morning and those living in Saugus and Newhall Districts at seven by bus for the San Fernando High School. This fact has caused many patrons in the past to express a desire

of having a high school located within the area of these six elementary school districts.

The Los Angeles City School authorities have stated it will be impossible to give these districts a high school until their enrollment in the high school is six hundred fifty. One of the members of the Los Angeles City Board of Education stated if these districts would enter the Los Angeles City Elementary District, the city board might establish a six year high school in Newhall.

Summary and conclusions. The aim of the chapter is to state the problem and to explain the organization and location of Newhall and contiguous school districts.

The problem consists of making a comprehensive survey of the various phases of these schools, all of which are independent in the elementary field, but a part of the Los Angeles City High School District. These schools are independent of each other and are governed largely by their respective boards of trustees. The county superintendent of schools, through his assistants, has direct supervision over them. Very little direct health supervision is had in any of them with the exception of Newhall and Saugus, which have the services of a part time nurse, but all have access to the county health center at San Fernando.

These school districts are located mainly between the Ridge, the state highway over which is spoken of as the Ridge Route, and the range of mountains just north of San Fernando Valley. Their faculties vary in size from one to eight members.

All high school pupils have bus transportation to the San Fernando High School, a Los Angeles City High School, and since they are required to leave home quite early each morning to attend school, many patrons have expressed a desire to have a small high school located within the area of these six elementary districts. The Los Angeles City school authorities do not approve of this until the number of high school pupils living in these districts greatly increases.

Since these districts are in common to the extent of being independent in the elementary field and a part of the Los Angeles City High School District, it seems appropriate to make a rather comprehensive survey of them all. Any scheme of reorganization would effect them all in their high school problem and possibly to a more or less extent in the elementary field.

In making this survey the writer has attempted to bring out a few facts enlightening the patrons of these districts as to the advisability of establishing a high school in Newhall or vicinity in the near future or when the population increases very greatly. Among the questions he has attempted to answer are the following:

I. The high school situation.

1. Considering the rather slow growth of these communities, at about what time in the future could Newhall or vicinity expect to have a high school, if the results of the survey should not warrant one in the near future?

II. Financial ability to pay.

1. Is a high school of approximately 150 enrollment too expensive to establish when a high school is from nine to thirty miles from every high school student in these elementary school districts?

2. How would the cost in average daily attendance in a small high school at Newhall or vicinity compare with that of Los Angeles City High School District?

III. Present school plants.

1. What elementary school buildings have been built or added to within the past five years?

2. Are the buildings well located?

3. Are the buildings meeting the present needs?

IV. Pupil progress.

1. On what basis are promotions made?

2. What has been the per cent of non-promotions in these districts during the past five years?

V. Educational and mental tests.

1. What standard tests have been given in these schools during the past year or two?

VI. Curricula.

1. Is the curriculum that could be offered in a small high school of too limited nature?

VII. Teaching staff.

1. How do teacher loads compare in these districts with teacher loads in the Los Angeles City System in outlying sections?

2. How many summers have the teachers in these six

districts attended summer schools?

3. What other preparation or traveling have these teachers had within the past five years?

VIII. Reorganization.

1. Would it be advisable to consolidate any or all of the six elementary districts for elementary purposes?

Sources of information. The following are the chief sources of information from which the data in this survey were secured:

I. Historical data.

1. Los Angeles County Library.
2. Los Angeles City Library.

II. Sources of revenue.

1. County auditor's reports.
2. Records of county superintendent of schools.

III. Current expense.

1. Records of county superintendent of schools.

IV. Evaluation of present school plants.

1. Through use of Strayer-Englehardt Score Cards for elementary and rural school buildings.

V. Pupil progress.

1. Teachers' records.

VI. Pupil achievement.

1. Through use of Stanford Achievement Tests, Form V, Primary and Advanced.

VII. Mental ability tests.

1. Haggerty Intelligence Test, Delta I.

2. Haggerty Intelligence Test, Delta II.
3. National Intelligence Test, Form A.
4. Terman Group Test, Form A.

VIII. Teaching staffs.

1. Personal interviews.
2. County records in office of county superintendent of schools.

IX. Curricula and time allotment.

1. Los Angeles County Courses of Study.
2. Personal interviews with teachers.
3. California Curriculum Study.

In securing the data necessary for this survey, the writer is extremely grateful to the library assistants of the Los Angeles County and the Los Angeles City Libraries, the staffs of the offices of the county auditor and the county superintendent of schools, and the teachers of all the districts in the survey for their most cordial and cooperative assistance. Still greater credit is due Dr. O. R. Hull, of the School of Education of the University of Southern California, who frequently gave expert advice concerning many of the sources for obtaining the information that is so important to include in such a survey as the writer has attempted to make.

CHAPTER II

THE COMMUNITY, PAST AND PRESENT

Discovery of gold. Newhall and vicinity are rich in historical background. While but few people of the state seem to realize it, gold was first discovered in Placerita Canyon, some four miles to the southeast of Newhall in 1842, and not on the American River at Sutter's Mill in Eldorado County to the east of Sacramento. However, the latter discovery in 1848 had such great influence on the settling of the state and the former such a little because such a small amount of gold was found in the vicinity of Newhall. Nevertheless, Newhall proudly boasts of the first discovery of gold in California.

Don Francisco Lopez, while herding cattle in Placerita Canyon on a warm day in 1842, dismounted from his horse and sat in the shade of a tree to rest. While sitting on the ground Lopez saw some wild onions a few paces from where he sat. His aunt, with whom he was living, requested him to bring her some of the first wild onions he could find. Lopez, remembering his aunt's request, began to pluck up some of these wild onions by the roots. To his great amazement he discovered shining stones clinging to the roots of the wild onions. Not being certain as to what the shining stones might be, he dug deeper into the earth with his hunting knife and found more of them. He gathered a number of these curious looking pebbles and tied them in his handkerchief, taking them to his father, Don Juan Francisco Lopez. The older Lopez took them to the pueblo, where after due research, it was decided the

shining stones or pebbles were gold. The news of the discovery of gold in Placerita Canyon spread rapidly and soon many people were mining in that region in a primitive way.

The first California gold ever coined was taken from the placer mines of Placerita Canyon around Cape Horn to Philadelphia. This gold was of superior quality and was valued at over \$19 an ounce. However, the amount was small, the coins totaling but \$344.75. Early writers of California history estimate the total amount of gold taken from this region to have been from \$80,000 to \$100,000 during the first two years after the discovery made by Lopez.

From the time of the discovery of gold in Placerita Canyon, the mines were worked, principally by Sonorians, until California became a part of the United States. Since water was so scarce in the vicinity of this early discovery of gold, the mining methods were very crude. The discovery of gold at Sutter's Mill in Eldorado County enticed the miners from the Placerita Canyon mines and little or no mining was done here between the years of 1848 and 1854.

A bronze tablet, erected under the auspices of the Native Sons, marks the spot of the discovery of gold in Placerita Canyon. At the present time a small amount of gold is being mined in this region by quite primitive methods.

Discovery of oil. Of far greater importance to Southern California than that of the discovery of gold was that of the discovery of oil in 1862. The discovery was made by men under the employ of Tom Scott, later Railroad King of Pennsylvania, in what is now known as Pico Canyon, some five miles

west of the town of Newhall.

"At 800 feet they secured a well of black oil which they could not refine and the business was abandoned. In 1876 operations were begun again and since then the business of oil production and refining has been carried on to a limited extent in the vicinity of Newhall."¹

First oil refinery. To refine oil from the Pico oil fields, a small refinery was erected adjoining the Valley Line of the Southern Pacific Railroad Company one half mile south of Newhall by the California Star Oil Works Company, a predecessor of the Standard Oil Company of California. In 1930 the latter company restored this little refinery in commemoration of the great oil industry it has developed in the State of California from such a small beginning in this locality. The following inscription is found on one of the stills of the restored refinery:

"CALIFORNIA'S FIRST OIL REFINERY
Operated on a commercial scale
Erected 1876

Restored by the Standard Oil Company of California in 1930 as a memorial to
D. G. Scofield
and his pioneer associates of the California Star Oil Works Company, a predecessor of the Standard Oil Company of California.

In 1875-1876 Mr. Scofield and his associates obtained California's first commercial production of crude petroleum in Pico Canyon six miles northwest of this point and built this refinery for the manufacture of petroleum products."

Effect of the oil industry on the community. The Pico Canyon oil fields owned and operated by the Standard Oil Company have until the present employed a sufficient number of

¹J. M. Guin, A. M., Historical and Biographical Record Los Angeles and Vicinity, Chapman Pub. Co., Chicago, 1901, p. 221.

men to have a one teacher school in their midst. In the summer of 1931 the company found it necessary to retrench in its operations to the extent that but four children were in attendance at the school during the school year of 1931-1932. Hence, this school year drew to a close this little school's existence in the center of California's pioneer oil fields.

A small refinery was erected in 1930 three miles to the south of Newhall by the Andrews Oil Company, which also has a refinery at Long Beach. This local refinery obtains its crude oil from wells in the midst of its surroundings. About a dozen men are at this time employed by this refinery, which has a capacity of about 42,000 gallons of crude oil per day. Its refined products are distributed largely in this locality and nearby areas. At the present time several wells are being drilled in the vicinity, one within the town of Newhall.

Other industries. The most important industry in the number of men employed in the vicinity of Newhall at present is the distributing station of the Southern California Gas Company, which was erected in Newhall in 1930. This plant employs approximately thirty men; part of whom patrol the gas lines in the vicinity.

Headquarters for divisions of both the Federal and the Los Angeles County Forestry Departments are maintained in Newhall. During the time from March to November each local division has from twelve to twenty men on its payroll. The forestry service aids in combatting fires, whether in the forest areas or in adjoining small towns. While both the Fed-

eral and County divisions try not to overlap the territory of each other, to some extent they cover the same area during the season of fire hazards.

Three of the major oil companies, Standard, Shell, and Union, have distributing plants in Newhall to serve the sparsely settled areas to the north, west, and east of Newhall. These companies give employment to five or six men.

Farming and stock raising are carried on throughout this area in a somewhat limited way. The principal farming areas are in Saugus and Honby Districts. A few vegetables, some deciduous fruits, alfalfa, and grain are grown. A shortage of rain and irrigation facilities, as well as the topography of the region, handicap the farming industry.

The Southern California Telephone Company's "booster station" in Newhall and the Southern California Edison's sub-station in the Saugus School District both aid in giving employment to people residing in the community.

For some few years this locality has been a center for filming motion pictures. Pictures in part and in whole have been made. The following motion picture celebrities have homes here: Charlie Mack, Hoot Gibson, Harry Carey, and Wm. S. Hart, who has a beautiful home situated on a high hill overlooking the town of Newhall. Hoot Gibson's ranch, located in the Saugus District, is noted for rodeos given twice yearly. A number of local people obtain employment in minor parts in pictures made here, while others add to their sources of income by renting the companies their property on which pictures are filmed.

On account of its proximity to Los Angeles City and other centers and being on the direct route to recreational resorts, this vicinity has a large number of roadside eating places and service stations which give employment to many people.

Unionizing Castaic and Live Oak School Districts. Castaic and Live Oak School Districts unionized in the school year of 1927-1928. This caused a centering of small businesses in the vicinity of the Castaic Union School built to accommodate the increased enrollment brought about by unionizing. To this school children are transported up to a distance of seven miles.

San Francisquito Dam Disaster and its effect upon Saugus. In the early spring of 1928 the greatest disaster known in this section occurred when the San Francisquito Dam broke, enabling its impounded waters to rush down San Francisquito Canyon and Santa Clara Valley to the sea. Breaking in the early hours of the morning, it found most of the inhabitants in the lowlands along the water's route asleep, thus drowning hundreds of people. Many entire families were quickly swept to their doom. Two school houses, Bee and San Francisquito, were swept away. The teachers of these districts were numbered among the drowned. San Francisquito School has never been re-built as the fertile lands in its midst were so thoroughly washed away no one is able to make a living in that district. For several days following the dam disaster every available building in Newhall was used as a morgue, hundreds of bodies being brought to this place for means of identi-

fication by relatives and friends. Several families living in the Saugus District were swept away, thus reducing that school's enrollment to a considerable extent. It was not until the school year of 1931-1932 that the Saugus School enrollment equalled what it was before the dam broke in 1928.

Transportation facilities. Four of the six districts in this survey are well supplied with transportation facilities, Newhall and Saugus being the best supplied. These two are on the Valley Line of the Southern Pacific Railroad Company extending between Los Angeles City and San Francisco. Saugus is a railway junction, as a branch line extends out from there to Fillmore, Santa Paula, and Ventura. Greyhound Bus service is given all except Felton and New Era Districts. Newhall, Saugus, and Castaic are on the Valley Highway extending to San Francisco and points north. The new route over the Ridge which is being built to shorten the distance to Bakersfield and to eliminate most of the grades, extends out from the present highway at Castaic. Weldon Canyon cut-off is but two miles west of Newhall and a like distance west of Saugus. Honby is situated on the Mint Canyon highway. Felton District, while easily accessible by way of Pico Canyon, is the most isolated of any of the districts in the survey. New Era is located on the Bouquet Canyon road, most of which is yet unpaved.

Conclusion. While Newhall and vicinity can rightly boast of their historical background, any rapid addition to their population will probably have to come in some manner at this time unseen, such as obtaining oil in much larg-

er quantities than it has been found in the past. However, as the urban centers extend farther to the north, it may be in time to come this area will benefit by such urban extension.

CHAPTER III

THE COMMUNITY AND ITS NEEDS

The districts in the survey. In making this comprehensive survey, the six elementary districts lying to the north of San Fernando, Castaic Union, Felton, Honby, New Era, Newhall, and Saugus are included. As has been previously stated, all these districts are independent in the elementary field but a part of the Los Angeles City High School District. Since this condition has existed in the area comprised by the six districts for a number of years, many patrons of these elementary districts have expressed a desire that something be done to enable the establishment of a small high school in the vicinity, thus eliminating such long bus transportation for the pupils attending high school at San Fernando. To this extent, most of the patrons of the schools have this one common interest, namely, having a high school in their midst that will supply their secondary educational needs. To a large degree this agitation for a high school in Newhall or vicinity prompted the writer to make this survey.

Population and elementary pupil average daily attendance.

It has been impossible to get an accurate population of the districts, but the method used by the office of the Los Angeles County Superintendent of Schools, multiplying the elementary average daily attendance by nine, shows the estimated population in Tables I to VI inclusive of each of the six districts. Table VII shows the estimated population of all the districts combined. It is realized this is far from an accur-

TABLE I
 ESTIMATED POPULATION BASED ON ELEMENTARY AVERAGE DAILY
 ATTENDANCE IN CASTAIC AND LIVE OAK SCHOOL DISTRICTS

Year	Castaic Union			Live Oak		
	A.D.A.	Per cent of in- crease	Estimated population	A.D.A.	Per cent of in- crease	Estimated population
1926-1927	39		351	25		225
1927-1928	43	10.2	387	28	12	252
1928-1929	42	- 2.3 ¹	378	16	-42.8 ¹	144
1929-1930	64	13.7 ²	576 ²			
1930-1931	71	10.9	639			

The population was based upon a rule used by the office of the county superintendent of schools of Los Angeles County, which is to multiply the average daily attendance by nine.

¹Decrease.

²The union of the two districts eliminates this data of Live Oak after the year 1928-1929.

TABLE II
ESTIMATED POPULATION BASED ON ELEMENTARY
AVERAGE DAILY ATTENDANCE IN FELTON DISTRICT

Year	A.D.A.	Per cent of increase	Estimated population
1926-1927	10		90
1927-1928	8	-20 ¹	72
1928-1929	12	50	108
1929-1930	12	0	108
1930-1931	10	-16.6 ¹	90

The population was based upon a rule used by the office of the county superintendent of schools of Los Angeles County, which is to multiply the elementary average daily attendance by nine.

¹Decrease.

TABLE III
ESTIMATED POPULATION BASED ON ELEMENTARY
AVERAGE DAILY ATTENDANCE IN HONBY DISTRICT

Year	A.D.A.	Per cent of increase	Estimated population
1926-1927	21		189
1927-1928	16	-23.8 ¹	144
1928-1929	16	0	144
1929-1930	16	0	144
1930-1931	19	18.7	171

The population was based upon a rule used by the office of the county superintendent of schools of Los Angeles County, which is to multiply the elementary average daily attendance by nine.

¹Decrease.

TABLE IV
ESTIMATED POPULATION BASED ON ELEMENTARY
AVERAGE DAILY ATTENDANCE IN NEW ERA DISTRICT

Year	A.D.A.	Per cent of increase	Estimated Population
1926-1927	9		81
1927-1928	11	22.2	99
1928-1929	11	0	99
1929-1930	12	9	108
1930-1931	6	-50 ¹	54

The population was based upon a rule used by the office of the county superintendent of schools of Los Angeles County, which is to multiply the elementary average daily attendance by nine.

¹Decrease.

TABLE V
ESTIMATED POPULATION BASED ON ELEMENTARY
AVERAGE DAILY ATTENDANCE IN NEWHALL DISTRICT

Year	A.D.A.	Per cent of increase	Estimated population
1926-1927	149		1341
1927-1928	160	7.3	1440
1928-1929	169	5.6	1521
1929-1930	170	.59	1530
1930-1931	180	5.8	1620

The population was based upon a rule used by the office of the county superintendent of schools of Los Angeles County, which is to multiply the elementary average daily attendance by nine.

TABLE VI
ESTIMATED POPULATION BASED ON ELEMENTARY
AVERAGE DAILY ATTENDANCE IN SAUGUS DISTRICT

Year	A.D.A.	Per cent of increase	Estimated population
1926-1927	45		405
1927-1928	49	8.8	441
1928-1929	40	-18.3 ¹	360
1929-1930	41	2.5	369
1930-1931	39	- 4.8 ¹	351

The population was based upon a rule used by the office of the county superintendent of schools of Los Angeles County, which is to multiply the elementary average daily attendance by nine.

¹Decrease.

TABLE VII
 ESTIMATED POPULATION BASED ON ELEMENTARY AVERAGE
 DAILY ATTENDANCE IN ALL DISTRICTS COMBINED

Year	A.D.A.	Per cent of increase	Estimated population
1926-1927	273		2,457
1927-1928	287	5.1	2,583
1928-1929	290	1.0	2,610
1929-1930	315	8.6	2,835
1930-1931	325	3.1	2,925

The population was based upon a rule used by the office of the county superintendent of schools of Los Angeles County, which is to multiply the elementary average daily attendance by nine.

ate population estimate, but since this area is entirely rural and the population predominately white, it seems about the only way one is to estimate the population. There is but a very small per cent of Mexican population, most of which is permanent.

Trend of growth of average daily attendance. Growth in population has been quite slow, in fact part of the districts have decreased rather than increased. Saugus since 1927-1928 has had a decrease in average daily attendance and population, a natural result of the San Francisquito Dam disaster in 1928. The enrollment in the early part of the school year of 1931-1932 showed a small increase over that of a few years previous to that school year. While Table II gives Felton's average daily attendance as quite stationary, the pupil enrollment in the early part of 1931-1932 was greatly decreased on account of the Standard Oil Company retrenching its oil operations in that area in the summer of 1931. New Era from Table IV shows the average daily attendance decreasing fifty per cent in 1930-1931 from that of 1929-1930 and its enrollment this year is also quite small. This is probably on account of New Era being in a strictly farming and stock raising region, the decrease being largely the result of recent years having very little rainfall, and that section not being equipped to any extent for irrigation.

Castaic Union does not really show a growth in population from Table I, except in the year 1929-1930, which is the year after the unionizing of Castaic and Live Oak Dis-

tricts into Castaic Union District. Since Castaic is largely a farming region with little facilities for irrigation, the past few excessive dry years has probably been the chief cause of its decrease in population.

Honby District from Table III seems to be more stationary in its population. While this district is likewise a farming region, it is better equipped for irrigation than some of the others, which in all probability is largely the reason for having less real decrease in population.

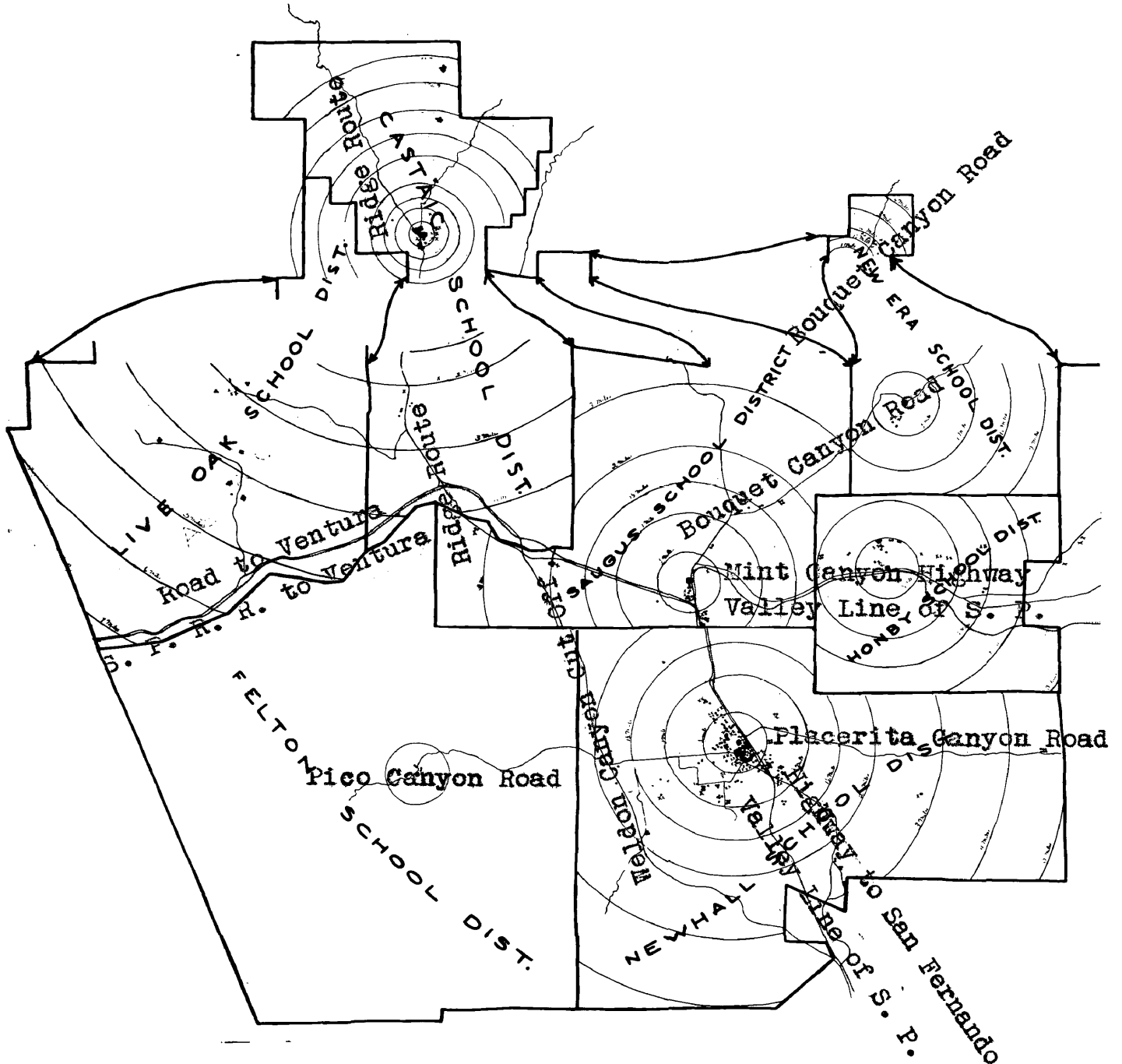
Newhall, having practically sixty per cent of the average daily attendance and population of the six districts, is a slow but steadily growing area as is shown in Table V. Newhall is not a strictly farming area as most of the others are, but is the center of a small oil field, which some people in the community believe will develop into a much greater oil producing section. Various other industries in the vicinity of Newhall as given in Chapter II are accountable for the steady increase in population in this district. A summary table of the six districts combined, Table VII, gives the growth of this area very small and quite irregular.

High school attendance. Since all pupils from the six districts in the survey attend San Fernando High School, a Los Angeles City High School, data could not be obtained as to the number enrolled from year to year from the districts in the survey. The nearest approach that can be made to it can be obtained from the number of eighth grade graduates from these districts during the past several years. In the fall semester of 1931-1932 ninety-seven students attended San Fer-

nando High School from the six districts as is shown in Table XI. A few of high school age were not attending, who probably would have been forced to attend were a high school located in the vicinity of Newhall. From Table VIII 144 eighth grade pupils graduated from the six districts in the survey from 1927 to 1931. The difference in this number and the number actually enrolled in high school from this area in the fall semester of 1931-1932 was on account of the few students of high school age not attending and the fact that the elementary average daily attendance in several districts decreased during that period, which also caused a decrease in population in those districts.

Residence location of all pupils. From a study of Map I it is seen but a very small part of the various districts is inhabited. The principally inhabited portions are in close proximity to the three small towns, Castaic, Newhall, and Saugus. Much of the area in each district is made up of low mountains, most of which is of no economic worth to the people living in the vicinity. By a study of Table IX it is found the vast majority of the pupils live within a radius of one and one half miles of their respective school houses.

Table IX gives the number of families in each district and the distance each one lives from their respective schools. In Castaic Union District ten families live within a radius of one half mile of the school house, two families between the radii of one half mile and one mile, one family between those of one mile and one and a half miles, five between those of two and three miles, three between those of three and four



Parts of Castaic, New Era, and Saugus School Districts are drawn to a smaller scale than the rest. The arrows are drawn to show this. Each dot represents the residence location of an elementary pupil and each cross represents the residence location of a high school pupil.

TABLE VIII
 NUMBER OF EIGHTH GRADE GRADUATES FROM 1927-
 1928 TO 1930-1931

District	1927- 1928	1928- 1929	1929- 1930	1930- 1931	Totals
Newhall	18	14	20	15	67
Castaic Union	14	9	10	10	43
Saugus	3	8	6	3	20
New Era	3	4	2	0	9
Honby	0	0	0	3	3
Felton	0	0	2	0	2
Totals	38	35	40	31	144

This table should be read as follows: the number of eighth grade graduates from Newhall in 1927-1928 was 18, in 1928-1929 14, in 1929-1930 20, in 1930-1931 15, or a total of 67 eighth grade graduates during the four year period, etc.

TABLE IX
NUMBER OF FAMILIES AND THE DISTANCE THEY LIVE
FROM THEIR RESPECTIVE SCHOOLS

District	Number of families in each radius of miles									Totals
	$\frac{1}{2}$ m.	1 m.	$1\frac{1}{2}$ m.	2 m.	3 m.	4 m.	5 m.	6 m.	7 m.	
Newhall	78	38	4	9	4	0	1	0	0	134
Castaic Union	10	2	1	0	5	3	5	0	1	27
Saugus	6	5	2	3	1	0	0	0	0	17
Honby	7	2	1	0	0	0	0	0	0	10
New Era	2	0	2	0	0	0	0	0	0	4
Felton	2	0	0	0	0	0	0	0	0	2

This table should be read as follows: there are children from 78 families enrolled in the Newhall School living within one half mile of the school, children from 38 families living between the radii of one half mile and one mile, etc.

miles, five between those of four and five miles, and one between those of six and seven miles. This district has by far the greatest problem in transportation of pupils because of so many families living at such great distances from their school house.

In Felton District the two families who have children in school live almost adjoining the school yard. The following school year, in all probability, these children will be transported to the Newhall School, five miles to the east, as this little district will be suspended during the summer of 1932.

In Honby School District, the families having children in school are quite well located also. Seven families live within a radius of one half mile from the school house, two families between the radii of one half mile and one mile, and one family between those of one mile and one and a half miles.

New Era District has two families living within a radius of one half mile from the school house and two families between the radii of one and one and a half miles. Three families' children enrolled in this school during the year lived to the north and out of the districts included in the survey.

In Newhall District 78 families live within a radius of one half mile from the school, 38 families between the radii of one half mile and one mile, four families between those of one mile and one and a half miles, nine families between those of one and a half miles and two miles, four

families between those of two miles and three miles, and one family between those of four and five miles.

In Saugus District there are six families who live within a radius of one half mile from the school house, five families between the radii of one half mile and one mile, two families between those of one mile and one and a half miles, three families between those of one and a half miles and two miles, and one family between those of two and three miles.

From Map I it is readily seen that during the year the survey was made Felton District had no worries over transportation. Honby is also fortunate in the location of its school. New Era, in caring for pupils living within its district, has little transportation difficulty. Castaic Union District, as previously stated, has the most difficult transportation situation of any of the six districts, since several children live as much as seven miles from the school house. Newhall District has the next most serious transportation problem, since it has one family of five children to be transported a distance of five miles. However, most of the children in Newhall District live but a convenient distance from the school house. Saugus District has to carry children from several families up to a distance of three miles, which adds to that district's financial burden.

Growth of population and elementary average daily attendance. In considering the growth of population, it would seem Newhall is the only district that needs estimating in this respect, since the other five districts show no increase during the period 1926-1927 to 1930-1931 inclusive as is given in

Tables I to VI inclusive. In the four year period the Newhall average daily attendance increased from 149 in 1926-1927 to 180 in 1930-1931, which gives an estimated population increasing from 1341 to 1620 in the period. In this period the percentage increase was 20.8, or roughly 5 per cent increase each year as Table V indicates. Using this as a basis, Table X, the average daily attendance would be 307 and the population 2763 by 1941-1942 or at the end of a ten year period. This is entirely speculative. The first three months of 1931-1932 the average daily attendance was 203 or an increase of 12.7 per cent over that of the previous year. It is impossible to determine if this is a permanent growth at the time this is written. However, judging from the four year period, 1926-1927 to 1930-1931, it seems safe to conclude there will be a steady increase of population in the Newhall School District.

Estimated growth of high school pupils. In studying Table VIII, which gives the number of eighth grade graduates from the six districts during the period of 1926-1927 to 1930-1931, one would conclude the number of high school students would decrease in the four years following 1930-1931 rather than increase. In considering the present eighth grade enrollment in the various districts, 36 in all, and the gradual increase in average daily attendance in the Newhall School, it seems probably the high school enrollment from the area in the survey will gradually increase rather than decrease.

Prospects of obtaining a high school in Newhall or

TABLE X
ESTIMATED POPULATION AND AVERAGE DAILY
ATTENDANCE IN THE NEWHALL SCHOOL FROM
1931 TO 1941 INCLUSIVE¹

Year	Population	A. D. A. ²
1931-1932	1701	189
1932-1933	1782	198
1933-1934	1872	208
1934-1935	1962	218
1935-1936	2061	229
1936-1937	2160	240
1937-1938	2268	252
1938-1939	2385	265
1939-1940	2502	278
1940-1941	2628	292
1941-1942	2763	307

¹Estimated from school growth from 1926-1931.

²Five per cent was added to the average daily attendance each year. The average daily attendance was then multiplied by nine.

TABLE XI
HIGH SCHOOL ENROLLMENT FROM EACH DISTRICT
1931-1932

District	No. enrolled
Newhall	50
Honby	15
Castaic Union	11
New Era	8
Saugus	7
Felton	0
From other districts ¹	6
Total	97

¹These students live in Antelope Valley Union High School District but attend San Fernando High School because the latter school is closer for them. This table should be read as follows: In the school year of 1931-1932 Newhall School District had 50 students enrolled in the high school at San Fernando, etc.

TABLE XII

TOTAL ENROLLMENT BY GRADE, FALL SEMESTER, 1931-1932

Grade	District						Total
	Newhall	Castaic Union	Saugus	Honby	New Era	Felton	
Eighth	22	7	6	1	1	0	37
Seventh	17	6	6	2	1	0	32
Sixth	27	3	4	5	1	1	41
Fifth	26	16	7	4	1	2	56
Fourth	27	7	4	2	1	0	41
Third	28	10	7	2	2	0	49
Second	25	10	5	2	1	1	44
First	31	6	6	3	2	0	48
Total	203	65	45	21	10	4	348

This table should be read as follows: in the fall semester of 1931-1932 Newhall School had 22 pupils enrolled in the eighth grade, 17 pupils in the seventh grade, etc.

vicinity. A high school enrollment as small as these six districts have would necessitate having a very limited curriculum in comparison with that offered in a high school of 1400 students at San Fernando. This number includes both junior and senior high school classes. The financial burden would likewise be very much greater on the people in this area for secondary education. However, it is readily seen having a high school in the vicinity of Newhall would have certain advantages, such as being less fatiguing for the students to ride shorter distances each day by bus and the closer contact students in a small high school have with their teachers.

While Map I shows evidence of a few high school students having to travel by bus as far as fifty miles per day to attend high school in San Fernando, with the slow growth in population in Newhall, it does not seem wise to take steps for a high school in this vicinity until the high school enrollment from these six elementary districts greatly increases. Since the State School Law does not permit a high school district to be formed from a part of another high school district until the area has an elementary average daily attendance of 500, these six districts cannot withdraw from the Los Angeles City High School District until that part of the law has been met. The elementary average daily attendance of these six districts combined was but 303 in the school year of 1930-1931. The State School Law also requires the area withdrawing from a high school district to form a new high school district to have an assessed valuation

of \$5,000,000. The six districts in the survey had a combined assessed valuation of but \$3,789,630 according to the auditor's report for the year 1931. This again would make it impossible to have a high school in this area until property valuations increased enough to give an assessed valuation of \$5,000,000.

Summary - Conclusion. Many patrons of the six elementary districts in the survey often expressing a desire for a high school in their midst led the writer to undertake this survey.

In the meager way of arriving at the population in the various districts, Newhall alone shows a slow but steady growth up until the beginning of the school year of 1931-1932, when a much larger growth is in evidence from the elementary average daily attendance for the first three months of the year. The lack of growth in the remaining five districts is mainly attributed to lack of sufficient rainfall for several years preceding the school year of 1931-1932, but the San Francisquito Dam disaster in 1928 in Saugus District and the curtailing of oil production in Felton District had a noticeable part.

While the high school enrollment in San Fernando High School from the area in the survey has seemingly decreased for several years judging from the number of eighth grade graduates in the six districts for that time, from Table V the high school enrollment in the area mentioned will slowly but gradually increase during the next several years.

From Map I the elementary buildings appear to be well located in the districts since the greater number of pupils live so close to their respective school buildings. This is especially true in Felton, Honby, Newhall, and Saugus Districts. With present school facilities, little or no additional room will be needed to care for future growth for some time to come, except in Honby School which is very much crowded at this time.

Since the elementary average daily attendance and the assessed valuation of these districts are much below that required by state law to form a high school district from an existing one, it will be impossible by withdrawal to secure a high school within the six elementary districts in the survey until those requirements are met.

CHAPTER IV

THE FINANCIAL ABILITY OF THE COMMUNITY TO PAY

Purpose of the chapter. The purpose of the chapter is to examine into the ability of the communities to pay for a school program and if the finances are being economically expended. Since any survey problem must involve the financial ability of the districts to pay, it is the aim of the writer to attempt to solve this important question in as satisfactory manner as is possible. To do this, it is necessary to examine into each district's revenue and expenditures for the five years preceding the making of the survey.

Sources of the districts' revenue. The six districts in the survey can lawfully derive their revenue from the following sources: (1) regular state apportionment based on average daily attendance, (2) regular county apportionment based on average daily attendance, (3) district tax levies of several kinds each having its special limits, such as building tax, special tax, and bond redemption, (4) special tax levies, such as bonds for buildings and school sites, and (5) miscellaneous sources such as revenues derived from rents, gifts, and sale of property. At the time of making this survey, Felton was the only district of the six not deriving revenue from special tax levies. All of the remaining districts obtained their revenues from all of the above sources, but miscellaneous sources are almost negligible in all of the districts.

Tables XIII to XIX show sources of revenue of the six districts for a period of five years preceding the time of making the survey. In 1927-1928 Castaic Union District voted a bond issue for \$17,000 to build its building on the present school site of the district. There was a bond issue in Newhall in 1928-1928 for \$45,000 to add to the school plant. Only \$35,000 of the bonds were sold, thus leaving \$10,000 in unsold bonds to the credit of the district. Much equipment and minor additions to both the Castaic and Newhall plants have been added from time to time in the past several years out of building tax levies for those purposes. Both of these districts have a district elementary tax of \$.45 per \$100, the maximum limit allowed by law. All the remaining districts in the survey, except Felton, levy the maximum allowed by law for their type of district, which is \$.30 per \$100.

Assessed valuation and true valuation. The assessed valuation of a district cannot be relied upon to give a true picture of a district's ability to pay for a school program for,

"In California, taxes for school purposes are levied on the assessed valuation of the personal and real property in the school districts. This taxable property represents the available resources of the community, and the amount of such property per pupil in school is a measure of the community's ability to support its educational program. Assessed valuation, however, must be expressed in terms of actual value if reliable comparisons are to be made by communities subject to varying rates of assessment."¹

¹O. R. Hull and W. S. Ford, Survey of the Alhambra Public Schools. University of Southern California, Los Angeles, 1928, p. 75.

TABLE XIII
SOURCE OF REVENUE, CASTAIC UNION SCHOOL
1927-1931

Item	1927-1928	1928-1929	1929-1930	1930-1931	1931-1932 ¹
Bal. on hand, prev. yr.	\$1,822.20	\$4,980.54	\$ 689.95	\$1,050.48	\$ 189.88
State	1,621.91	1,654.13	2,443.94	2,472.43	2,490.50
County	2,098.40	2,112.47	3,161.70	4,554.80	2,692.85
Local (Dist. Tax)	1,084.26	1,208.45	2,336.25	2,193.39	3,729.80
Special (Bond Sale)	18,000.00	0	0	0	0
Miscellaneous	0	358.40	308.96	92.86	0
Building	1,019.65	588.84	1,156.69	1,085.36	1,576.20
Transferred from other districts in this county	0	0	3,204.57	0	0
Total receipts	\$25,646.42 ²	\$10,902.83	\$13,302.06	\$11,449.32	\$10,679.23

¹Estimated.

²This includes bond sale for building.

TABLE XIV
 SOURCE OF REVENUE, LIVE OAK SCHOOL¹
 1927-1929

Item	1927-1928	1928-1929	1929-1930
Bal. on hand, prev. year	\$1,312.35	\$ 249.57	\$2,991.28
State	791.04	865.48	
County	1,339.60	1,147.68	
Local(Dist. Tax)	420.69	555.99	
Special(Bond Sale)	0	0	
Miscellaneous	0	.02	
Building	99.63	172.54	
Total receipts	\$3,963.31	\$2,991.28	\$2,991.28

¹After the year 1928-1929 the funds of Live Oak were added to those of Castaic Union District.

TABLE XV
SOURCE OF REVENUE, FELTON SCHOOL
1927-1931

Item	1927-1928	1928-1929	1929-1930	1930-1931	1931-1932 ¹
Bal. on hand, prev. yr.	\$1,636.04	\$1,078.49	\$ 933.04	\$1,560.33	\$1,566.36
State	756.90	747.28	765.25	769.84	755.00
County	878.00	837.30	888.85	907.40	783.50
Local (Dist. Tax)	0	0	490.59	9.32	0
Special (Bond Sale)	0	0	0	0	0
Miscellaneous	0	0	0	0	0
Building	0	0	0	0	0
Total receipts	\$3,270.94	\$2,663.07	\$3,077.73	\$3,246.89	\$3,104.86

¹Estimated.

TABLE XVI
SOURCE OF REVENUE, HONBY SCHOOL
1927-1931

Item	1927-1928	1928-1929	1929-1930	1930-1931	1931-1932 ¹
Bal. on hand, prev. yr.	\$ 600.87	\$ 738.93	\$ 475.13	\$1,014.35	\$ 791.17
State	796.73	794.56	794.88	793.12	804.50
County	1,013.70	969.41	983.20	979.20	858.65
Local (Dist. Tax)	226.49	272.09	622.39	640.26	752.20
Special (Bond Sale)	0	0	0	0	0
Miscellaneous	0	0	176.14	0	0
Building	240.77	16.57	143.79	108.21	300.38
Total receipts	\$2,878.56	\$2,791.56	\$3,195.53	\$3,535.14	\$3,506.90

¹Estimated.

TABLE XVII
SOURCE OF REVENUE, NEW ERA SCHOOL
1927-1931

Item	1927-1928	1928-1929	1929-1930	1930-1931	1931-1932 ¹
Bal. on hand prev. yr. \$	384.34	\$ 251.07	\$ 142.23	\$ 512.04	\$ 373.23
State	751.21	782.74	765.23	769.84	733.00
County	864.40	1,035.57	900.55	907.40	750.10
Local (Dist. Tax)	170.05	208.20	770.66	363.75	354.03
Special (Bond Sale)	0	0	0	0	0
Miscellaneous	0	0	0	0	0
Building	287.07	101.19	168.61	148.45	411.67
Total receipts	\$2,457.07	\$2,378.77	\$2,747.28	\$2,701.48	\$2,622.03

¹Estimated.

TABLE XVIII
SOURCE OF REVENUE, NEWHALL SCHOOL
1927-1931

Item	1927-1928	1928-1929	1929-1930	1930-1931	1931-1932 ¹
Bal. on hand, prev. yr.	\$3,525.37	\$2,532.73	\$31,779.26 ²	\$3,974.28	\$5,586.66
State	4,347.81	4,445.60	4,502.17	4,489.40	5,190.00
County	6,166.90	6,157.77	6,473.75	6,464.50	5,703.00
Local(Dist. Tax)	2,844.16	4,687.60	4,924.16	4,973.68	7,173.99
Special(Bond Sale)	0	30,000.00	5,000.00	0	0
Miscellaneous	22.00	0	20.40	20.03	0
Building	3,178.43	2,300.30	2,456.41	2,483.71	2,711.46
Total receipts	\$20,084.67	\$50,124.00	\$55,156.15	\$22,405.60	\$26,365.11

¹Estimated.

²Balance largely from bond sale.

TABLE XIX
SOURCE OF REVENUE, SAUGUS SCHOOL
1927-1931

Item	1927-1928	1928-1929	1929-1930	1930-1931	1931-1932 ¹
Bal. on hand, prev. yr.	\$1,308.66	\$1,688.36	\$2,624.69	\$1,897.22	\$1,198.59
State	1,656.05	1,689.59	1,637.20	1,638.62	1,614.50
County	2,213.00	2,212.85	2,125.55	2,113.45	1,725.65
Local (Dist. Tax)	1,983.49	2,344.99	1,754.62	1,888.50	2,095.32
Special (Bond Sale)	0	0	0	0	0
Miscellaneous	0	0	0	4.80	0
Building	416.13	652.96	103.97	3.92	206.44
Total receipts	\$7,577.33	\$8,588.75	\$8,246.03	\$7,546.51	\$6,840.50

¹Estimated.

In referring to Table XX one sees the comparative wealth in each district in the survey and five other Los Angeles County districts of a similar size in assessed valuation per average daily attendance. Felton has the greatest wealth per average daily attendance in the six districts and Newhall has the least. In comparing Newhall to the other five districts in Los Angeles County, one finds two of the five districts with less wealth in assessed valuation per average daily attendance than that of Newhall. While Newhall has practically one half of the wealth of assessed valuation per average daily attendance of that of Keppel Union in Antelope Valley High School District, Newhall has a total tax rate of \$3.18 per \$100 compared to \$3.35 of Keppel Union, as is shown in Table XXII. This difference is largely on account of Keppel Union's greater high school taxes. In considering the wealth per average daily attendance and the total tax rates, none of the school costs in the districts in the survey may be said to be excessive when comparing them with other districts in the county.

The State Board of Equalization, by a system of appraisals of property values has determined for each county the ratio of assessed valuation to actual value. Application of this ratio to the tax rates actually levied gives the tax rate that would be required if levied on the true valuation of the district. Tax rates adjusted on the basis of equalization ratios may then be compared without reference to variations in policies of assessment.¹

This ratio of assessed valuation to true valuation is

¹ O. R. Hull and W. S. Ford, Survey of the Alhambra Public Schools. University of Southern California, Los Angeles, 1928, p.74.

TABLE XX
 ASSESSED VALUATION PER PUPIL IN AVERAGE DAILY
 ATTENDANCE IN EACH DISTRICT OF THE SURVEY AND
 FIVE OTHER DISTRICTS OF LOS ANGELES COUNTY,
 1930-1931

District	A. D. A.	Assessed Valuation	Assessed Valuation per A.D.A.
Calabasas	24	\$1,029,740	\$42,905
Felton	10	294,245	29,424
New Era	6	118,010	19,668
Saugus	39	698,445	17,908
Mint Canyon	7	124,215	17,745
Keppel Union	67	1,145,625	17,098
Castaic Union	49	830,860	16,956
Honby	19	250,730	13,196
Newhall	180	1,597,340	8,874
Del Sur	56	483,370	8,631
Carmenita	187	937,925	5,015

This table should be read as follows: Calabasas District had an average daily attendance of 24, a total assessed valuation of \$1,029,740, or an assessed valuation of \$42,905 per average daily attendance, etc.

38.96 per cent for Outside Properties in Los Angeles County in the year 1930. This was used in arriving at the true valuation of the six districts in the survey. The assessed valuation and true valuation of these districts for the school year of 1930-1931 are given in Table XXI. In applying the above ratio to these districts the tax payers are not burdened as much as it would seem from outward appearances.

Total tax rate for school purposes per one hundred dollars. Table XXII gives the tax rates for each school purpose per one hundred dollars of assessed valuation, or the actual rates assessed against personal and real property in the different districts in the survey for the school year of 1930-1931, while Table XXIII gives the same on each one hundred dollars of true valuation. This would cause the bonding limit to be less than two per cent of the true valuation rather than five per cent, the maximum legal limit, based on the assessed valuation. In districts having the maximum \$.30 District Elementary Fund Tax on assessed valuation, this would amount to actually less than \$.12 on true valuation.

Capital outlays for school property. In studying Tables XXIV to XXX inclusive it will be found that Castaic Union and Newhall are the only districts that have built new buildings or large additions to their plants during the five year period taken in the financial study. In Table XXXIII showing capital outlay by districts for the period, Castaic is found to have by far the greatest amount spent per average daily attendance or \$95.61. In comparing this amount with

TABLE XXI
 COMPARING ASSESSED VALUATION AND TRUE¹
 VALUATION OF THE SIX DISTRICTS
 1930-1931

District	Assessed Valuation	True Valuation
Newhall	\$1,597,340	\$4,099,948
Castaic Union	830,860	2,132,597
Saugus	698,445	1,792,723
Felton	294,245	755,248
Honby	250,730	643,557
New Era	118,010	302,900

¹True valuation was found from State Board of Equalization Report for Los Angeles County. In 1930 the assessed valuation for this county was but 38.96 per cent of its true valuation, Outside Properties.

TABLE XII

ASSESSED VALUATION AND TAX RATE OF THE SIX ELEMENTARY DISTRICTS IN THE SUR-
VEY AND OTHER ELEMENTARY DISTRICTS OF LOS ANGELES COUNTY OF SIMILAR SIZE

1930-1931

Dist.	Assessed Valuation	Gen. Co. Elem. Sch.	Gen. Co. H. S.	Jr. Col. Tuit. ¹	Elem. Bldg. Tax	Dist. Elem. Fund	Dist. H. S. Fund	Elem. Bond	H. S. Bond	Tot. Rate for Sch.	Tot. Tax Rate
Carmenita	\$ 937,925	.262	.192	.026	.29	.30	.75	.28	.26	2.36	3.49
Keppel Un.	1,145,625	.262	.192	.026	.04	.30	.75	.49	.16	2.22	3.35
Mint Can.	124,215	.262	.192	.026	.32	.30	.75	.13	.16	2.14	3.27
Newhall	1,597,340	.262	.192	--	.17	.45	.476	.39	.11	2.05	3.18
Del Sur	483,370	.262	.192	.026	0	.30	.75	.38	.16	2.07	3.10
Castaic Un.	830,860	.262	.192	--	.19	.45	.476	.21	.11	1.89	3.02
New Era	118,010	.262	.192	--	.35	.30	.476	0	.11	1.69	2.82
Calabasas	1,029,740	.262	.192	--	.13	.29	.476	.06	.11	1.52	2.65
Honby	250,730	.262	.192	--	.12	.30	.476	0	.11	1.46	2.59
Saugus	698,445	.262	.192	--	.03	.30	.476	0	.11	1.37	2.50
Felton	294,245	.262	.192	--	0	0	.476	0	.11	1.04	2.17

¹Blanks in this column indicate junior college tuition is included in Dist. high school Fund. This table should be read as follows: Carmenita Dist. has an assessed valuation of \$937,925 and the tax rates for the year for all purposes are gen. co. elementary \$.262, etc., making a total of \$3.49 per \$100 of assessed val. for all purposes, etc.

TABLE XXIII

TRUE VALUATION AND TRUE TAX RATE OF THE SIX ELEMENTARY DISTRICTS IN THE SURVEY AND OTHER ELEMENTARY DISTRICTS OF LOS ANGELES COUNTY OF SIMILAR SIZE
1930-1931

Dist.	True Valuation	Gen. Co. Elem. Sch.	Gen. Co. H. S.	Jr. Col. Tuit. ¹	Elem. Bldg. Tax	Dist. Elem. Fund	Dist. H. S. Fund	Elem. Bond	H. S. Bond	Tot. Rate for Sch.	Tot. Tax Rate
Carmenita	\$2,407,405	.102	.075	.01	.113	.117	.29	.109	.101	.92	1.40
Keppel Un.	2,945,159	.102	.075	.01	.016	.117	.29	.191	.062	.86	1.31
Mint Can.	318,827	.102	.075	.01	.125	.117	.29	.051	.062	.83	1.27
Newhall	4,099,948	.102	.075	--	.066	.175	.186	.152	.043	.80	1.24
Del Sur	1,240,682	.102	.075	.01	0	.117	.29	.148	.062	.81	1.21
Castaic Un.	2,132,597	.102	.075	--	.074	.175	.186	.082	.043	.74	1.18
New Era	302,900	.102	.075	--	.136	.117	.186	0	.043	.66	1.10
Calabasas	2,643,069	.102	.075	--	.051	.113	.186	.023	.043	.59	1.03
Honby	643,557	.102	.075	--	.047	.117	.186	0	.043	.57	1.01
Saugus	1,792,723	.102	.075	--	.012	.117	.186	0	.043	.53	.97
Felton	755,248	.102	.075	--	0	0	.186	0	.043	.41	.85

¹Blanks in this column indicate jr. college tuition is included in Dist. h. s. Fund. This table should be read as follows: Carmenita Dist. has a true valuation of \$2,407,405 and the true rates for the year are, gen. co. elem. \$.102, etc., making a total of \$1.40 per \$100 of true valuation for all purposes, etc.

TABLE XXIV

EXPENDITURES BY YEAR, 1926-1930, CASTAIC UNION SCHOOL¹

Item	1926-1927	1927-1928	1928-1929	1929-1930	1930-1931
General Control	\$ 3.95	\$ 194.79	\$ 14.96	\$ 14.35	\$ 43.98
Teachers' Salaries	2,925.00	3,285.00	3,328.83	5,545.88	5,369.64
Other Ex. of Inst.	104.56	357.08	90.00	200.11	248.14
Library	60.00	62.10	90.00	161.46	140.80
Oper. of School Plant	210.10	258.74	369.78	852.34	740.32
Main. " " "	265.76	115.38	672.26	556.60	295.57
Fixed Charges	0	259.44	152.19	0	0
Capital Outlay	6.65	15,516.87	4,680.49	1,529.99	1,690.73
Auxiliary Expenses	260.90	716.48	814.37	2,691.99	2,722.31
Total Expenditures ²	3,830.27	5,249.01	5,532.39	10,022.73	9,560.76
Balance on Hand	1,822.20	4,980.54 ³	6,689.95	1,050.48	189.88

¹Castaic's and Live Oak's funds were kept separately until 1929-1930.

²Total Expenditures are for Current Expenses only.

³Part of this balance is from bond issue.

TABLE XXV
EXPENDITURES BY YEAR, 1926-1928, LIVE OAK SCHOOL¹

Item	1926-1927	1927-1928	1928-1929
General Control	\$ 100.00	\$ 135.25	\$ 0
Teachers' Salaries	2,781.50	2,880.00	1,485.00
Other Ex. of Instruction	108.35	172.38	74.45
Library	60.00	60.00	50.00
Operation of School Plant	168.40	244.00	218.79
Maintenance of School Plant	344.58	93.13	305.95
Fixed Charges	90.00	90.00	28.50
Capital Outlay	0	115.25	20.80
Auxiliary Agencies	9.95	38.98	8.20
Total Current Expense	3,662.78	3,713.74	2,170.89
Balance on Hand	1,317.35	249.57	799.59

¹After 1928 Live Oak's school money was added to that of Castaic.

TABLE XXVI

EXPENDITURES BY YEAR, 1926-1930, FELTON SCHOOL

Item	1926-1927	1927-1928	1928-1929	1929-1930	1930-1931
General Control	\$ 0	\$ 5.00	\$ 2.82	\$ 5.00	\$ 0
Teachers' Salaries	1,350.00	1,395.00	1,350.00	1,395.00	1,350.00
Other Ex. of Inst.	16.30	31.65	51.06	16.63	64.59
Library	3.95	87.01	212.87	30.00	30.00
Oper. of School Plant	45.00	47.03	52.00	45.75	45.00
Main. " " "	1.60	536.60	3.50	0	34.14
Fixed Charges	30.00	0	1.43	25.00	0
Capital Outlay	0	90.16	53.80	0	156.80
Auxiliary Agencies	4.20	0	2.55	0	0
Total Current Expense	1,451.05	2,102.29	1,676.23	1,517.38	1,523.73
Balance on Hand	1,636.04	1,078.49	933.04	1,560.33	1,556.36

TABLE XXVII
EXPENDITURES BY YEAR, 1926-1930, HONBY SCHOOL

Item	1926-1927	1927-1928	1928-1929	1929-1930	1930-1931
General Control	\$ 1.77	\$ 1.00	\$ 2.82	\$ 4.03	\$ 1.40
Teachers' Salaries	1,750.00	1,500.00	1,600.00	1,503.00	1,426.50
Other Ex. of Instruction	42.57	93.42	140.63	138.98	92.18
Library	60.00	60.00	40.00	50.00	50.00
Oper. of School Plant	179.81	185.10	139.61	176.53	108.05
Main. " " "	61.60	35.40	121.55	188.97	736.92
Fixed Charges	20.00	0	12.50	20.00	0
Capital Outlay	140.00	194.71	0	0	139.47
Auxiliary Agencies	5.05	70.00	259.32	99.67	189.45
Total Current Expense	2,120.80	1,944.92	2,316.43	2,181.18	2,604.50
Balance on Hand	600.87	738.93	475.13	1,014.35	791.17

TABLE XXVIII
EXPENDITURES BY YEAR, 1926-1930, NEW ERA SCHOOL

Item	1926-1927	1927-1928	1928-1929	1929-1930	1930-1931
General Control	\$ 11.50	\$ 30.50	\$ 0	\$ 9.20	\$ 0
Teachers' Salaries	1,404.00	1,516.45	1,507.55	1,404.00	1,404.00
Other Ex. of Instruction	60.36	126.83	144.54	48.89	39.71
Library	40.00	40.00	40.00	40.00	40.00
Oper. of School Plant	136.30	155.00	250.36	365.78	377.47
Main. " " "	141.34	82.40	155.19	258.73	368.47
Fixed Charges	0	40.00	0	0	40.00
Capital Outlay	100.35	214.82	125.00	103.61	58.60
Auxiliary Agencies	3.00	0	13.90	5.03	0
Total Current Expense	1,796.50	1,991.18	2,111.54	2,131.63	2,269.65
Balance on Hand	384.34	251.07	142.23	512.04	373.23

TABLE XXIX
EXPENDITURES BY YEAR, 1926-1930, NEWHALL SCHOOL

Item	1926-1927	1927-1928	1928-1929	1929-1930	1930-1931
General Control	\$ 24.65	\$ 130.22	\$ 104.13	\$ 100.39	\$ 180.90
Teachers' Salaries	6,438.75	8,465.00	8,093.75	9,692.75	9,666.25
Other Ex. of Inst.	314.60	565.79	406.14	663.76	496.36
Library	200.00	200.00	200.00	204.45	221.38
Oper. of School Plant	1,448.36	1,670.56	1,572.11	2,115.26	2,059.50
Main. " " "	365.26	502.25	868.94	3,047.95	1,700.26
Fixed Charges	316.00	167.59	540.01	539.31	322.86
Capital Outlay	417.40	4,106.11	4,541.32	32,579.89	138.75
Auxiliary Agencies	1,359.32	1,744.43	2,018.34	2,248.01	2,022.68
Total Current Ex.	10,466.94	13,445.83	13,803.42	18,611.88	16,670.19
Balance on Hand	3,525.37	2,532.73	31,779.26 ¹	3,974.28	5,586.66

¹A large amount of the balance in 1928-1929 was from bond sales.

TABLE XXX
EXPENDITURES BY YEAR, 1926-1930, SAUGUS SCHOOL

Item	1926-1927	1927-1928	1928-1929	1929-1930	1930-1931
General Control	\$ 400.00	\$ 49.20	\$ 11.40	\$ 5.70	\$ 5.72
Teachers' Salaries	3,285.00	3,425.00	3,614.25	3,573.00	3,669.50
Other Ex. of Inst.	136.42	135.45	74.12	293.50	335.00
Library	74.03	70.00	75.00	75.00	75.00
Oper. of School Plant	517.56	572.47	606.57	644.14	939.24
Main. " " "	860.51	267.31	432.23	208.80	309.20
Fixed Charges	50.95	40.00	60.00	0	40.00
Capital Outlay	355.05	397.99	232.69	708.18	587.01
Auxiliary Agencies	688.78	931.55	857.70	850.38	387.25
Total Current Ex.	6,013.25	5,490.98	5,731.27	5,650.52	5,760.91
Balance on Hand	1,308.66	1,688.36	2,624.69	1,897.22	1,198.59

TABLE XXI

CURRENT EXPENDITURES AND THE PER CENT OF EACH ITEM OF CURRENT EXPENSE OF
 CASTAIC UNION, FELTON, AND HONBY DISTRICTS, 1930-1931.

Item	Castaic Union		District Felton		Honby	
	Amount	Per cent of cur. ex.	Amount	Per cent of cur. ex.	Amount	Per cent of cur. ex.
General Control	\$ 43.98	.46	\$ 0	0	\$ 1.40	.05
Teachers' Sal.	5,369.64	56.16	1,350.00	88.59	1,426.50	54.77
Other Ex. of Inst.	248.14	2.28	64.59	4.23	92.18	3.53
Library	140.80	1.47	30.00	1.96	50.00	1.91
Oper. of Sch. Plant	740.32	7.74	45.00	2.95	108.05	4.14
Main. " " "	295.57	3.09	34.14	2.24	736.92	28.29
Fixed Charges	0	0	0	0	0	0
Aux. Agencies	2,722.31	28.47	0	0	189.45	7.27
Total	9,560.76	100	1,523.73	100	2,604.50	100

This table should be read as follows: the expenditures for Gen. Con. in Castaic Union in 1930-1931 were \$43.98, or .46 per cent of its total yearly cur. expenditures.

TABLE XXXII

CURRENT EXPENDITURES AND THE PER CENT OF EACH ITEM OF CURRENT EXPENSE OF
NEW ERA, NEWHALL, AND SAUGUS DISTRICTS, 1930-1931.

Item	New Era		District Newhall		Saugus	
	Amount	Per cent of cur. ex.	Amount	Per cent of cur. ex.	Amount	Per cent of cur. ex.
General Control	\$ 0	0	\$ 180.90	1.08	\$ 5.72	.09
Teachers' Salaries	1,404.00	61.85	9,666.25	57.98	3,669.50	63.69
Other Ex. of Inst.	39.71	1.74	496.36	2.97	335.00	5.81
Library	40.00	1.76	221.38	1.32	75.00	1.30
Oper. of Sch. Plant	377.47	16.63	2,059.50	12.34	939.24	16.30
Main. " " "	368.47	16.23	1,700.26	10.19	309.20	5.36
Fixed Charges	40.00	1.76	322.86	1.93	40.00	.69
Aux. Agencies	0	0	2,022.68	12.13	387.25	6.72
Total	2,269.65	100	16,670.19	100	5,760.91	100

This table should be read as follows: the expenditure for Gen. Con. in Newhall in 1930-1931 was \$180.90, or 1.08 per cent of its total yearly cur. expenditures.

TABLE XXXIII
 CAPITAL OUTLAYS OF THE SIX DISTRICTS OVER
 FIVE YEAR PERIOD, 1926-1927 TO 1930-1931.

District	Total Capital Outlay	Period Capital Outlay Per A.D.A. ¹	Yearly Capital Outlay Per A.D.A. ¹
Castaic Union	\$23,424.73	\$478.05	\$95.61
Newhall	41,783.47	232.13	46.42
New Era	602.38	100.39	20.08
Saugus	2,280.48	58.48	11.69
Felton	300.76	30.07	6.01
Honby	474.18	24.95	4.99

¹This is based on the average daily attendance for the school year of 1930-1931
 This table should be read as follows: during the five year period of 1926-1927 to 1930-1931 the total capital outlay of Castaic Union District was \$23,424.73, making a total period average per average daily attendance of \$478.05 and a yearly average per average daily attendance of \$95.61, etc.

the average annual capital outlay with other elementary districts for a same length period, one cannot say the cost of capital outlay has been exorbitant. In the Alhambra survey by O. R. Hull and W. S. Ford made in 1928 the five year period of 1922-1927 gives the following average annual capital outlay for elementary schools: Colton \$15.13, Whittier \$75.23, Burbank \$57.65, and Pasadena \$119.73. These larger schools are building gradually to care for gradual increase in enrollment, while Castaic Union built during the five year period, in all probability, to care for her enrollment for years to come. Viewing the situation from this angle, Castaic's annual capital outlay is not excessive.

The present investment in school property. From a study of Table XXXIV it is seen Felton District has practically no investment in school property for the building and the small lot on which it is situated are the property of the Standard Oil Company of California.

Castaic Union has a site of two and a half acres valued at \$2,500 and a building of two class rooms and an auditorium, which is also used as a class room, costing \$15,000 or a total of \$17,500. The equipment valuation is placed at \$2,000 making a total valuation of \$19,500.

Honby's one room school building is valued at \$1,000. It is located on a lot for which the district has never paid. The owner of the lot the building is placed on has wanted \$500 for the acre site, but his terms have never been met by the board. The equipment valuation is placed at \$500,

TABLE XXXIV
 VALUATION OF SCHOOL PROPERTY IN USE DURING SCHOOL YEAR
 1930-1931

District	Grounds	Buildings	Equipment	Total value of school property	Outstanding bond indebtedness
Newhall	\$10,000	\$52,000	\$3,000	\$65,000	\$59,000
Castaic	2,500	15,000	2,000	19,500	16,000
Saugus	2,000	6,000	3000	8,300	0
New Era	300	2,000	200	2,500	0
Honby	500 ¹	1,000	500	1,500	0
Felton	300 ¹	600 ¹	190	190	0

¹Not owned by district.

making a total valuation of \$1,500.

New Era's one room building is located on a two acre site valued at \$300 and the building is valued at \$2,000. The equipment's valuation is placed at \$200, making a total property investment of \$2,500.

Newhall's site consists of ten acres valued at \$10,000. A ten room concrete building and an auditorium seating 340 people costing \$80,000, but now valued at \$50,000, and two frame bungalows costing \$2,000 each, now valued at \$1,000 each, comprise the school plant. The equipment is now valued at \$3,000. Taking into consideration decreased property values during 1931-1932, the total value of Newhall's school property is but \$65,000.

The site of Saugus School District consists of two and a half acres of land valued at \$2,500 and two frame one-room buildings valued at \$3,000 each. The equipment in the two rooms is valued at \$300, making a total valuation of \$8,300.

Bonding limits and outstanding bonded indebtedness.

Table XXXV shows the assessed valuation of each district, the bonding limit, outstanding bonds, and additional bonding capacity each district had for the year of 1930-1931. As before stated, Felton District does not own its own site and plant, and consequently could have no outstanding bonds. The other districts not having outstanding bonds are Honby, New Era, and Saugus, which leaves but Castaic Union and Newhall with such bonds.

As provided by state law, the maximum bonding capacity is five per cent of the district's assessed valuation.

TABLE XXXV
 ASSESSED VALUATION AND THE BONDING LIMIT
 OF THE SIX DISTRICTS

District	Assessed valuation	Bonding limit ¹	Outstanding bonds	Additional bonding capacity
Newhall	\$1,597,340	\$79,867	\$59,000	\$20,867
Castaic Un.	830,860	41,543	16,000	25,543
Saugus	698,445	34,922	0	34,922
Felton	294,245	14,712	0	14,712
Honby	250,730	12,536	0	12,536
New Era	118,010	5,900	0	5,900

¹Five per cent of the assessed valuation as allowed by state law.
 This table should be read as follows: the assessed valuation of Newhall District was \$1,597,340 in 1930-1931. Five per cent of this amount is \$79,867, the maximum amount of bonds that can be issued against the district. The present outstanding bonds amount to \$59,000, leaving an additional bonding capacity for the district of \$20,867, etc.

The outstanding bond indebtedness for Castaic Union District is \$16,000, leaving a possible bonded indebtedness of \$25,443 in addition to its outstanding bonds. Newhall's outstanding bonded indebtedness is \$59,000, which leaves a possible bond issue of \$20,867 yet available.

Castaic is more in need of additional room than Newhall, although by using the auditorium for a class room, as it is doing at the present time, it is not necessary to try to float another bond issue at this time. Newhall has two class rooms that are scarcely used at the time this was written, which makes it unnecessary to vote additional bonds in the near future.

From Table XXXV Saugus is the best able to float a bond issue, as it can issue bonds up to \$34,922, an amount sufficient to care for a school much larger than its present size. From the same table it is seen New Era is the least able to issue bonds as its bonding capacity is but \$5,900.

Comparative costs with other districts. By a study of Table XXII or XXIII it is seen the financial ability of the six elementary districts in the survey compares very favorably with the other five districts of similar size taken at random in Los Angeles County. While Newhall, with \$3.18 per \$100 of assessed valuation, has the highest total tax rate of the six districts, both Keppel Union with \$3.35, and Carmenita with \$3.49, have higher total tax rates. In comparison with these two districts, Newhall is much more fortunate in its total tax burden. Castaic Union ranks next

to Newhall in the six districts with a total tax rate of \$3.02. The other four districts range from \$2.82 per \$100 of assessed valuation in New Era down to \$2.17 in Felton, which has the lowest rate of all the six districts.

Since Newhall and Castaic Union have outstanding bonds, their tax rates are increased largely by that fact. Both of these districts have greater transportation problems than the other districts, which also adds to their tax burdens.

Felton, Honby, and Saugus Districts' total tax rates are less than any of the five districts' total tax rates chosen at random in Los Angeles County.

From a careful study of the tax rates, it is found none of the six districts in the survey are over burdened with school or total tax costs in comparison with other school districts in Los Angeles County.

Current expenses, disbursements. Tables XXIV to XXX give expenditures in the six districts from the years of 1926-1927 to 1930-1931.

Maintenance expenses were exceptionally large in Castaic Union District in 1928-1929, or just after the construction of its new plant. Operation costs were also very large in this school both in 1929-1930 and 1930-1931. In Newhall maintenance costs were very great in 1929-1930 and 1930-1931. From outward appearances it leads one to believe the schools' finances in these costs were not well managed during those two years.

Both Castaic Union and Newhall Districts have large

auxiliary agency costs, Castaic having the greater amount in money of the two. This is largely accounted for in the great distance Castaic Union District transports some of its pupils. Newhall has been transporting some of its pupils who live less than a mile from the school house, thereby increasing its expenditures for auxiliary agencies.

All six districts appear to be quite inconsistent in expenditures for "other expenses of instruction". Some years this item is as much as three or four times what it is in other years in certain districts.

In the item of fixed charges, there appears to be too much difference in the amount expended from year to year. Newhall is to have its insurance policies re-written so as to make this item of expense about uniform one year with another.

Table XXXVI gives comparative costs per average daily attendance of the districts in the survey and five other districts in Los Angeles County. In this table one can readily see New Era's cost per pupil in average daily attendance of \$378.28 was nearly double that of Castaic's cost per pupil in average daily attendance, \$195.11, which was the next highest per pupil in average daily attendance cost of the six districts. New Era's cost was also much greater than any of the five other districts for that year. Newhall's cost of \$92.67 per pupil in average daily attendance for that year was the lowest of any of the six districts, but nearly 50 per cent higher than Carmenita's, one of the

TABLE XXXVI
 COMPARISON OF AVERAGE DAILY ATTENDANCE COSTS OF
 THE SIX DISTRICTS IN THE SURVEY AND FIVE OTHER
 LOS ANGELES COUNTY SCHOOLS¹

Districts	Total current expense	A. D. A.	Cost per A. D. A.
New Era	\$2,269.65	6	\$378.28
Mint Canyon	1,866.06	7	266.58
Castaic Union	9,560.76	49	195.11
Calabasas	4,171.56	24	173.81
Keppel Union	10,933.03	67	163.18
Felton	1,523.73	10	152.37
Saugus	5,760.91	39	147.71
Honby	2,604.50	19	137.08
Newhall	16,680.19	180	92.67
Del Sur	5,038.93	56	89.98
Carmenita	12,059.94	187	64.49

¹These figures are for the year 1930-1931. This table should be read as follows: New Era's total current expense was \$2,269.65, which for each of its 6 pupils in average daily attendance was an average cost of \$378.28, etc.

other five districts.

Summary and conclusions. In total receipts of school money, most of the districts have remained about the same from year to year. Newhall has gradually increased, the most of its increase being from state apportionment and by additional local tax. The latter has been necessary to accommodate a larger average daily attendance. The county apportionment has decreased because the county has reduced its amount per pupil in average daily attendance in recent years, while the state has paid the same amount per pupil in average daily attendance as formerly.

In computing tax rates on true value rather than on assessed value, it is readily seen school costs are much less than they would appear to be.

In capital outlays Castaic Union and Newhall Districts are the only districts building plants or making additions to existing ones in the past five years. Castaic is a little high in this item of expense, more than twice as much as Newhall, but not higher than some larger schools in this expense for a like period.

Under present investment in school property, Castaic Union and Newhall Districts have the greatest amount invested, and consequently have plants much superior to the other four districts.

Newhall has the greatest amount in outstanding bonds and has more nearly reached its bonding capacity than has Castaic Union. Newhall's plant can take care of a future

growth to greater advantage than Castaic Union is able to do. The other four districts have no outstanding bonds. Of the remaining districts, Saugus is the most able to issue bonds for new buildings and New Era, the least able.

Castaic Union and Newhall Districts have had greater percentages of increases in current expenses than the four remaining districts. Castaic Union's percentages of expenditures have increased on account of having a larger plant and greater distances to transport pupils since its unionizing with Live Oak. Newhall's larger plant and its steady increase in transporting many children short distances have gradually increased its current expense.

There appears to be some inconsistency in yearly expenditures in such as "other expenses of instruction" and fixed charges in all the districts.

With more careful management of school finances and decreasing the number of children transported short distances, current expenses should be reduced to a considerable extent.

CHAPTER V

THE PRESENT SCHOOL PLANTS' EVALUATION

Purpose of the chapter. The purpose of the chapter is to give the location of each school building in the six districts, the type of each, and its score, evaluation, capacity, and building utilization, need for new buildings, and recommendations for such.

Location and type of each district's buildings. Castaic Union District's school house is located on a two and a half acre site in the village of Castaic, which is practically at the foot of the Ridge. The highway passing over this Ridge is commonly called the "Ridge Route." The site, while of a gravel soil, is somewhat low, causing water to stand in parts of it after a severe storm. A five foot substantial wire fence encloses the lot, the gates to which are kept locked when school is not in session. A concrete walk, in the center of which is a flagpole, leads from the street to the building. The building, constructed of concrete, contains two class rooms and an auditorium with a seating capacity of approximately two hundred. Gas is used for heating purposes and electric lights are provided in the building. As yet there are no trees, shrubs, or lawn on the lot, but the board of trustees contemplates beautifying the grounds with such as soon as sufficient funds are available for that purpose.

The school house of Felton District is located in Pico

Canyon, five miles to the west of the town of Newhall. As before stated, the first productive oil well in California is in close proximity to this school house. The building is an old frame structure, containing one class room and a small library, and is heated and lighted with gas obtained from the nearby wells. A wooden walk extends from the road to the building. The lot containing less than a half acre, enclosed by a rough wooden fence, is well shaded by large oak trees. The center of the yard is quite low causing the drainage to be quite poor. There are no shrubs or lawn in the yard, for there is too much shade for them to do well.

Honby School House, four and a half miles to the east of Saugus, is built on a lot containing approximately an acre of land just below the Mint Canyon Highway and bordering Santa Clara River, a dry river bed the greater part of the year. However, during the rainy season this river's waters do flood part of the school grounds, making it quite dangerous for the children at such times. The drainage is excellent, as there is sufficient slope to the river to avoid water standing in the yard after severe storms. The grounds are unimproved with the exception of a few small eucalyptus trees growing about the building. The building is a small frame structure having one class room and a small room in the rear, which is used as a library and a store room.

New Era District has a small frame building, heated with wood and lighted by electricity, occupying a two acre site, which is poorly fenced, just below Bouquet Canyon Road, four

and a half miles to the northeast of Saugus. The grounds border and form part of a creek bed, which is dry with the exception of the most rainy season of the year. The soil, while having excellent drainage to the creek, is somewhat of a clay nature and of a poor type for a school yard. The grounds are unimproved on account of the lack of water, which even must be carried to school for drinking purposes.

Newhall District is indeed fortunate in having its school plant located in the southeast portion of a ten acre plot, somewhat to the north of the center of the town. It is not on a main traveled street or thoroughfare and is two blocks from the railroad. The main building contains ten class rooms and an auditorium with a seating capacity of three hundred forty. It is constructed of cement and has a tile roof. It is heated with gas radiators. The four rooms that were in the original unit have but one electric light in each, while the six rooms, which were more recently built, have five lights in each. A concrete corridor extends along the front part of the building, which has the four class rooms of the first unit, and connects with corridors extending along each wing, which has three rooms each. On each side of the front entrance, which is in the center of the first unit, is a small room, one of which is the library and the other the principal's office. A large basement, approximately 25 feet by 35 feet is at the rear of each wing. Somewhat to the rear of the main building are two frame structures 25 feet by 40 feet, one of which has been used as

a store room and the other the school cafeteria. Both buildings could be used as class rooms, should they be needed for such. The grounds are quite well drained. The soil contains much gravel and is excellent for a playground for it is never muddy. Locust trees are planted around the edge of the lot and through the center from side to side, dividing the grounds into four plots. Shrubbery is planted next to the front of the main building and a lawn between the main building and the street. A bed of various varieties of roses adjoin the lawn at each end. On account of so much gravel in the soil, the lawn, trees, and flowers do not grow well. A concrete walk, in the center of which is a flagpole, extends from the front of the building to the street, while another extends from the rear of the building to the two frame buildings at the back.

Saugus District's school building is located on a two and a half acre plot of ground to the north edge of the village of Saugus. The location is exceptionally poor as the Mint Canyon Highway and the main line of the Southern Pacific Railroad are just in front of the school grounds. The grounds in front of the school building are lower than those in the rear. With them adjoining the state highway, there is no drainage and large water holes are found in front of the building for some time after severe storms. While there are a few shade trees in front of the building, the grounds as a whole are unimproved. The building consists of two separate frame structures on cement foundations, which are connected by a long wooden porch. The storage and toilet rooms are be-

tween the two buildings and somewhat to the rear of them.

Method of scoring the buildings. The scoring of the buildings was done with the aid of the teacher or principal in each school. A revision of the scoring was made later and the scores given the various buildings were compared with one another to be more accurate in the score of each building finally arrived at. Strayer and Englehardt's "Standards For Elementary School Buildings" was used for the Newhall School and the "Score Card For Village And Rural School Buildings Of Four Teachers Or Less" by the same authors was used for the other five buildings. Instructions in the score card were followed as closely as possible.

Results of the scoring. Each building was scored as to the five main points, as site, building, service systems, class rooms, and special rooms.

The results of scoring each plant are found in Tables XXXVII to XLIII inclusive.

Out of a possible score of 1,000 Castaic Union School was given 681, which is lower than a plant built as recently as this building was should score. The location is quite poor, since it is located on the "Ridge Route", a main traveled highway extending from Los Angeles to Bakersfield and points north. The drainage is quite poor, as the site is much lower than the highway and it has little or no slope to the rear. The nature of the soil is excellent for playground purposes, since there is much gravel in the soil. The gross structure of the building is excellent, for it scored a total of 83 points out of a maximum of 90. The

TABLE XXXVII

SCORE OF THE CASTAIC UNION SCHOOL BY STRAYER-EN-
GLEHARDT SCORE CARD FOR RURAL SCHOOL BUILDINGS¹

Standard Score (1)	Building Score (2)	Standard Score (1)	Building Score (2)
	(1) (2)	(1) (2)	(1) (2)
I. Site	160 115	G. Toilet systems	60 55
A. Location	65 45	IV. Class rooms	225 175
B. Drainage	40 30	A. Arrange- ment	10 8
C. Size, form and use	45 30	B. Construc- tion and finish	80 67
D. Flagpole	10 10	C. Illumin- ation	60 40
II. Bldg.	200 139	D. Cloak rooms and ward- robes	20 10
A. Placement	40 30	E. Equip- ment	55 50
B. Gross Structure	90 83	V. Special rooms	165 55
C. Internal Structure	70 26	A. Rooms for gen. use	80 30
III. Service systems	250 197	B. Official rooms	20 20
A. Heating and ventilation	55 37	C. Other special rooms	65 5
B. Fire pro- tection	20 16	Totals	1000 681 1000 681
C. Cleaning system	25 18		
D. Artificial lighting	20 16		
E. Schedule and emergency equipment	20 15		
F. Water supply system	50 40		

¹An abbreviated copy of Strayer-Englehardt's score card. This table should be read as follows: out of a total score of 160 points for Site Castaic Union School scored 115 points, etc.

TABLE XXXVIII
SCORE OF THE FELTON SCHOOL BY STRAYER-ENGLEHARDT
SCORE CARD FOR RURAL BUILDINGS¹

Standard Score (1)			Building Score (2)			Standard Score (1)			Building Score (2)
	(1)	(2)	(1)	(2)		(1)	(2)	(1)	(2)
I. Site			160	120	G. Toilet systems	60	25		
A. Location	65	60							
B. Drainage	40	20			IV. Class rooms			225	117
C. Size, form and use	45	30			A. Arrange- ment	10	8		
D. Flagpole	10	10			B. Construc- tion and finish	80	62		
II. Bldg.			200	72	C. Illumin- ation	60	14		
A. Placement	40	20			D. Cloak- rooms and ward- robes	20	10		
B. Gross structure	90	45			E. Equip- ment	55	25		
C. Internal structure	70	7			V. Special rooms			165	20
III. Service systems			250	114	A. Rooms for gen. use	80	20		
A. Heating and ventila- tion	55	17			B. Officials' room	20	0		
B. Fire pro- tection	20	12			C. Other special rooms	65	0		
C. Cleaning system	25	12			Totals	1000	443	1000	443
D. Artificial lighting	20	10							
E. Schedule and emergency equipment	20	8							
F. Water supply system	50	30							

¹An abbreviated copy of Strayer-Englehardt's score card. This table should be read as follows: out of a total score of 160 points for Site Felton School scored 120 points, etc.

TABLE XXXIX

SCORE OF THE HONBY SCHOOL BY STRAYER-ENGLEHARDT

SCORE CARD FOR RURAL BUILDINGS¹

Standard Score (1)	Building Score (2)		Standard Score (1)	Building Score (2)		
	(1)	(2)	(1)	(2)	(1)	(2)
I. Site			160	115		
A. Location	65	35				
B. Drainage	40	40			50	20
C. Size, form, and use	45	30			60	27
D. Flagpole	10	10				
II. Bldg.			200	93		
A. Placement	40	35				
B. Gross structure	90	51				
C. Internal structure	70	7				
III. Service systems			250	75		
A. Heating and ventila- tion	55	5				
B. Fire pro- tection	20	6				
C. Cleaning system	25	9				
D. Artificial light- ing	20	0				
E. Schedule and emergency equipment	20	8				
					225	138
					10	8
					80	51
					60	37
					20	10
					55	32
					165	20
					80	15
					20	0
					65	5
					Totals	1000 441 1000 441

¹An abbreviated copy of Strayer-Englehardt's score card. This table should be read as follows: out of a total score of 160 points for Site Honby School scored 115 points, etc.

TABLE XL
SCORE OF THE NEW ERA SCHOOL BY STRAYER-ENGLEHARDT
SCORE CARD FOR RURAL BUILDINGS¹

Standard Score (1)	Building Score (2)	Standard Score (1)	Building Score (2)
	(1) (2)		(1) (2)
I. Site	160	123	
A. Location	65	45	
B. Drainage	40	38	
C. Size, form and use	45	30	
D. Flagpole	10	10	
II. Bldg.	200	97	
A. Placement	40	28	
B. Gross structure	90	57	
C. Internal structure	70	12	
III. Service systems	250	86	
A. Heating and ventila- tion	55	15	
B. Fire pro- tection	20	10	
C. Cleaning system	25	16	
D. Artificial lighting	20	7	
E. Schedule and emergency equipment	20	8	
F. Water supply system	50	9	
G. Toilet systems	60	21	
IV. Class rooms		225	139
A. Arrange- ment	10	3	
B. Construc- tion and finish	80	47	
C. Illumin- ation	60	52	
D. Cloakrooms and ward- robes	20	10	
E. Equipment	55	27	
V. Special rooms		165	10
A. Rooms for gen. use	80	5	
B. Official rooms	20	0	
C. Other special rooms	65	5	
Totals	1000	455	1000 455

¹An abbreviated copy of Strayer-Englehardt's score card. This table should be read as follows: out of a total score of 160 points for Site New Era School scored 123 points, etc.

TABLE XLI
SCORE OF THE NEWHALL SCHOOL BY STRAYER-ENGLEHARDT
SCORE CARD FOR ELEMENTARY SCHOOL BUILDINGS¹

Standard Score (1)	Building Score (2)		Standard Score (1)	Building Score (2)		
	(1)	(2)	(1)	(2)	(1)	(2)
I. Site			125	107		
A. Location	55	45				
B. Drainage	30	27				
C. Size and form	40	35				
II. Bldg.			165	141		
A. Placement	25	18				
B. Gross structure	60	53				
C. Internal structure	80	70				
III. Service systems			280	168		
A. Heating and ven- tilation	80	40				
B. Fire pro- tection	65	50				
C. Cleaning system	20	5				
D. Artificial lighting	20	13				
E. Electric service system	15	15				
F. Water sup- ply system	30	15				
G. Toilet "	50	30				
IV. Class rooms					290	242
A. Location and con- nection	35	35				
B. Construc- tion and finish	95	90				
C. Illumin- ation	85	70				
D. Cloak rooms and ward- robes	25	10				
E. Equip- ment	50	37				
V. Special rooms					140	57
A. Rooms for gen. use	65	22				
B. Rooms for school of- ficials	35	20				
C. Other special rooms	40	15				
Totals	1000	715	1000	715		

¹An abbreviated copy of Strayer-Englehardt's score card. This table should be read as follows: out of a total score of 125 points allowed for Site, Newhall School scored 107 points, etc.

TABLE XLII

SCORE OF THE SAUGUS SCHOOL BY STRAYER-ENGLEHARDT
SCORE CARD FOR RURAL BUILDINGS¹

Standard Score (1)	Building Score (2)		Standard Score (1)	Building Score (2)		
	(1)	(2)	(1)	(2)	(1)	(2)
I. Site			160	118		
A. Location	65	48			G. Toilet system	60 50
B. Drainage	40	30				
C. Size, form and use	45	30			IV. Class rooms	225 187
D. Flagpole	10	10			A. Arrange- ment	10 8
II. Bldg.			200	98	B. Construc- tion	80 68
A. Placement	40	27			C. Illumin- ation	60 55
B. Gross structure	90	59			D. Cloak rooms and ward- robes	20 10
C. Internal structure	70	12			E. Equip- ment	55 46
III. Service systems			250	173	V. Special rooms	165 0 165 0
A. Heating and ventilation	55	35			Totals	1000 576 1000 576
B. Fire pro- tection	20	13				
C. Cleaning system	25	19				
D. Artificial lighting	20	8				
E. Schedule and emergency equipment	20	13				
F. Water supply system	50	35				

¹An abbreviated copy of Strayer-Englehardt's score card. This table should be read as follows: out of a total score of 160 points for Site, Saugus School scored 118 points, etc.

TABLE XLIII
 STANDARD SCORE AND BUILDING SCORE BY STRAYER-
 ENGLEHARDT'S SCORE CARDS OF EACH OF THE SIX
 DISTRICTS' BUILDINGS

District	Standard Score	Building Score
Newhall	1000	715
Castaic Union	1000	681
Saugus	1000	576
New Era	1000	455
Felton	1000	443
Honby	1000	441

This table should be read as follows: out of the standard score of 1000 points as given in Strayer-Englehardt's Score Cards, Newhall School received a total score of 715 points.

internal structure is very poor, its total score being but 26 points out of a total of 70 allowed by the authors. There is no basement and the color scheme is very poor. The service system is quite good, as the total score is 197 out of a maximum of 250. The class rooms scored very well, having been given 175 points out of 225. In this the window shades and window placement were not satisfactory. Lack of special rooms reduced the score of the fifth division to 55 out of a total of 165 points.

Felton School scored but 443 points out of a possible score of 1000. This score places it in a very undesirable class and it should not be used for school purposes. On account of the school having an attendance of but four pupils during the school year of 1931-1932, the district will be suspended. It is not likely the building will ever be used again for school purposes, for from present indications the Standard Oil Company, whose employees have kept up the school in the past, never again will have sufficient employees in that district to support a school. The site of this building scored a total of 120 out of 160, which is the best of the five main divisions. The building score is but 72 out of a possible score of 200. This building is probably fifty years old. Windows are found on both sides and in the rear. Every part of the building is far from what a modern school building should be. The service system scored 114 out of 250. The gas heat is provided by a burner being attached to an old fashioned box stove. Among other unhygienic features

are the outdoor toilets, which are but a few steps from the building. The class room score is 117 out of 225. In this the illumination is the poorest, since windows are not only on both sides but also in the rear. In special rooms, a small room for a library is all under this division.

Honby's score is but 441 out of 1000 points, or even slightly worse than that of Felton. The site is 115 out of a possible 160. The building is located adjoining the Mint Canyon Highway and is never free from the noise of automobiles and heavy trucks. The grounds are cut into by the Santa Clara River bed. The building is given but 93 points out of a maximum of 200. It is but a cheaply built frame structure with a very low ceiling. It has one entrance at the rear and one at the front. There is but little space for cloaks and lunches. The color scheme is rather a dark brown, causing much difficulty in securing proper light. The service system scored but 55 points out of a maximum of 250. The building is heated by a small old fashioned wood stove. With the ceiling very low and a lack of window space, it is exceptionally difficult to properly ventilate the room. The window placement is very poor. Special rooms are lacking with the exception of a small room used for a library and a store room. There is no artificial lighting system.

The score of New Era's building is 455 out of 1000 or slightly more than those of Felton and Honby. The site score is 123 out of 160 points. While the building is on a main traveled road for that section, the traffic on it is

very little compared to the highway on which Honby is located. The school room is quite small but sufficiently large to accommodate the school's small enrollment. The building occupies the center of the lot, thereby interfering with proper use of the ground for play purposes. The construction is entirely of wood, with the exception of the foundation, which is concrete. Its only entrance leads to a cloak room, which in turn has two entrances to the class room. The building score is but 97 out of a maximum of 200 points. The service system was given but 86 points out of a total of 250. The building is heated with a small wood stove and has very poor means of proper ventilation. The room has but one electric light in the center of the room. The cleaning system is but the old fashioned corn broom and feather duster. The water supply is very defective, as water must be carried to the school. The toilet system is the outdoor privy type, which is located some distance to the rear of the building. The fuel room is part of the toilet building, occupying the central portion of it. The floor of the class room is soft wood, which is very much in need of replacement. The room has sufficient supply cupboard space for such a small enrollment. The equipment is very old and far from modern in every respect. The class room score is 139 out of a total of 225 points. The special rooms are entirely lacking, with the exception of a well screened building used for a lunch room in favorable weather. This division received but a score of 10 out of a total of 165 points.

The building in Newhall, while far from a perfect score, comes nearer meeting present day school standards than any of the buildings scored in the survey. It was given 715 out of a maximum of 1000 points. This building, the older portion of which is but eight years old, should have scored higher. The site is excellent, receiving a score of 107 out of a total of 125 points. The building score is also excellent, as it scored 141 out of a total of 165 points. The service system is not satisfactory, scoring 168 out of 280 points. The building is heated with gas radiators, some of which are too small to heat the rooms in a satisfactory manner. The air supply is poor in four class rooms and the auditorium, which were all built in the original unit. But one small sash will open in each window in these rooms, the others being cemented to the window casings. Since transoms in these four class rooms are open at all times, ventilation is helped to some extent. The class rooms all open into cement corridors, which make safe exits in case of fire. No electric apparatus, except a carpet sweeper for the carpet in the auditorium and principal's office, is included in the cleaning system. While the drinking water system is excellent, the washing system, consisting of one large bowl in each lavatory, is very poor with no facilities for bathing. The building has no hot water connections. The toilet system is fairly satisfactory, but there are no separate accommodations for teachers. The class rooms are fairly good, for they made a score of 242 out of a total of 290 points. The closet

space for books, cloaks, and lunches are built in the end of each class room, leaving the tops of them for "catch alls" and dust catchers, especially. The glass area is good but the shades are not satisfactory. In "large rooms for general use", a very satisfactory auditorium and lunch rooms, open to the weather, are all the building is provided with. There is no teachers' room and there are no rooms for industrial arts, general science, or drawing. This brings the score on special rooms to but 57 out of a total of 140 points. While the building has many deficiencies that keep it from meeting standard requirements, it is quite satisfactory in general.

The score of Saugus School is 576 out of a total of 1000 points. This building, while far from meeting standards, is a much better building than the three one teacher buildings in the survey. The site totaled 118 out of 160, the maximum allowed. The principal objection to the site is the grounds border the Mint Canyon Highway and the Valley Line of the Southern Pacific Railroad is just beyond the highway from the school. With these two disturbing factors so near at hand, there is much interruption, especially when trains are switching near the school. The nature of the soil is excellent, since it has much gravel in it. There are several low spots in the grounds causing water to stand in those spots after heavy rains. The building, scoring but 98 out of a maximum of 200 points, consists of two distinct structures, connected by a wooden porch. The buildings are set on con-

crete foundations. The score for the service system is but 173 out of a total of 250 points. The heating system is gas and the radiation is sufficient for satisfactory heating. While the buildings are lighted with electricity, there are not a sufficient number of lights to make this item meet standard requirements. The cleaning system, while efficient for its kind, is not modern. The water supply is sufficient but there are no hot water or bathing facilities. The toilet systems are quite satisfactory, scoring 50 out of 60 points. The class rooms score is 187 out of 225, which is quite good. The floors are of soft wood and are somewhat worn. The shades are very poor. The equipment in general is quite satisfactory. All special rooms are entirely lacking, which decreased the total score on the building to a considerable degree.

In all six districts, the pupils' desks are mostly of the unadjustable type. Saugus is the only district that has small tables in place of desks for the four primary grades. The furnishings in general do not meet standard requirements, but during a period of depression, as the world is now in, it will be necessary to use these furnishings, even if they do not measure up to what school authorities would wish to have used.

Utilization and capacity of the buildings. Table XLIV gives the utilization and capacity of each building in the different districts. In this respect Castaic Union and Newhall each have additional room for an increase of eighty-

TABLE XLIV
 UTILIZATION AND CAPACITY OF EACH
 DISTRICT'S BUILDING

District	Number of seats	Present membership	Estimated capacity	Possible increase
Newhall	266	203	450	247
Castaic Union	73	65	120	55
Saugus	53	45	59	14
Felton	10	4	18	14
Honby	29	21	29	8
New Era	11	10	18	8

This table should be read as follows: Newhall School has 266 seats in its rooms. Its present membership is 203. It is estimated the rooms will care for 450 pupils, leaving a possible increase in enrollment of 247 pupils, etc.

five per cent and one hundred per cent respectively in membership, counting 40 pupils to each of Castaic's two regular class rooms and its auditorium, which is used for a class room. Newhall's capacity was estimated at 45 pupils to each of the ten rooms, which makes them a little crowded, especially in the upper grades where larger seats are required to meet the needs of larger children. Felton's building, which is being discontinued for school use after the school year of 1931-1932, has the largest per cent of additional room of any of the buildings in the study. When the count was made Honby had room for eight additional pupils to enter their school. Later in the year the room was filled to capacity by additional children entering the school. Saugus, likewise, increased to its capacity by additional children entering their school. Newhall increased to 226, which still left additional room for nearly one hundred per cent increase in its enrollment. New Era's building, though quite a small room, had additional room for eight pupils or eighty per cent increase in enrollment.

Need for new buildings. With Felton District to be suspended in the summer of 1932, there is little need to consider their building farther. However, if the school should ever be re-opened, it, by all means, should provide a new building for its school. Since it is anticipated that district will be annexed to Newhall District in 1933, its building problem will be solved through its annexation to the latter district.

New Era and Honby school buildings are both much below what authorities estimate a building should score and still be used for school purposes. New buildings should be built in both districts, or they should consolidate or unionize with Newhall, since Newhall has sufficient room to care for them. By referring to Map I it is seen Honby District adjoins Newhall and in turn New Era adjoins Honby. Both Castaic and Newhall school buildings, while neither made high scores according to Strayer and Englehardt's methods of scoring, are very satisfactory for continuance as school buildings for some years in the future.

Summary and conclusions. In considering the locations of the school buildings in the survey, Honby, Castaic Union, and Saugus buildings have the least desirable locations, since all three are located on main traveled highways, and Saugus is also very close to a main line railroad. The remaining three districts' buildings are well located as there are few distracting factors in their midst. All with the exception of New Era have very good soil conditions for playground purposes.

The buildings were all scored by the Strayer-Englehardt score card method. By this method, Felton, Honby, and New Era buildings were found to be unfit for school use. Saugus, while the next lowest in the score, made a total score of 576. This score could be raised somewhat by expending a small amount of money to secure better drainage, better artificial lighting, a new floor in the building, and adding

a special room or two to its existing plant. Castaic Union, which had next to the highest score, 681, could raise its score by improving its drainage, its color scheme in the rooms, adding additional rooms, etc. Newhall's building, while not excellent, is the most satisfactory in the six districts, since it scored a total of 715 points. This score could be raised by improving its heating system, ventilating system, the artificial lighting in the four rooms that were built in the original unit, securing a better type of window shades for school rooms, securing better equipment, etc.

In utilization and capacity of the buildings, Honby and Saugus Schools used their buildings to full capacity during the school year the study was made. The other four buildings had room for large percentages of increased enrollments, Castaic Union and Newhall each having room for nearly one hundred per cent increase.

In need for new buildings, Felton needs no consideration as it was to become a suspended district in the summer of 1932. Both Honby and New Era are seriously in need of new buildings. The building at Saugus, while usable for school purposes, is poorly located. Since Honby and New Era Districts, each but six and a half miles from Newhall, are in need of new buildings, it is recommended they consolidate or unionize with Newhall. Saugus, but two miles from Newhall, will need a new building in a few years. Since it is very poorly located, it is recommended it, also, consolidate or unionize with Newhall.

CHAPTER VI

PUPIL PROGRESS

Aim of the chapter. The aim of this chapter is to determine the progress being made by the pupils in the six districts in the survey in their school work.

In addition to counting the children to see whether or not they are in school, it is necessary to count them with reference to the progress they are making through their grades. There are four reasons why this kind of accounting is essential in scientific management and in surveying:

First, the rate of progress of the children through the grades gives us a quantitative statement of output as compared with intake of human material. Such facts have a general social and economic, as well as an educational significance.

Second, such facts furnish an important check on the grading and promotion machinery and on the general management of the children.

Third, they provide a valuable index as to the efficiency of the curriculum. A large amount of slow progress means a too difficult or ill-adapted curriculum.

Fourth, they are essential in determining the cost of instruction. A child who spends nine years in doing eight years of work is a case of nine units of cost for eight units of accomplishment, and so an exhibition of poor economy.

Such figures, therefore, are indispensable in modern management, and a survey should not only make such studies, but it should find out whether the schools are making and using the results of such studies as a regular routine part of management, supervision, and administration.¹

Interpretation of age-grade tables. In considering this phase of child accounting the following quotation is quite explanatory:

There are two kinds of studies to be made. One shows where the children are in their studies at a given age. This is called an age-grade study. The other shows how long it has taken the children to do the amount of work completed up to a given date. This is called a study of progress. In the former we get a picture of the schools as they stand.

¹Jesse B. Sears, The School Survey. Houghton Mifflin Company, New York, 1925, pp. 267-268.

We see how the children of each age-group are distributed through the grades, but cannot infer accurately how long it has taken them to reach their present positions. In the latter we get a clear statement of the rate at which each child has worked through the grades, but cannot infer accurately how old the children are. Thus a child may be described as retarded, normal, or accelerated, either from the standpoint of his position in the grades at a given age, or from the standpoint of the length of time it has taken him to reach a given point in the grades.¹

In this study the word over-ageness is substituted for retardation, and under-ageness for acceleration.

Percentage of pupils in the various grades. Table XLV gives the percentage of pupils in the various grades in the six schools in the survey for the school year of 1931-1932. In this table the smallest schools vary considerably in the percentage of pupils enrolled in the various grades. With the exception of the fifth grade in Castaic Union District the largest per cent in Castaic Union, Newhall, and Saugus Districts as a whole is found in the first grade. The percentage decreases quite gradually until the smallest percentage is found to be in the upper grades. These percentages are seen to vary considerably in the same grade in the different schools. New Era, with but two pupils in its first grade, has 20 per cent of its enrollment in this grade, while Honby, with also two pupils in the first grade, has but 9.5 per cent of its enrollment in the first grade. With the exception of the seventh and eighth grades, Newhall's percentages in the various grades are quite evenly distributed. This table is not as reliable for purposes of comparison as

¹Jesse B. Sears, The School Survey. Houghton Mifflin Company, New York, 1925, pp. 269-270.

TABLE XLV
 PERCENTAGE OF PUPILS IN THE VARIOUS GRADES
 IN THE SIX SCHOOLS, 1931-1932

District	Grade							
	1	2	3	4	5	6	7	8
Castaic Union	18.0	13.8	13.8	9.7	22.2	4.1	8.3	9.7
Felton		25			50	25		
Honby	9.5	9.5	14.2	9.5	19	23.8	9.5	4.7
New Era	20	10	20	10	10	10	10	10
Newhall	15.2	12.3	13.3	13.7	12.8	13.3	8.3	10.8
Saugus	13.6	11.3	13.6	9.0	15.9	9.0	13.6	13.6

This table should be read as follows: Castaic Union District had 18.0 per cent of its enrollment in the first grade, 13.8 per cent in the second grade, 13.8 per cent in the third grade, etc.

it should be, for if the enrollments in the different schools were larger or more nearly the size of Newhall's enrollment it would be more reliable.

Percentage of attendance. Percentage of attendance is found by dividing the total days of actual attendance in a school by its total days of possible attendance.

The percentage of attendance in each school for 1930-1931 is given in Table XLVI. In this, Honby School with 96.78 per cent of attendance has the best record of attendance in the entire group, while New Era with 80.88 per cent has the poorest record. Newhall with but 91.60 per cent is the next lowest. This low record with that of New Era is partially on account of much sickness among the school children during the year the data were obtained. Newhall's low attendance is also partially on account of having no vacation during the Christmas holidays, at which time many school children were kept at home by parents and guardians. Castaic Union District's percentage of attendance, 93.96 per cent, is quite good, while that of Felton with 95.44 per cent, Saugus with 96.54 per cent, and Honby with 96.78 per cent are all very good.

Number of pupils under-age, normal age, and over-age. From a study of Tables XLVII to LII inclusive, one can readily see there is little under-ageness in all the grades in all six districts in the survey. In Castaic Union District, Table XLVII, there is no under-ageness, except in grades five to eight, both of which is quite small. The over-age-

TABLE XLVI
PER CENT OF ATTENDANCE IN EACH SCHOOL, 1930-1931

District	Total days attendance	Total days absence	Total possible days attendance	Per cent of attendance
Honby	3,306.25	109.75	3,416	96.78
Saugus	6,321.20	233.80	6,545	96.54
Felton	1,707.45	81.55	1,789	95.44
Castaic Union	12,010.60	771.40	12,782	93.96
Newhall	30,830.40	2,823.60	33,654	91.60
New Era	1,034.55	244.45	1,279	80.88

This table should be read as follows: during the school year of 1930-1931 Honby District had 3,306.25 total days attendance and 109.75 total days absence making a possible days attendance of 3,416. The total days attendance of 3,306.25 is 96.78 per cent of the total possible days attendance of 3,416, etc.

TABLE XLVII

AGE-GRADE TABLE OF THE CASTAIC UNION SCHOOL, OCT. '31.

Age in years and months	1	2	3	4	5	6	7	8	Boys	Girls	Tot.
5-3 to 5-9	—										
5-9 to 6-3	5								2	3	5
6-3 to 6-9	6	3							6	3	9
6-9 to 7-3		4							2	2	4
7-3 to 7-9	2	1	1						3	1	4
7-9 to 8-3		1	5						4	2	6
8-3 to 8-9			3						1	2	3
8-9 to 9-3			1	1	1				1	2	3
9-3 to 9-9		1		2	1				1	3	4
9-9 to 10-3				2	3				3	2	5
10-3 to 10-9					1				1		1
10-9 to 11-3						1	1		4	2	6
11-3 to 11-9				1	1		2	1	4	1	5
11-9 to 12-3				1	2			2	5		5
12-3 to 12-9						1	1		2		2
12-9 to 13-3							1		2		2
13-3 to 13-9					1	1			2	2	4
13-9 to 14-3							2		2	2	4
14-3 to 14-9								1		1	1
14-9 to 15-3								1		1	1
15-3 to 15-9								1		1	1
15-9 to 16-3											
Total	13	10	10	7	16	3	6	7	45	27	72

No. under age	0	0	0	0	1	0	0	1			2
No. at age	5	7	6	1	4	0	3	2			28
No. over age	8	3	4	6	11	3	3	4			42
Per cent under age	0	0	0	0	6.2	0	0	14.2			2.7
Per cent at age	38.4	70	60	14.2	25	0	50	28.5			38.8
Per cent over age	61.5	30	40	85.7	68.7	100	50	57.1			58.3

This table should be read as follows: in the first grade five pupils are at age, eight pupils over age, etc. There is one pupil in the fifth grade and one in the eighth grade under age, making a total of two or 2.7 per cent of the school enrollment under-age, etc.

TABLE XLVIII

AGE-GRADE TABLE OF FELTON SCHOOL, OCT. '31

Age in years and months	Grade								Boys	Girls	Tot.
	1	2	3	4	5	6	7	8			
5-3 to 5-9	—										
5-9 to 6-3	—										
6-3 to 6-9	—										
6-9 to 7-3	—	1								1	1
7-3 to 7-9		—									
7-9 to 8-3		—									
8-3 to 8-9			—								
8-9 to 9-3			—								
9-3 to 9-9				—							
9-9 to 10-3				—	1					1	1
10-3 to 10-9					—						
10-9 to 11-3					—					1	1
11-3 to 11-9						—					
11-9 to 12-3						—			1		1
12-3 to 12-9							—				
Total	0	1	0	0	2	1	0	0	1	3	4
No. under age	0	0	0	0	0	0	0	0			0
No. at age	0	1	0	0	1	0	0	0			2
No. over age	0	0	0	0	1	1	0	0			2
Per cent under age	0	0	0	0	0	0	0	0			0
Per cent at age	0	100	0	0	50	0	0	0			50
Per cent over age	0	0	0	0	50	100	0	0			50

This table should be read as follows: in the second grade one pupil is at age, etc. There is one pupil in the fifth grade and one pupil in the sixth grade over-age, making a total of two or 50 per cent of the school enrollment over-age, etc.

TABLE XLIX
AGE-GRADE TABLE OF THE HONBY SCHOOL, OCT. '31

Age in years and months	Grade								Boys	Girls	Tot.
	1	2	3	4	5	6	7	8			
5-3 to 5-9											
5-9 to 6-3	<u>1</u>		1						1	1	2
6-3 to 6-9	<u>1</u>									1	1
6-9 to 7-3		<u>1</u>								1	1
7-3 to 7-9											
7-9 to 8-3		<u>1</u>								1	1
8-3 to 8-9			<u>1</u>	<u>1</u>					2		2
8-9 to 9-3											
9-3 to 9-9											
9-9 to 10-3				<u>1</u>	<u>1</u>	1			2	1	3
10-3 to 10-9					<u>1</u>				1		1
10-9 to 11-3			1		<u>1</u>	<u>1</u>			2	1	3
11-3 to 11-9					1	<u>1</u>			1	1	2
11-9 to 12-3											
12-3 to 12-9							<u>1</u>		1		1
12-9 to 13-3						2			1	1	2
13-3 to 13-9											
13-9 to 14-3								<u>1</u>		1	1
14-3 to 14-9							1		1		1
Total	2	2	3	2	4	5	2	1	12	9	21
No. under age	0	0	1	1	0	1	0	0			3
No. at age	2	1	1	0	2	2	1	0			9
No. over age	0	1	1	1	2	2	1	1			9
Per cent under age	100	0	33	50	0	20	0	0			14
Per cent at age	100	50	33	0	50	40	50	0			43
Per cent over age	0	50	33	50	50	40	50	100			43

This table should be read as follows: in the first grade two pupils are at age, etc. There is but one pupil in the third grade, one in the fourth grade, and one in the sixth grade under age making a total of three or 14 per cent of the total enrollment under age, etc.

TABLE I

AGE-GRADE TABLE OF THE NEW ERA SCHOOL, OCT. '31

Age in years and months	Grade								Boys	Girls	Tot.
	1	2	3	4	5	6	7	8			
5-3 to 5-9											
5-9 to 6-3	I									1	1
6-3 to 6-9	I										
6-9 to 7-3	I								1		1
7-3 to 7-9											
7-9 to 8-3											
8-3 to 8-9			1							1	1
8-9 to 9-3		1	I							2	2
9-3 to 9-9											
9-9 to 10-3				I						1	1
10-3 to 10-9											
10-9 to 11-3					I	I			2		2
11-3 to 11-9											
11-9 to 12-3											
12-3 to 12-9											
12-9 to 13-3											
13-3 to 13-9							1		1		1
13-9 to 14-3											

17-9 to 18-3								1	1		1
Total	2	1	2	1	1	1	1	1	5	5	10
No. under age	0	0	0	0	0	0	0	0	0		0
No. at age	1	0	1	0	0	1	0	0			3
No. over age	1	1	1	1	1	0	1	1			7
Per cent under age	0	0	0	0	0	0	0	0			0
Per cent at age	50	0	50	0	0	100	0	0			30
Per cent over age	50	100	50	100	100	0	100	100			70

This table should be read as follows: there is one pupil in the first grade at age and one pupil over age, etc. There is one pupil in the first, one in the third, and one in the sixth grades at age, making a total of three or 30 per cent of the total enrollment at age, etc.

TABLE LI

AGE-GRADE TABLE OF THE NEWHALL SCHOOL, OCT. '31

Age in years and months	Grade								Boys	Girls	Tot.
	1	2	3	4	5	6	7	8			
5-3 to 5-9	5								3	2	5
5-9 to 6-3	<u>15</u>								7	8	15
6-3 to 6-9	8	2							6	4	10
6-9 to 7-3	<u>2</u>	<u>13</u>							6	9	15
7-3 to 7-9		2	1						2	1	3
7-9 to 8-3	1	<u>3</u>	<u>8</u>	1					8	5	13
8-3 to 8-9		5	6	1					8	4	12
8-9 to 9-3			<u>6</u>	<u>5</u>					5	6	11
9-3 to 9-9			4	8	4				4	12	16
9-9 to 10-3				<u>8</u>	<u>7</u>	1			8	8	16
10-3 to 10-9			1	2	5	2			1	9	10
10-9 to 11-3				1	<u>1</u>	<u>5</u>			4	3	7
11-3 to 11-9			1		6	2	4		6	7	13
11-9 to 12-3				1		<u>5</u>	<u>2</u>		5	3	8
12-3 to 12-9					2		3	1	5	1	6
12-9 to 13-3				1	1	3	<u>1</u>	<u>7</u>	8	5	13
13-3 to 13-9						7	1	3	7	4	11
13-9 to 14-3								<u>4</u>	3	1	4
14-3 to 14-9						1	3	2	3	3	6
14-9 to 15-3						1	3	2	3	3	6
15-3 to 15-9								2	1	1	2
15-9 to 16-3								1		1	1
Total	31	25	27	28	26	27	17	22	103	100	203
No. under age	5	2	1	2	4	3	4	1			22
No. at age	23	15	14	13	12	7	5	10			99
No. over age	3	8	12	13	10	17	8	11			82
Per cent under age	16	8	4	7	15	11	4	5			10.8
Per cent at age	74	60	52	46	46	26	29	45			48.7
Per cent over age	10	32	44	46	38	63	47	50			40.3

This table should be read as follows: there are five pupils in the first grade under age, twenty-three at age, and three over age, etc. There are 22 in the school under age or 10.8 per cent of the total enrollment under age, etc.

TABLE LII

AGE-GRADE TABLE OF THE SAUGUS SCHOOL, OCT. '31

Age in years and months	Grade								Boys	Girls	Tot.	
	1	2	3	4	5	6	7	8				
5-3 to 5-9	<u>1</u>										1	1
5-9 to 6-3	<u>1</u>								1			1
6-3 to 6-9	<u>2</u>								1	1		2
6-9 to 7-3												
7-3 to 7-9	2										2	2
7-9 to 8-3		<u>1</u>	<u>1</u>						1	1		2
8-3 to 8-9		2	<u>3</u>	<u>2</u>					2	5		7
8-9 to 9-3			<u>1</u>	<u>1</u>					1	1		2
9-3 to 9-9		2			<u>1</u>				1	2		3
9-9 to 10-3				<u>1</u>		<u>1</u>			1	1		2
10-3 to 10-9			1			<u>1</u>			1	1		2
10-9 to 11-3					<u>1</u>					1		1
11-3 to 11-9					1					1		1
11-9 to 12-3					1	<u>2</u>	<u>2</u>		3	2		5
12-3 to 12-9							<u>1</u>	<u>2</u>	1	2		3
12-9 to 13-3							<u>3</u>		2	1		3
13-3 to 13-9								<u>1</u>	1			1
13-9 to 14-3					1			<u>1</u>	2			2
14-3 to 14-9					1				1			1
14-9 to 15-3												
15-3 to 15-9								1	1			1
15-9 to 16-3					1			1	1	1		2
Total	6	5	6	4	7	4	6	6	21	23		44
No. under age	1	0	0	2	1	2	0	2				8
No. at age	3	0	4	1	0	0	3	1				12
No. over age	2	5	2	1	6	2	3	3				24
Per cent under age	17	0	0	50	14	50	0	33				18.1
Per cent at age	50	0	67	25	0	0	50	17				27.2
Per cent over age	33	100	33	25	86	50	50	50				54.5

This table should be read as follows: there is one pupil in the first grade under age, three at age, and two over age, etc. There are eight pupils in the school under age or 18.1 per cent of the total enrollment under age, etc.

TABLE LIII

AGE-GRADE TABLE OF ALL SIX DISTRICTS, OCT. '31

Age in years and months	Grade								Boys	Girls	Tot.
	1	2	3	4	5	6	7	8			
5-3 to 5-9	6								3	3	6
5-9 to 6-3	18		1						9	10	19
6-3 to 6-9	16	2							9	9	18
6-9 to 7-3	9	18							13	14	27
7-3 to 7-9	2	6	1						4	5	9
7-9 to 8-3	3	6	10	1					12	8	20
8-3 to 8-9		8	16	4					16	12	28
8-9 to 9-3		1	11	6					7	11	18
9-3 to 9-9		2	5	9	6				6	16	22
9-9 to 10-3		1		13	10	3			12	15	27
10-3 to 10-9			2	4	9	3			6	12	18
10-9 to 11-3			1	1	6	7			10	5	15
11-3 to 11-9			1		8	3	4		7	9	16
11-9 to 12-3				1	5	9	5		13	7	20
12-3 to 12-9				1	3		7	4	11	4	15
12-9 to 13-3				2	3	5	4	9	16	7	23
13-3 to 13-9						8	3	4	11	4	15
13-9 to 14-3					2	1		6	7	2	9
14-3 to 14-9					3	1	4	4	7	5	12
14-9 to 15-3						1	5	2	5	3	8
15-3 to 15-9								4	2	2	4
15-9 to 16-3					1			3	1	3	4

17-9 to 18-3								1	1		1
Total	54	44	48	42	56	41	32	37	188	166	354
No. under age 6		2	2	5	6	6	4	4			35
No. at age 34		24	26	15	19	10	12	13			153
No. over age 14		18	20	22	31	25	16	20			166
Per cent under age	11	4	4	12	11	15	13	11			10
Per cent at age	63	55	54	36	34	61	37	35			43
Per cent over age	26	41	42	52	55	24	50	54			47

This table should be read the same as Tables XLVII to LII inclusive.

ness in this district is far greater than the number at age. This is found to be 85.7 per cent in the fourth grade and 100 per cent in the sixth grade.

Table XLVIII shows the age-grade placement of the four pupils in Felton School. In this very small enrollment this school has 50 per cent at age and 50 per cent over age.

From Table XLIX showing age-grade placements in Honby School there is likewise but little under-ageness. In this district the percentages of at age and over-ageness are quite evenly divided, except in the first grade which is 100 per cent at age and the eighth grade which is 100 per cent over-age.

New Era, Table L, has no under-ageness. The school as a whole has 60 per cent over-ageness and 40 per cent at age.

Newhall, having a much larger enrollment than the other districts in the survey and also a more transient population, has a wider range in its age-grade table as is shown in Table LI. In this school the under-ageness ranges from 3.7 per cent in the third grade to 23.5 per cent in the seventh grade. The normal age is the lowest in the sixth grade or 25.9 per cent, while the over-ageness in this grade is 62.9 per cent, the highest in the school. The least over-ageness, 9.6 per cent, is found in the first grade.

Saugus School, Table LII, shows no under-ageness in grades two, three, and seven, and no at age placement in grades two, five, and six. In grade six there is 50 per cent in each under-ageness and over-ageness, while in grade two the over-ageness is 100 per cent. In the fifth grade the

CHART I

A CHART SHOWING THE COMPARISON IN PER CENT OF UNDER-AGENESS, OVER-AGENESS, AND NORMAL AGENESS OF THE CASTAIC UNION SCHOOL

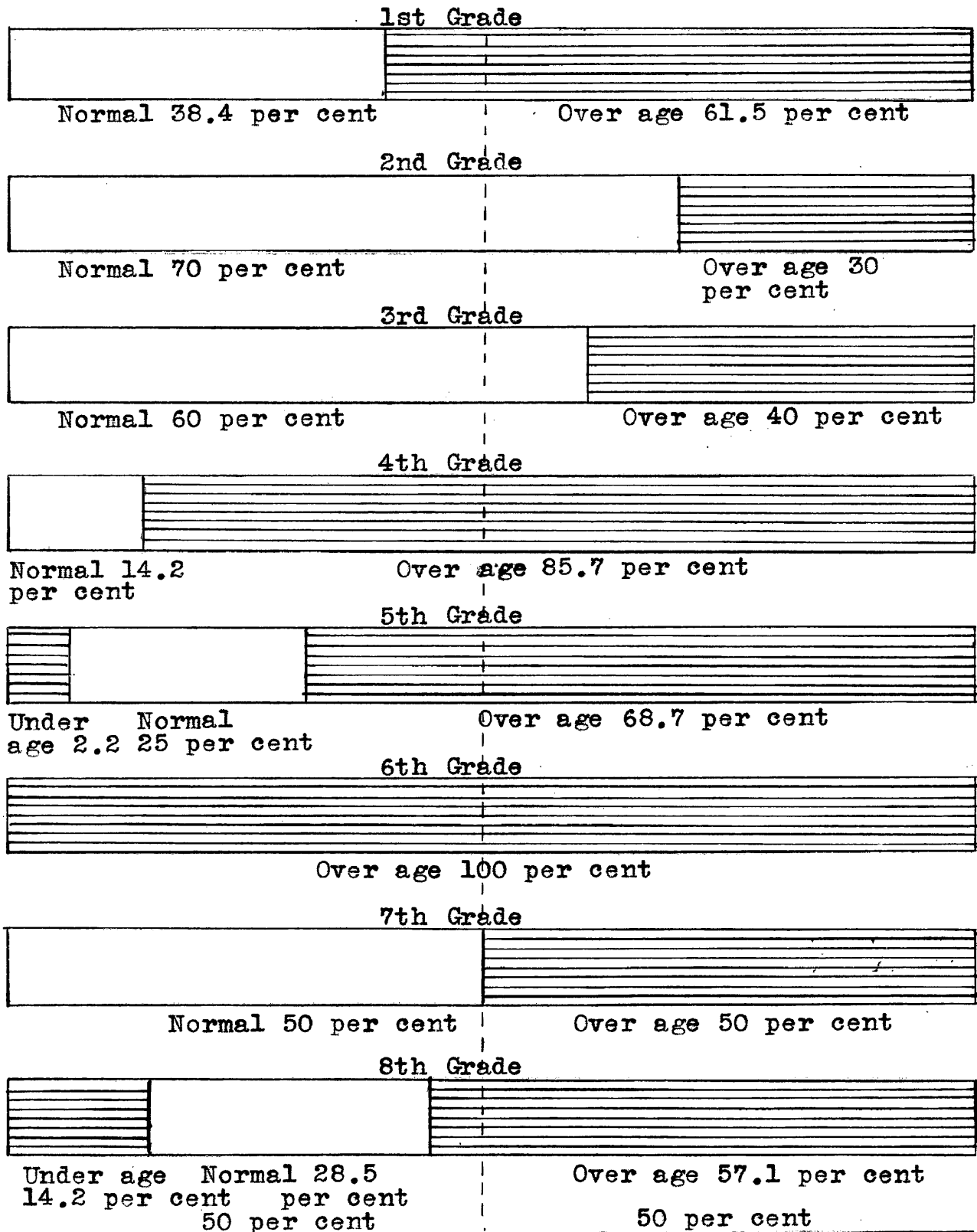
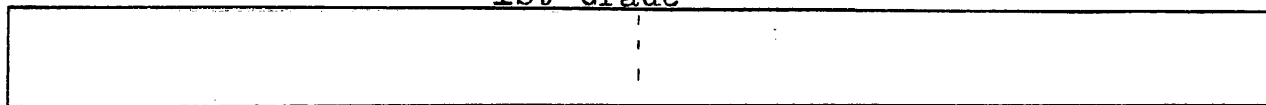


CHART II

A CHART SHOWING THE COMPARISON IN PER CENT OF UNDER-AGENESS, OVER-AGENESS, AND NORMAL AGENESS OF

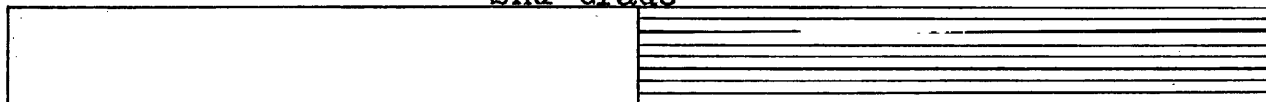
THE HONBY SCHOOL

1st Grade



Normal age 100 per cent

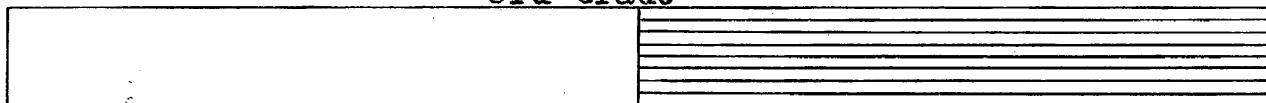
2nd Grade



Normal age 50 per cent

Over age 50 per cent

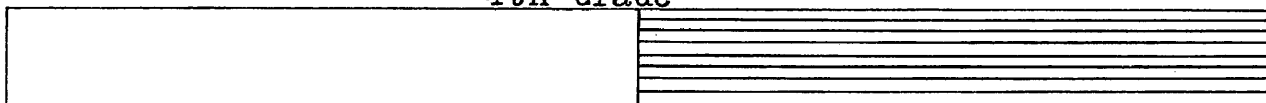
3rd Grade



Normal age 50 per cent

Over age 50 per cent

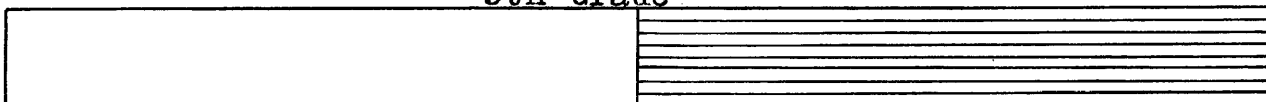
4th Grade



Normal age 50 per cent

Over age 50 per cent

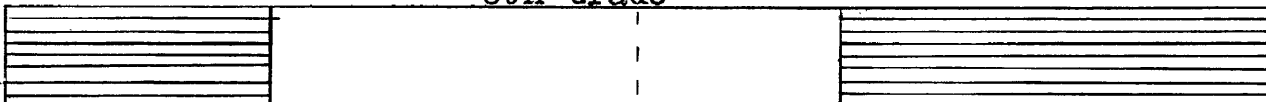
5th Grade



Normal age 50 per cent

Over age 50 per cent

6th Grade

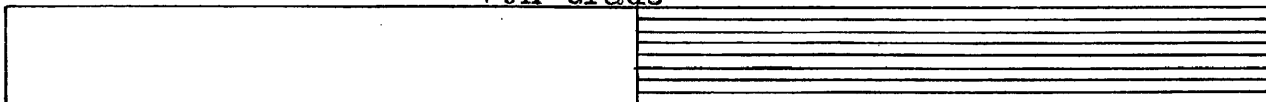


Under age
20 per cent

Normal age 40 per cent

Over age 40 per cent

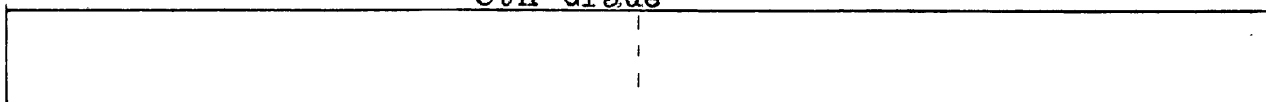
7th Grade



Normal age 50 per cent

Over age 50 per cent

8th Grade



Over age 100 per cent

50 per cent

50 per cent

CHART III

A CHART SHOWING THE COMPARISON IN PER CENT OF UNDER-AGENESS, OVER-AGENESS, AND NORMAL AGENESS OF THE NEWHALL SCHOOL

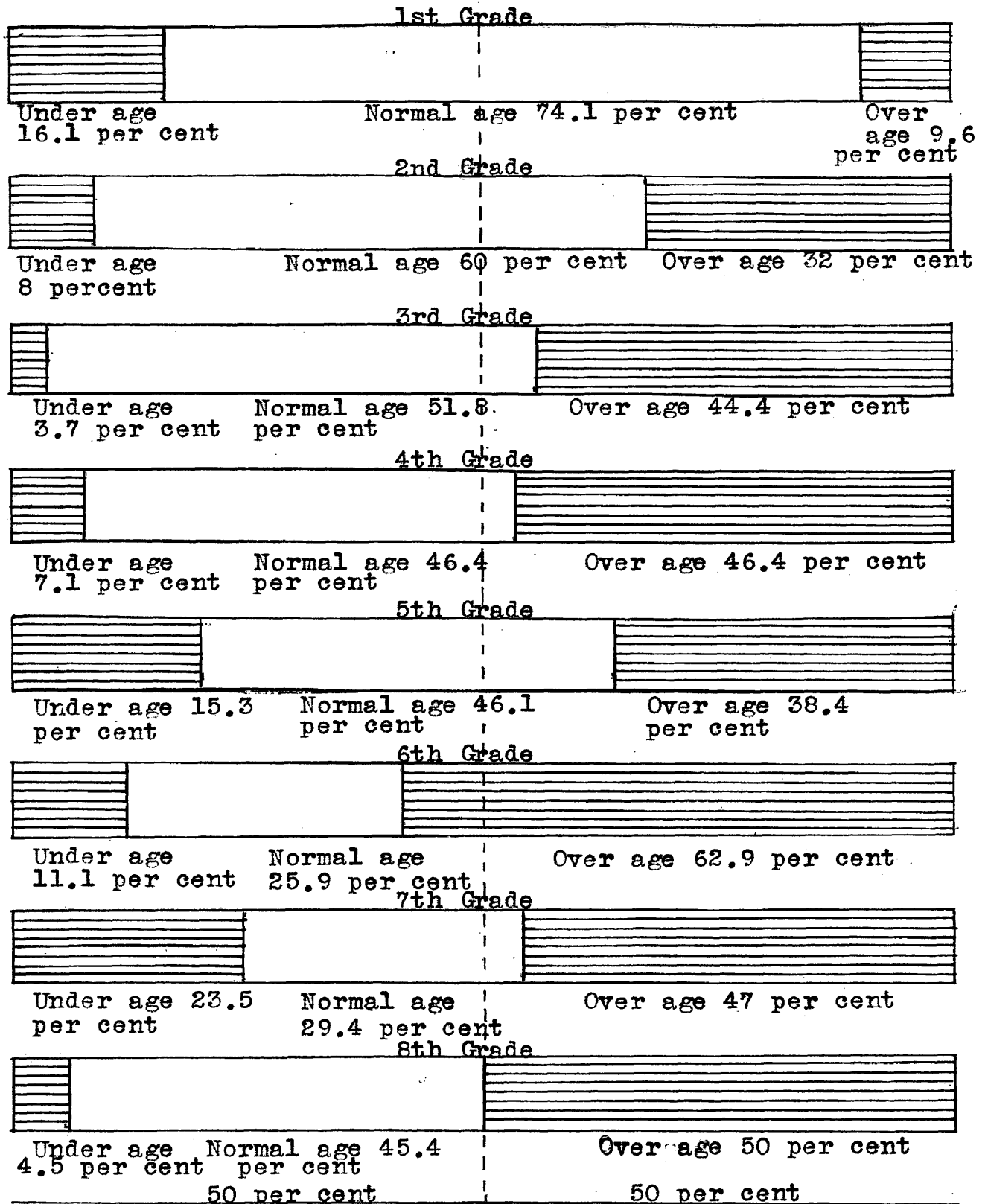


CHART IV

A CHART SHOWING THE COMPARISON IN PER CENT OF UNDER-AGENESS, OVER-AGENESS, AND NORMAL AGENESS OF

THE SAUGUS SCHOOL

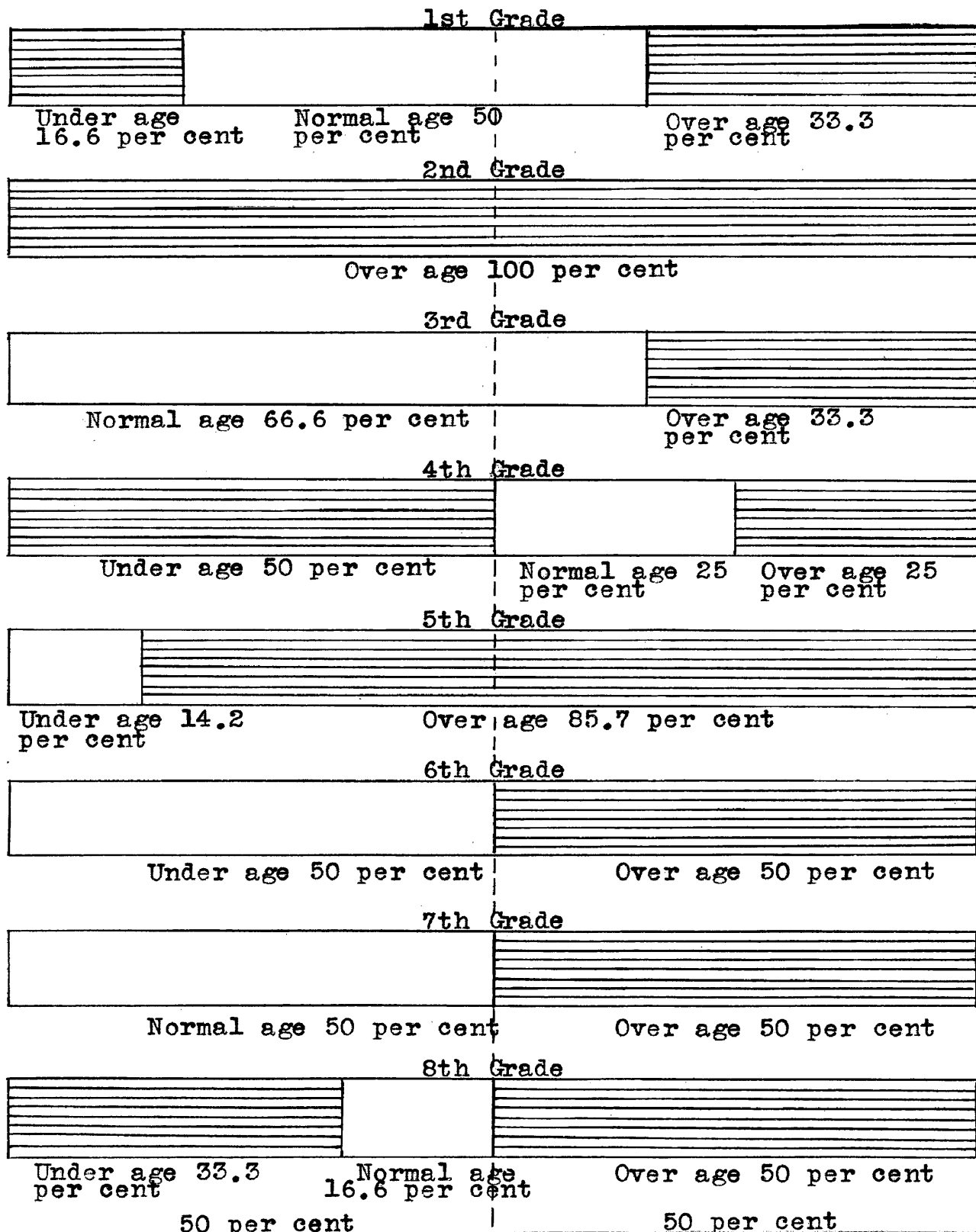
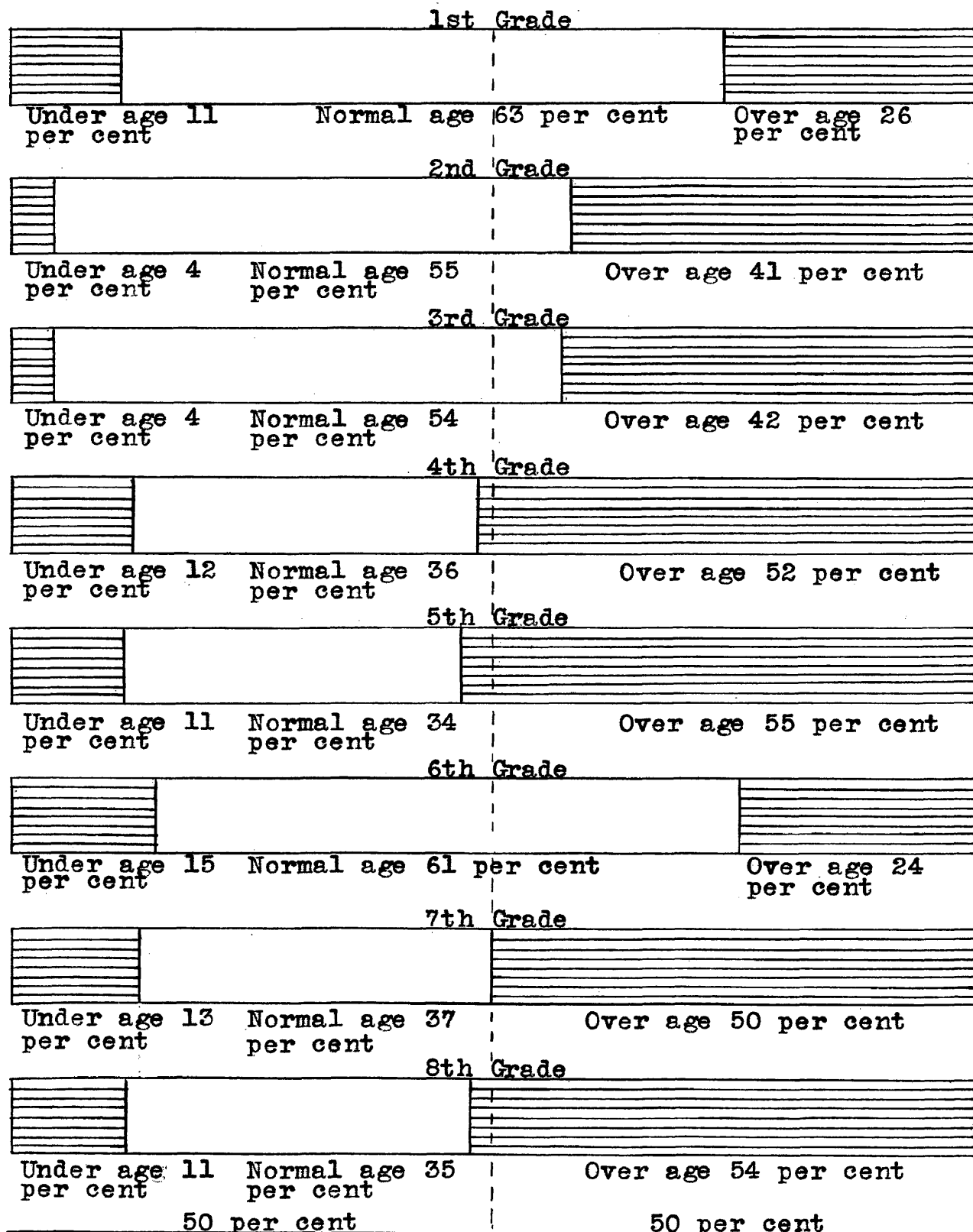


CHART V

A CHART SHOWING THE COMPARISON IN PER CENT OF UNDER-AGENESS, OVER-AGENESS, AND NORMAL AGENESS OF ALL SIX DISTRICTS



over-ageness is likewise very high or 85.7 per cent of the class enrollment. Table LIII gives the same information for all six schools combined.

Charts I to IV inclusive give graphical comparison of under-ageness, normal ageness, and over-ageness of the pupils in the various grades in Castaic Union, Honby, Newhall, and Saugus Schools, and Chart V gives the same data in all six schools in the survey combined. Tables XLVII to LIII inclusive give the same data. No charts were made for Felton and New Era Schools on account of their exceptionally small enrollments.

Number of years pupils have been in school. Tables LIV to LIX inclusive give the number of years the pupils in each grade of the six districts have attended school. Table LIV shows Castaic Union having pupils in grades seven and eight only that have made more than an average of one grade a year. From this same table it is seen that each grade has from one pupil in the eighth grade to seven pupils in the second grade that have averaged more than one year of school attendance to one grade. The school as a whole has 6.6 per cent making more than normal progress, 46.6 per cent making normal progress, and 46.6 per cent making less than normal progress. By normal progress is meant making one grade or completing the work of one grade with each year of school attendance.

Felton District, Table LV, shows 50 per cent of the enrollment making normal progress and 50 per cent making less than normal progress.

TABLE LIV
 NUMBER OF YEARS IN SCHOOL AS OF FEBRUARY 1, 1932,
 CASTAIC UNION SCHOOL

Years in school	1	2	3	4	5	6	7	8	Total
1 1/2	10								10
1	3	3							6
2		6	4						10
3		1	3	2					6
4			2	5	10				17
5			1		3	1	4		9
6					3	3		1	7
7						2		5	7
8							1	1	2
9							1		1
Total	13	10	10	7	16	6	6	7	75

No. making more than nor. prog.	0	0	0	0	0	0	4	1	5
No. making nor. progress	10	3	4	2	10	1	0	5	35
No. making less than nor. prog.	3	7	6	5	6	5	2	1	35
Per cent making more than nor. progress	0	0	0	0	0	0	67	14	6.6
Per cent making nor. prog.	76	30	40	28	62	16	0	72	46.6
Per cent making less than nor. progress	24	70	60	72	38	84	33	14	46.6

This table should be read as follows: there are 10 pupils who have spent one half year in the first grade and 3 pupils who have spent one and a half years in that grade, etc. The number between the lines indicate the number of children who have progressed through school at the rate of one grade a year, those above the lines have been promoted more than one grade a year, and those below the lines have been retained in some grade or grades for two years or even more in some cases, etc.

TABLE LV
 NUMBER OF YEARS IN SCHOOL AS OF FEBRUARY 1, 1932,
 FELTON SCHOOL

Years in school	Grade						Total
	1	2	3	4	5	6	
1½		<u>1</u>					1

4½					<u>1</u>		1
5½					1	<u>1</u>	1
6½						1	1
Total	0	1	0	0	2	1	4
No. making more than nor. prog.	0	0	0	0	0	0	0
No. making nor. prog	0	1	0	0	1	0	2
No. making less than nor. prog.	0	0	0	0	1	1	2
Per cent mak- ing more than nor. prog.	0	0	0	0	0	0	0
Per cent making nor. prog.	0	100	0	0	50	0	50
Per cent making less than nor. progress	0	0	0	0	50	100	50

This table should be read as follows: there is one pupil who has spent one and one half years in reaching the second grade, etc. The numbers between the lines indicate the number of children who have progressed through school at the rate of one grade a year and those below the lines have been retained in some grade for two years, etc.

In Honby District, Table LVI, one pupil or 4.7 per cent of the entire school's enrollment is making more than normal progress. All the remaining pupils enrolled are making normal progress.

New Era School, Table LVII, with less enrollment than Honby, has 10 per cent making greater than normal progress, 50 per cent making normal progress, and 40 per cent making less than normal progress.

Table LVIII shows Newhall with its larger enrollment again varying more than the smaller schools in the rate of progress made by the pupils. Grades one, two, three, and five have no pupils making more than normal progress, while the remaining grades have one or more pupils in each making more than normal progress. The highest per cent, 82.1, making normal progress is in the third grade, while the largest per cent making less than normal progress, 62.9, is in the sixth grade. In the fourth grade 48.1 per cent are found to be making normal progress and a like per cent less than normal progress.

In Saugus School, Table LIX, grades three, six, and eight are the only ones which have pupils making greater than normal progress. In grades one, three, and seven the percentage making normal progress is 100. The greatest per cent, 66.6, making less than normal progress is found in the second grade, while 50 per cent are making less than normal progress in the sixth grade. These large percentages are on account of several Mexican children being enrolled in these grades.

TABLE LVI
NUMBER OF YEARS IN SCHOOL AS OF FEBRUARY 1, 1932,
HONBY SCHOOL

Years in school	1	2	3	Grade		6	7	8	Total
				4	5				
$\frac{1}{2}$	<u>2</u>		1						3
$1\frac{1}{2}$		<u>2</u>							2
$2\frac{1}{2}$			<u>2</u>						2
$3\frac{1}{2}$				<u>3</u>					3
$4\frac{1}{2}$					<u>5</u>				5
$5\frac{1}{2}$						<u>1</u>			1
$6\frac{1}{2}$							<u>2</u>		2
$7\frac{1}{2}$								<u>3</u>	3
Total	2	2	3	3	5	1	2	3	21
No. making more than nor. prog.	0	0	1	0	0	0	0	0	1
No. making nor. prog.	2	2	2	3	5	1	2	3	20
Per cent mak- ing more than nor. prog.	0	0	33	0	0	0	0	0	4.7
Per cent mak- ing nor. prog.	100	100	67	100	100	100	100	100	95.2

This table should be read as follows: there are two pupils who have spent one half year in the first grade, etc. The number between the line indicates the number of children who have progressed through school at the rate of one grade a year and the one above the line indicates he has been in school but one half year and yet is in the third grade.

TABLE LVII
 NUMBER OF YEARS IN SCHOOL AS OF FEBRUARY 1, 1932,
 NEW ERA SCHOOL

Years in school	1	2	3	Grade 4	5	6	7	8	Total
$\frac{1}{2}$	2								2
1		1	2						3
2				1	1	1			3
3									0
4									0
5									0
6									0
7							1		1
8								1	1
Total	2	1	2	1	1	1	1	1	10
No. making more than nor. prog.	0	0	0	0	0	1	0	0	1
No. making nor. prog.	2	0	2	0	1	0	0	0	5
No. making less than nor. prog.	0	1	0	1	0	0	1	1	4
Per cent making more than nor. prog.	0	0	0	0	0	100	0	0	10
Per cent making nor. prog.	100	0	100	0	100	0	0	0	50
Per cent making less than nor. prog.	0	100	0	100	0	0	100	100	40

This table should be read as follows: there are two pupils who have spent one half year in the first grade, etc. The number between the lines indicate the number of children who have progressed through school at the rate of one grade a year, the numbers above the lines indicate the children who have accomplished more than one grade each year, and the numbers below the lines indicate those children who have been retained one year in a grade.

TABLE LVIII
 NUMBER OF YEARS IN SCHOOL AS OF FEBRUARY 1, 1932,
 NEWHALL SCHOOL

Years in school	1	2	3	4	5	6	7	8	Total
1	28								28
2	3	18							21
3		7	23	1					31
4			5	13					18
5				13	16	2			31
6					10	8	3	1	22
7						11	8	4	23
8						6	5	7	18
9							1	9	10
								1	1
Total	31	25	28	27	26	27	17	22	203
No. making more than nor. prog.	0	0	0	1	0	2	3	5	11
No. making less than nor. prog.	28	18	23	13	16	8	8	7	121
Per cent making more than nor. prog.	0	0	0	4	0	7	18	23	5.4
Per cent making less than nor. progress	90	72	82	48	62	30	47	32	59.6
	10	28	18	48	38	63	35	45	34.9

This table should be read as follows: in the first grade there are 28 pupils who have spent one half year in school and 3 who have spent one and one half years in school, etc. The numbers between the lines indicate the children who have progressed through school at the rate of one grade a year, etc.

TABLE LIX
 NUMBER OF YEARS IN SCHOOL AS OF FEBRUARY 1, 1932,
 SAUGUS SCHOOL

Years in school	1	2	3	Grade 4	5	6	7	8	Total
$\frac{1}{2}$	5								5
1		1	1						2
2		2	5						7
3				5					5
4				1	2	1			4
5					3	1			4
6					1	2	5	2	10
7					1			3	4
8								1	2
9									1
Total	5	3	6	6	8	4	5	7	44
No. making more than nor. prog.	0	0	1	0	0	1	0	2	4
No. making less than nor. prog.	5	1	5	5	2	1	5	3	27
Per cent making more than nor. progress	0	0	17	0	0	25	0	29	9.0
Per cent making less than nor. progress	100	33	83	83	25	25	100	43	61.3
Per cent making more than nor. progress	0	67	0	17	75	50	0	28	29.5

This table should be read as follows: in the first grade there are five pupils who have spent one half year in school, etc. The number between the lines indicate the children who have progressed through school at the rate of one grade a year, etc.

Table LX gives percentages of over-ageness, normal age, and under-ageness of each school in the survey. In over-ageness, New Era has the largest or 70 per cent while Newhall has the lowest or 40.3 per cent. In normal age Felton, the highest in the group, has 50 per cent while Saugus has the lowest or 27.2 per cent. In under-ageness neither Felton nor New Era have any. Of the remaining four districts, Castaic Union has the lowest under-ageness or 2.7 per cent and Saugus has the greatest of 18.1 per cent.

Various causes of over-ageness. Some of the over-ageness in these districts in the past has been caused by teachers demoting pupils entering from other districts during the school year, when such pupils did not appear to the teacher to have acquired as much in the grade the pupil was entering as she felt her class had acquired. This has been somewhat eliminated by the rural supervisor, who feels pupils should progress at a reasonable rate. He opposes retaining children in a grade for more than one year. In all probability the curriculum formerly was too difficult, which now causes such over-ageness in the intermediate and upper grades. In Castiac and Saugus Districts some of the over-ageness is on account of foreign born children attending these schools. A few other cases are the result of certain children being absent from school much of one or more school years on account of ill health. In all these schools with the exception of Felton there are some boys under the juvenile court jurisdiction, many of whom are over-age. Quite a number of

TABLE LX
 COMPARISON OF THE SIX DISTRICTS IN THE PERCENTAGE
 OF PUPILS WHO ARE OVER-AGE, NORMAL AGE, AND UNDER-
 AGE IN 1931-1932

School	Over-age	Normal age	Under-age
Castaic Union	58.3	38.8	2.7
Felton	50	50	0
Honby	42.8	42.8	14.2
New Era	70	30	0
Newhall	40.3	48.7	10.8
Saugus	54.5	27.2	18.1

This table should be read as follows: Castaic Union School has 58.3 per cent of over-ageness, 38.8 per cent of normal ageness, and 2.7 per cent of under-ageness, etc.

transient people live in Newhall and vicinity. With so many children from these families attending one school for but a few weeks or months and then moving elsewhere interferes with the children's progress in school and often retains them longer than one year in a grade. There are probably other reasons than those given above for much of the over-ageness in these schools, but the ones given seem to be the most noticeable,

Non-promotion in the various schools. Non-promotion in these schools, with the exception of Castaic Union, has been almost unknown in recent years. The rural supervisor disapproves of non-promotion in most cases. Most of the teachers are beginning to feel it is better to promote a child each year except in the first grade, where a few of the slower pupils are retained for two years. Castaic Union retained very few pupils in the lower grades last year, but more in the preceding years. The principal and teachers there are also beginning to feel it is useless to retain so many pupils as that district formerly retained each year. The percentage of non-promotion has not been more than six or eight in Newhall School for several years.

During the winter of 1931-1932 when the writer was enrolled in an educational course at University College, Dr. C. C. Crawford, the instructor in the course, stated the elementary school's "job" is to keep the children happy and not to retain a child a second year in a grade, except on very rare occasions. To a large extent the writer has shared

this view for several years.

Many cases of over-ageness in these schools, particularly Newhall, is the result of so many children entering from other schools where they have been retained one or more years in various grades.

While there is some danger of school children feeling there is no reason for doing their best school work since they will be promoted without it, few of them will take advantage of this if they are kept reasonably happy in their school work.

Size of classes. From Table LXI one finds the sizes of classes in the various schools when the data were secured. While the numbers in Castaic Union School rooms are not large, the first, second, and third grade room with 33 is the largest in that school. This is the largest teacher load by far, for the first grade should have so much more individual attention in comparison with the other grades in the school. The seventh and eighth grades with but 13 in one room is a very small number for one room. Since this is the principal's room, it is well to keep the number in it less than those in the other rooms.

Felton School, with but four pupils for one room, is an exceptionally small number for one room. As has been previously stated in Chapter V, this school is to be suspended in the summer of 1932.

Honby School, with all the grades, had 21 pupils enrolled when the data for this study were secured. Later in

TABLE LXI
GRADES IN ROOMS AND SIZES OF CLASSES IN EACH
OF THE SIX SCHOOLS, 1931-1932

School	No. of teachers	Grades in room	Pupils	Total pupils in school
Castaic Union	3	1, 2, & 3	33	
		4, 5, & 6	26	
		7 & 8	13	72
Felton	1	3, 5, & 6	4	4
Honby	1	1 to 8 inclusive	21	21
New Era	1	1 to 8 inclusive	10	10
Newhall	7	1	31	
		2	25	
		3	27	
		4	28	
		5	26	
		6	27	
		7 & 8	39	203
Saugus	2	1 to 4 inclusive	21	
		5 to 8 inclusive	23	44

This table should be read as follows: Castaic Union School has three teachers. One room has the first, second and third grades, in which are 33 pupils, one has the fourth, fifth, and sixth grades, in which are 26 pupils, and the third room has the seventh and eighth grades, in which are 13 pupils, etc., making a total enrollment in the three rooms of 72, etc.

the year this number increased to 29, which filled the school room to its full capacity.

New Era School has but 10 pupils, which is a very small number for one room. However, with one pupil in each of six different grades and two pupils in each of the other two grades, it is realized from the view point of work to be accomplished by the teacher an enrollment of 10 does not appear to be such a small number in a class room.

The size of the classes in Newhall has been kept very small with the exception of the seventh and eighth grade room which has 39 pupils in the two grades. The seventh and eighth grade teacher receives assistance from two of the other teachers one hour and forty minutes daily, thus leaving that room with but 22 pupils in the eighth grade during that time. The other six rooms vary from 25 in the second grade room to 31 in the first grade room.

The size of classes in the Saugus School is quite even, there being 21 pupils in the four lower grades and 23 in the four upper grades. Each of the preceding groups has one teacher. These numbers increased to about 28 in each room later in the year, or after the data for the study were obtained.

Summary and conclusions. In a study of pupil progress it is necessary to have information such as age-grade tables, number of years in school of the pupils enrolled, number of pupils enrolled, size of classes, etc., to enable the school administrator to evaluate his grading system and the curriculum, and to determine the pupil cost of instruction.

An age-grade study is one that shows the grades of pupils at a certain age, while a study of progress shows the amount of school work completed up to a certain date.

The great difference in the percentage of pupils in the various grades in these districts is largely on account of some of the schools having such small enrollments. Since Felton District has but four pupils and New Era ten pupils, no fair comparison can be made with Newhall, which has an enrollment of 203. Newhall's percentages seem to be more evenly distributed in the different grades, which probably is on account of its much larger enrollment than those of the other districts.

In percentage of attendance, New Era has the lowest for the school year of 1930-1931 and Newhall with 91.6 per cent, next to the lowest. Saugus and Honby Schools have the best percentages of attendance with 96.54 per cent and 96.78 per cent respectively.

The percentage of under-ageness is quite small in most of the districts, with none at all in Felton and New Era Districts. Felton, with 50 per cent, has the greatest percentage of normal ageness, while New Era, with 30 per cent has the least. New Era has 70 per cent over-ageness, the greatest of any of the districts, and Newhall with 40.3 per cent has the least.

As a whole, few children in these districts have made more than normal progress. The percentage making less than normal progress in some grades is very large, especially in

the sixth grade in the Newhall School, where the percentage is 62.9, and in Saugus in the second grade, where the percentage is 66.6.

Among the causes of over-ageness in these schools are (a) teachers formerly retaining larger numbers of slower pupils in one grade two years, (b) a considerable number of children from transient families attending these schools for short times, (c) some foreign born children residing in these districts, (d) illness keeping some children from school much of the school year, (e) a number of boys under juvenile authority, who in many cases are over-age, residing in these districts, (f) lack of curriculum adjustments, etc. During the past year or two there has been little non-promotion in these schools, most of it being in the first grade.

The size of classes has remained quite small in most of the schools in this survey. Honby, with 21 to 29 pupils enrolled, has the largest class from the point of view of teacher load during the school year. Newhall, with the exception of the seventh and eighth grade room, has been exceptionally fortunate in having small numbers in its classes, which range from 25 to 31.

Should the voters in all the districts concerned approve of unionizing or consolidating with Newhall School District, from a study of the facts in this chapter, one's conclusion is that with but 25 to 31 pupils enrolled in the first six grades in Newhall and with one teacher to each of these six grades, the small numbers enrolled in Honby, New Era, and Saugus Districts could be quite easily cared for in

the Newhall School with the addition of not more than two teachers to the present teaching personnel of the Newhall School.

CHAPTER VII

EDUCATIONAL MEASUREMENT BY STANDARD TESTS

Use in school surveys. Because of the increasing use of tests for purposes of survey and classification, a number of tests have been devised to serve that purpose. These survey tests are in reality batteries of tests covering several fields. They are group tests, and can be given to pupils at one sitting, in the same way as any other group test might be given. Two of these tests are the Stanford Achievement Test and the Illinois Test.¹

Scholastic proficiency is one of the facts of school success. Achievement tests and scales attempt to evaluate it through the instrumentality of objective measurements of scientific precision. Tests and scales have been constructed along lines analogous to those underlying physical measurements. The results have been approximative and more or less arbitrary because educational products are rarely one-dimensional and because tests are not exact measuring rods.²

Objective evidence of pupil achievement in school systems dates back to 1845 when Horace Mann, Secretary of Massachusetts Board of Education, was in controversy with some Boston schoolmasters over the efficiency of the Boston City Schools, which led to an examination of the schools by the school committee. Objective measurement then was largely lost sight of until 1900. From 1910 until the World War period objective testing developed rapidly under the leadership of such men as Rice, Thorndike, Ayers, Terman, and Courtis. Following the World War objective measurement revived and more city school surveys have been made since 1921 than had been made during the entire period up to that date.³

¹Charles Russell, Standard Tests. Ginn & Co., New York, 1930. p. 88.

²Albert J. Levine and Louis A. Marks, Testing Intelligence and Achievement, The Macmillan Co., New York, 1928. p. 188

³Hollis Leland Caswell, City School Surveys, Bureau of Publications, Teachers College, Columbia University, 1929. p. 27.

Tests used in this survey. In this survey the New Stanford Achievement Test, both Primary and Advanced, Form V, was used, the former in the third grade and the latter in grades four to eight inclusive in all the schools in the survey.

The New Stanford Achievement Test, Primary Examination, consists of tests in paragraph meaning, word meaning, dictation (spelling), arithmetic reasoning, and arithmetic computation, which are parts of the Advanced Examination, and are designed for the second and third grades. The New Stanford Achievement Test, Advanced Examination, consists of tests in language usage, literature, history and civics, geography, and physiology and hygiene in addition to the Primary Examination and is intended for use in grades four to nine inclusive. Both the Primary and Advanced Examinations are published in Forms V, W, X, Y, and Z.

The profile chart giving the score of each subject, total score of the test, educational age, chronological age, and school grade is an excellent feature, for at a glance one is able to observe a pupil's grade placement and educational age, not only in each subject but in the examination as a whole.

Grade placement in arithmetic, reading, and in the total scores. Results of the average of arithmetic computation and reasoning, the average of reading for paragraph meaning and word meaning, and the total scores in the tests are taken and tables are made showing these three phases of the tests. To have considered each one of the ten separate parts

of the test would have been too laborious a process, when as a whole these three phases taken are fairly representative of the other parts of the test.

Tables LXII to LXXVII inclusive give the results of the three phases given above of the Stanford Achievement Test, Primary and Advanced, in the six schools. The tables contain the scores made and the arithmetic, reading, and achievement age and grade, both actual and that made in the test, of all the pupils who took the test. Since the test was given in October, a normal grade is considered one tenth of a year above the grade the child is enrolled in, such as 3.1 being normal for the third grade.

The arithmetic age in the Castaic Union School, Table LXII, ranges from below seven years and below a grade of 2.5 in the third and fourth grades, to above an arithmetic age of 15-11 and a grade of 10.0, or to adult standing in the eighth grade. The arithmetic age range is over eight years and the arithmetic grade range is about eight years, when there is an actual difference of but five years from the third grade to the eighth grade. From the same table showing the grade mean, every one is below grade, ranging from 0.3 of a year in the third grade to 1.8 years in the sixth grade. The reading age, Table LXIII, in this same school shows the same range as in the arithmetic age. The reading grade ranges from 0.1 of a year below grade in the third grade to two years below grade in the sixth grade. In the educational age there is the same condition as in the arithmetic and reading ages. The achievement grade, Table LXIV, ranges from 0.3 of a year below grade

TABLE LXII
 ARITHMETIC AGES AND GRADES OF STANFORD ACHIEVE-
 MENT TESTS, PRIMARY AND ADVANCED, CASTAIC UN-
 ION SCHOOL

Arithmetic Age ¹	Arithmetic Grade	3	4	Grade -		7	8
				5	6		
Above 15-11	Adult stand. or 10						1
15-8	9.5-9.9						1
15-4	9.0-9.4						1
14-8	8.5-8.9						1
14-4	8.0-8.4						1
13-7	7.5-7.9					1	
12-11	7.0-7.4					1	
12-6	6.5-6.9					1	1
12-1	6.0-6.4						1
11-7	5.5-5.9			2	1	1	2
11-2	5.0-5.4						
10-7	4.5-4.9			5	1	1	1
10-1	4.0-4.4		3	7			
9-6	3.5-3.9		2	3	1	1	
8-11	3.0-3.4	3			1		
7-11	2.5-2.9	3	2				
Below 7-0	Below 2.5	2	1				
Total		8	8	17	4	6	7
Grade mean		2.8	3.2	4.4	4.3	5.7	6.6
Above or below grade mean		-.3	-.9	-.7	-1.8	-1.4	-1.5

¹Age is for mid point of grade interval. This table gives arithmetic grade rating. The numbers between the lines have arithmetic scores for their respective grades, those above the lines are above standard, and those below the lines are below standard in arithmetic for their grades. This table should be read as follows: one eighth grade pupil has an arithmetic age of above 15 years 11 months, and an arithmetic grade of adult standing or above grade 10, etc.

TABLE LXIII
 READING AGES AND GRADES OF STANFORD ACHIEVEMENT
 TESTS, PRIMARY AND ADVANCED, CASTAIC UNION SCHOOL

Reading Age ¹	Grade	3	4	Grade -		7	8
				5	6		
Above 15-11	Adult stand. or 10						1
15-8	9.5-9.9						1
15-4	9.0-9.4						1
14-8	8.5-8.9					1	1
14-4	8.0-8.4					1	1
13-7	7.5-7.9					1	
12-11	7.0-7.4					1	
12-6	6.5-6.9						1
12-1	6.0-6.4			1		1	1
11-7	5.5-5.9			2			1
11-2	5.0-5.4		1	2			
10-7	4.5-4.9			3	1		1
10-1	4.0-4.4			4	1	1	
9-6	3.5-3.9	1	2	2	1	1	
8-11	3.0-3.4	5	2	3	1		1
7-11	2.5-2.9	1	1				
Below 7-0	Below 2.5	1	2				
Total		8	8	17	4	6	7
Grade mean		3.0	3.1	4.4	4.1	5.8	6.2
Above or below grade mean		-.1	-1.0	-.7	-2.0	-1.3	-1.9

¹Age is for mid point of grade interval. This table gives reading grade rating. The numbers between the lines have reading scores for their respective grades, those above the lines are above standard, and those below the lines are below standard in reading for their grades. This table should be read as follows: one eighth grade pupil has a reading age of above 15 years 11 months, and a reading grade of adult standing or above grade 10, etc.

TABLE LXIV
 EDUCATIONAL AGES AND ACHIEVEMENT GRADES OF STAN-
 FORD ACHIEVEMENT TESTS, PRIMARY AND ADVANCED,
 CASTAIC UNION SCHOOL

Educational Ages ¹	Achievement Grades	Grade					
		3	4	5	6	7	8
Above 15-11	Adult stand. or 10						1
15-8	9.5-9.9						
15-4	9.0-9.4						
14-8	8.5-8.9						
14-4	8.0-8.4					1	1
13-7	7.5-7.9					1	
12-11	7.0-7.4					1	
12-6	6.5-6.9						1
12-1	6.0-6.4			1		1	1
11-7	5.5-5.9			2			1
11-2	5.0-5.4		1	2			
10-7	4.5-4.9			3	1		1
10-1	4.0-4.4			4	1	1	
9-6	3.5-3.9	1	2	2	1	1	
8-11	3.0-3.4	5	2	3	1		1
7-11	2.5-2.9	1	3				
Below 7-0	Below 2.5	1					
Total		8	8	17	4	6	7
Grade mean		2.8	3.3	3.3	4.1	6.7	6.6
Above or below grade mean		-.3	-.8	-1.8	-2.0	-.4	-1.5

¹Age is for mid point of grade interval. This table gives achievement grade rating. The numbers between the lines have achievement scores for their respective grades, those above the lines are above standard, and those below the lines are below standard in achievement for their grades. This table should be read as follows: one eighth grade pupil has an educational age of above 15 years 11 months, and an achievement grade of adult standing or above grade 10, etc.

TABLE LXV

ARITHMETIC AGES AND GRADES OF STANFORD ACHIEVEMENT
TESTS, PRIMARY AND ADVANCED, HONBY SCHOOL

Arithmetic Age ¹	Grade	3	4	5	6	7	8
14-4	8.0-8.4				1		
13-7	7.5-7.9				1		
12-11	7.0-7.4						
12-6	6.5-6.9				1		
12-1	6.0-6.4					1	1
11-7	5.5-5.9		1	1	1		
11-2	5.0-5.4						
10-7	4.5-4.9			2		1	
10-1	4.0-4.4		1		1		
9-6	3.5-3.9						
8-11	3.0-3.4		1				
7-11	2.5-2.9	1					
Below 7-0	Below 2.5	1					
Total		2	3	3	5	2	1
Grade mean		2.6	4.3	4.9	6.2	5.6	6.4
Above or below grade mean		-.5	+.2	-.2	+.1	-1.5	-1.7

¹Age is for mid point of grade interval. This table gives arithmetic grade rating. The numbers between the lines have arithmetic scores for their respective grades, those above the lines are above standard, and those below the lines are below standard in arithmetic for their grades. This table should be read as follows: one sixth grade pupil has an arithmetic age of 14 years 4 months, and an arithmetic grade of 8.0-8.4, etc.

TABLE LXVI
 READING AGES AND GRADES OF STANFORD ACHIEVEMENT
 TESTS, PRIMARY AND ADVANCED, HONBY SCHOOL

Reading		Grade					
Age ¹	Grade	3	4	5	6	7	8
15-4	9.0-9.4				1		
14-8	8.5-8.9				1		
14-4	8.0-8.4			1			
13-7	7.5-7.9						
12-11	7.0-7.4						
12-6	6.5-6.9				1		1
12-1	6.0-6.4			1	1	1	
11-7	5.5-5.9		1				
11-2	5.0-5.4				1		
10-7	4.5-4.9		1	1		1	
10-1	4.0-4.4		1				
9-6	3.5-3.9						
8-11	3.0-3.4						
7-11	2.5-2.9						
Below 7-0	Below 2.5	2					
Total		2	3	3	5	2	1
Grade mean		Below 2.5	4.6	6.2	7.0	5.5	6.8
Above or below grade mean		-.6	+4.5	+1.1	+.9	-1.6	-1.3

¹Age is for mid point of grade interval. This table gives reading grade rating. The numbers between the lines have reading scores of their respective grades, those above the lines are above standard, and those below the lines are below standard in reading for their grades. This table should be read as follows: 1 sixth grade pupil has a reading age of 15 years 4 months, and a reading grade of 9.0-9.4, or 3 years above grade, etc.

TABLE LXVII
 EDUCATIONAL AGES AND ACHIEVEMENT GRADES OF STAN-
 FORD ACHIEVEMENT TESTS, PRIMARY AND ADVANCED,
 HONBY SCHOOL

Educational Ages ¹	Achievement Grades	Grade					
		3	4	5	6	7	8
15-4	9.0-9.4				1		
14-8	8.5-8.9						1
14-4	8.0-8.4				1		
13-7	7.5-7.9					1	
12-11	7.0-7.4			1			
12-6	6.5-6.9						
12-1	6.0-6.4				1		1
11-7	5.5-5.9			1		1	
11-2	5.0-5.4		1				
10-7	4.5-4.9		1		1	1	
10-1	4.0-4.4			1	1		
9-6	3.5-3.9		1				
8-11	3.0-3.4						
7-11	2.5-2.9	1					
Below 7-0	Below 2.5	1					
Total		2	3	3	5	2	1
Grade mean		Below 2.5	4.5	5.3	6.1	5.4	6.4
Above or below grade mean		-.6	+4	+2	---	-1.7	-1.7

¹Age is for mid point of grade interval. This table gives achievement grade rating. The numbers between the lines have achievement scores for their respective grades, those above the lines are above standard, and those below the lines are below standard in achievement for their grades. This table should be read as follows: 1 sixth grade pupil has an educational age of 15 years 4 months, and an achievement grade of 9.0-9.4, over 3 years above grade, etc.

TABLE LXVIII

ARITHMETIC AGES AND GRADES OF STANFORD ACHIEVEMENT TESTS, PRIMARY AND ADVANCED, NEWHALL SCHOOL

Arithmetic Age ¹	Grade	3	4	5	6	7	8
Above 15-11	Adult stand. or 10						2
15-8	9.5-9.9						1
15-4	9.0-9.4					1	1
14-8	8.5-8.9						1
14-4	8.0-8.4					3	
13-7	7.5-7.9						3
12-11	7.0-7.4					1	4
12-6	6.5-6.9						1
12-1	6.0-6.4					5	4
11-7	5.5-5.9			1	5	3	1
11-2	5.0-5.4			5	8	3	4
10-7	4.5-4.9		1	7	7		
10-1	4.0-4.4		1	6	5		
9-6	3.5-3.9		4	1	2	1	
8-11	3.0-3.4	4	13	5	2		
7-11	2.5-2.9	9	5	1			
Below 7-0	Below 2.5	15	3				
Total		28	27	26	27	17	22
Grade mean	Below 2.5	3.2	4.4	4.8	6.1	7.4	
Above or below grade mean		-.6	-.9	-.7	-1.3	-1.1	-.7

¹Age is for mid point of grade interval. This table gives arithmetic grade rating. The numbers between the lines have arithmetic scores for their respective grades, those above the lines are above standard, and those below the lines are below standard in their grades. This table should be read as follows: 2 eighth grade pupils have arithmetic ages of above 15 years 11 months, and arithmetic grade placements of adult standing, or above grade 10, etc.

in the third grade to 1.8 years below grade in the fifth grade. In all three the third grade comes more nearly being up to grade than any of the other grades and the fifth grade has the lowest grade rating in the school.

In Honby School, Table LXV, the arithmetic age ranges from below seven years in the third grade to about 14 years 4 months in the sixth grade, and from a grade of 2.5 to a grade of 8.1. In this subject the grade obtained ranges from .2 of a year above grade in the fourth grade to 1.7 years below grade in the eighth grade. The range in reading, Table LXVI, is greater than in arithmetic, for it extends from below a grade of 2.5 in the third grade to 9.0 in the sixth grade. In this subject the grade is from 1.1 years above grade in the fifth grade to 1.6 years below grade in the seventh grade. In achievement, Table LXVII, the grade range is from below 2.5 in the third grade to 9.0 in the sixth grade. Here a sixth grade pupil tested more than 2 years above the only eighth grade pupil in the school and over 3 years above the two seventh grade pupils. The achievement grade ranges from 0.4 years above grade in the fourth grade to 1.7 years below grade in both the seventh and eighth grades. On the average, the fourth grade appears to be doing the best work in the school, and the seventh and eighth grades the poorest.

Table LXVIII shows the Newhall School to be exception-weak in arithmetic. Over half of the third grade made below a grade of 2.5 in this subject, the lowest in the school, and the highest, a grade of 10, was made by two eighth grade pupils. All grade means are below what their respective

means should be, ranging from 0.6 of a year below in the third grade to 1.3 years below in the sixth grade. Reading, Table LXIX, is somewhat better in this grade, the reading age ranging from below 7 years in the third and fourth grades to 15 years 11 months in the seventh and eighth grades. The grade range is from below 2.5 to 10.0. The mean grade ranges from 0.7 of a year above grade in the fifth grade to 0.9 of a year below grade in the fourth grade. In achievement, Table LXX, the educational age ranges from below 7 years in the third grade to 15 years 11 months in the eighth grade and from below a grade of 2.5 in the third grade to the 10th grade in the eighth. The grade means, all below for their respective grades, range from 0.6 of a year below in grades three and seven to 1.4 below in the sixth grade.

In Saugus School, Table LXXI, the arithmetic age ranges from 7 years 11 months in the fourth grade to 15 years 11 months in the eighth grade, and the grade range is from 2.9 years in the fourth grade to above the 10th grade in the eighth. In this school the grades obtained range from 0.3 of a year above grade in the third grade to 1.7 years below grade in the eighth grade. The reading age, Table LXXII, varies from 7 years 11 months in the fifth grade to 15 years 8 months in the seventh and eighth grades, and a reading grade of 2.7 years in the fifth grade to 9.8 in the seventh and eighth grades. In this a fifth grade pupil is lower than the lowest made by any pupil in either the third or fourth grades. The grades obtained range from 0.8 of a year below standard for their respective grades in the fifth grade

TABLE LXIX
 READING AGES AND GRADES OF STANFORD ACHIEVEMENT TESTS, PRIMARY AND ADVANCED, NEWHALL SCHOOL

Reading Age ¹	Grade	3	4	5	6	7	8
Above 15-11	Adult stand. or 10					2	3
15-8	9.5-9.9					2	1
15-4	9.0-9.4						2
14-8	8.5-8.9						2
14-4	8.0-8.4			1		1	1
13-7	7.5-7.9					2	3
12-11	7.0-7.4			3		1	4
12-6	6.5-6.9				1	1	1
12-1	6.0-6.4			2	2	2	2
11-7	5.5-5.9		1	3	8	2	2
11-2	5.0-5.4	1	1	5	8	3	1
10-7	4.5-4.9		3	1	2		
10-1	4.0-4.4		2	7	3		
9-6	3.5-3.9	3	4	2		1	
8-11	3.0-3.4	3	9	2	2		
7-11	2.5-2.9	8	5		1		
Below 7-0	Below 2.5	13	2				
Total		28	27	26	27	17	22
Grade mean		2.5	3.2	5.2	5.4	6.6	7.6
Above or below grade mean		-.6	-.9	+.1	-.7	-.5	-.5

¹Age is for mid point of grade interval. This table gives reading grade rating. The numbers between the lines have reading scores of their respective grades, those above the lines are above standard, and those below the lines are below standard in reading for their grades. This table should be read as follows: two seventh grade pupils and three eighth grade pupils have reading ages of above 15 years 11 months, and reading grade placements of adult standing or above grade 10, etc.

TABLE LXX

EDUCATIONAL AGES AND ACHIEVEMENT GRADES OF STAN-
FORD ACHIEVEMENT TESTS, PRIMARY AND ADVANCED,
NEWHALL SCHOOL

Educational age ¹	Achievement grade	3	4	5	6	7	8
Above 15-11	Adult stand. or 10						1
15-8	9.5-9.9						1
15-4	9.0-9.4					2	1
14-8	8.5-8.9					1	2
14-4	8.0-8.4					1	
13-7	7.5-7.9					1	5
12-11	7.0-7.4						2
12-6	6.5-6.9					3	5
12-1	6.0-6.4			3	1	2	4
11-7	5.5-5.9			1	6	3	1
11-2	5.0-5.4				8	2	1
10-7	4.5-4.9		1	4	4	1	
10-1	4.0-4.4		3	13	3		
9-6	3.5-3.9	1	4	3	3	1	
8-11	3.0-3.4	4	12	2	2		
7-11	2.5-2.9	10	7				
Below 7-0	Below 2.5	13					
Total		28	27	26	27	17	22
Grade mean		2.5	3.4	4.4	4.7	6.5	7.2
Above or below grade mean		-.6	-.7	-.7	-1.4	-.6	-.9

¹Age is at mid point of grade interval. This table gives achievement grade rating. The numbers between the lines have achievement scores for their respective grades, those above the lines are above standard, and those below the lines are below standard in achievement for their grades. This table should be read as follows; one eighth grade pupil has an educational age of above 15 years 11 months, and an achievement grade of adult standing or above grade 10, etc.

TABLE LXXI

ARITHMETIC AGES AND GRADES OF STANFORD ACHIEVEMENT TESTS, PRIMARY AND ADVANCED, SAUGUS SCHOOL

Arithmetic Age ¹	Grade	3	4	5	6	7	8
Above 15-11	Adult stand. or 10						1
15-8	9.5-9.9						
15-4	9.0-9.4						
14-8	8.5-8.9						1
14-4	8.0-8.4						1
13-7	7.5-7.9						
12-11	7.0-7.4					2	
12-6	6.5-6.9					2	
12-1	6.0-6.4				1		
11-7	5.5-5.9				1	1	1
11-2	5.0-5.4				1	1	
10-7	4.5-4.9		1	3	1		1
10-1	4.0-4.4	1	1	3			1
9-6	3.5-3.9	1	1	1			
8-11	3.0-3.4	4					
7-11	2.5-2.9		1				
Below 7-0	Below 2.5						
Total		6	4	7	4	6	6
Grade mean		3.4	3.9	4.4	5.5	6.3	6.4
Above or below grade mean		+ .3	- .2	- .7	- .6	- .8	- 1.7

¹Age is at mid point of grade interval. This table gives arithmetic grade rating. The numbers between the lines have arithmetic scores for their respective grades, those above the lines are above standard, and those below the lines are below standard in their grades. This table should be read as follows: one eighth grade pupil has an arithmetic age of above 15 years 11 months, and an arithmetic grade placement of adult standing or grade 10, etc.

TABLE LXXII

READING AGES AND GRADES OF STANFORD ACHIEVEMENT TESTS, PRIMARY AND ADVANCED, SAUGUS SCHOOL

Reading Age ¹	Grade	Grade					
		3	4	5	6	7	8
15-8	9.5-9.9					1	2
15-4	9.0-9.4					1	
14-8	8.5-8.9						1
14-4	8.0-8.4					1	
13-7	7.5-7.9				1	1	1
12-11	7.0-7.4				1		1
12-6	6.5-6.9						
12-1	6.0-6.4						
11-7	5.5-5.9		1	3	1	1	
11-2	5.0-5.4		1			1	
10-7	4.5-4.9						1
10-1	4.0-4.4	1	1	2	1		
9-6	3.5-3.9			1			
8-11	3.0-3.4	5	1				
7-11	2.5-2.9			1			
Total		6	4	7	4	6	6
Grade mean		3.4	4.5	4.3	6.1	7.5	7.6
Above or below grade mean		+.3	+.4	-.8	---	+.4	-.5

¹Age is at mid point of grade interval.

This table gives reading grade placement. The numbers between the lines have reading scores for their respective grades, those above the lines are above standard, and those below the lines are below standard in their grades. This table should be read as follows: one seventh grade pupil and two eighth grade pupils have a reading age of 15 years 8 months, and a reading grade placement of from 9.5 to 9.9, etc.

TABLE LXXIII
 EDUCATIONAL AGES AND ACHIEVEMENT GRADES OF STAN-
 FORD ACHIEVEMENT TESTS, PRIMARY AND ADVANCED,
 SAUGUS SCHOOL

Educational Age ¹	Achievement Grade	Grade					
		3	4	5	6	7	8
15-4	9.0-9.4						1
14-8	8.5-8.9					1	1
14-4	8.0-8.4						1
13-7	7.5-7.9					2	1
12-11	7.0-7.4					1	1
12-6	6.5-6.9				1		
12-1	6.0-6.4						1
11-7	5.5-5.9			1	2	1	
11-2	5.0-5.4			1		1	
10-7	4.5-4.9		1	1	1		
10-1	4.0-4.4		1	2			1
9-6	3.5-3.9	1	1	1			
8-11	3.0-3.4	3	1				
7-11	2.5-2.9	2		1			
Total		6	4	7	4	6	6
Grade mean		3.1	4.1	4.3	5.6	6.9	7.2
Above or below grade		---	---	-.8	-.5	-.2	-.9

¹Age is at mid point of grade interval. This table gives achievement grade rating. The numbers between the lines have achievement scores for their respective grades, those above the lines are above standard, and those below the lines are below standard in achievement for their grades. This table should be read as follows: one eighth grade pupil has an educational age of 15 years 4 months, and a grade placement of 9.0 to 9.4, etc.

to 0.4 of a year above in the fourth and the seventh grades. There are but the fifth and the eighth grades below standard, the other grades being 0.3 and 0.4 years above. The educational age, Table LXXIII, ranges from 7 years 11 months in the fifth grade to 15 years 4 months in the eighth grade, and the achievement grade extends from 2.9 in the fifth grade to 9.2 in the eighth grade. The grades obtained range at grade in the third and the fourth grades to 0.9 of a year below in the eighth grade.

From Table LXXIV New Era School has but two pupils in the third grade and one pupil each in grades four to eight inclusive. The lowest arithmetic age, about 8 years 11 months is by one pupil in each the third and fourth grades, and their arithmetic age is 3.1 years, while the highest is an age of about 13 years 7 months and a grade of 7.6, made by the seventh grade pupil. The pupil making the highest above grade is the one in the fifth grade, which is 0.6 of a year above his grade, while both the fourth and the eighth grade pupils tied for the lowest, each being 1.1 years below his respective grade. In reading, Table LXXV, the lowest age is about 8 years 11 months and a grade of 3.4 years, which is made by one of the third grade pupils, and the highest age is about 14 years 8 months and a grade of 8.7 made by the fifth grade pupil. The one highest above grade in reading, 3.6 years, is made by the fifth grade pupil, and the lowest is the seventh grade pupil, 1.4 years below grade. The lowest educational age, Table LXXVI, is 8 years 11 months, with an achievement grade of

TABLE LXXIV
 ARITHMETIC AGES AND GRADES OF STANFORD ACHIEVE-
 MENT TESTS, PRIMARY AND ADVANCED, NEW ERA SCHOOL

Arithmetic		Grade					
Age ¹	Grade	3	4	5	6	7	8
13-7	7.5-7.9					1	
12-11	7.0-7.4						1
12-6	6.5-6.9						
12-1	6.0-6.4						
11-7	5.5-5.9			1	1		
11-2	5.0-5.4						
10-7	4.5-4.9						
10-1	4.0-4.4	1					
9-6	3.5-3.9						
8-11	3.0-3.4	1	1				
7-11	2.5-2.9						
Total		2	1	1	1	1	1
Grade mean		3.5	3.1	5.7	5.7	7.6	7.0
Above or below grade		+.4	-1.1	+.6	-.4	+.5	-1.1

¹Age is at mid point of grade interval. This table gives arithmetic grade rating. The numbers between the lines have arithmetic scores for their respective grades, those above the lines are above standard, and those below the lines are below standard for their grade. This table should be read as follows: the seventh grade pupil has an arithmetic age of 13 years 7 months, and an arithmetic grade placement of 7.5 to 7.9, etc.

TABLE LXXV
 READING AGES AND GRADES OF STANFORD ACHIEVE-
 MENT TESTS, PRIMARY AND ADVANCED, NEW ERA SCHOOL

Reading Age ¹	Grade	3	4	5	6	7	8
14-8	8.5-8.9			1			
14-4	8.0-8.4						1
13-7	7.5-7.9						
12-11	7.0-7.4				1		
12-6	6.5-6.9						
12-1	6.0-6.4						
11-7	5.5-5.9					1	
11-2	5.0-5.4						
10-7	4.5-4.9		1				
10-1	4.0-4.4	1					
9-6	3.5-3.9						
8-11	3.0-3.4	1					
7-11	2.5-2.9						
Total		2	1	1	1	1	1
Grade mean		3.6	4.6	8.7	7.1	5.7	8.1
Above or below grade		+.5	+.5	+3.6	+1.0	-1.4	---

¹Age is at mid point of grade interval.
 This table gives reading grade rating. The numbers between the lines have reading scores for their respective grades, those above the lines are above standard, and those below the lines are below standard in their grades. This table should be read as follows: the fifth grade pupil has a reading age of 14 years 8 months, and a reading grade placement of 8.5 to 8.9, etc.

TABLE LXXVI
 EDUCATIONAL AGES AND ACHIEVEMENT GRADES OF STAN-
 FORD ACHIEVEMENT TESTS, PRIMARY AND ADVANCED,
 NEW ERA SCHOOL

Educational Age ¹	Achievement Grade	Grade					
		3	4	5	6	7	8
13-7	7.5-7.9						1
12-11	7.0-7.4						
12-6	6.5-6.9				1		
12-1	6.0-6.4			1		1	
11-7	5.5-5.9						
11-2	5.0-5.4						
10-7	4.5-4.9						
10-1	4.0-4.4	1					
9-6	3.5-3.9		1				
8-11	3.0-3.4	1					
7-11	2.5-2.9						
Total		2	1	1	1	1	1
Grade mean		3.6	3.5	6.2	6.6	6.0	7.8
Above or below grade		+.5	-.6	+1.1	+.5	-1.1	-.3

¹Age is at mid point of grade interval.
 This table gives achievement grade rating. The numbers between the lines have achievement scores for their respective grades, those above the lines are above standard, and those below the lines are below standard in achievement for their grades. This table should be read as follows: the eighth grade pupil has an educational age of 13 years 7 months, and an achievement grade placement of 7.5 to 7.9, etc.

TABLE LXXVII
 ARITHMETIC AND READING AGES AND GRADES, AND EDUCATIONAL AGES AND ACHIEVEMENT GRADES OF STANFORD ACHIEVEMENT TESTS, PRIMARY AND ADVANCED, FELTON SCHOOL

Age ¹	Grade	Achievement Grade		Reading Grade		Arithmetic Grade	
		5	6	5	6	5	6
12-1	6.0-6.4		I		I		I
11-7	5.5-5.9			I			
11-2	5.0-5.4	1				1	
10-7	4.5-4.9			I			
10-1	4.0-4.4	1				1	
9-6	3.5-3.9						
8-11	3.0-3.4						
7-11	2.5-2.9						
Total		2	1	2	1	2	1
Grade mean		4.6	6.1	5.2	6.2	4.6	6.1
Above or below grade		-.5	---	+.1	+.1	-.5	---

¹Age is at mid point of grade interval. This table gives achievement, reading, and arithmetic grade rating. The numbers between the lines have scores for their respective grades, and those below the lines are below standard. This table should be read as follows: the sixth grade pupil has an achievement age of 12 years 1 month, and an achievement grade of 6.0 to 6.4, etc.

3.2 years made by a third grade pupil, and the highest educational age, about 13 years 7 months, with an achievement grade of 7.8, is made by the eighth grade pupil. The fifth grade pupil is 1.1 years above his grade, the highest in the school, and the lowest is the seventh grade pupil, who is 1.1 years below his grade, or below standard. In this school the fifth grade pupil seems to be the outstanding one.

Table LXXVII gives the achievement, reading, and arithmetic ages and grades of the three pupils in the Felton School. The sixth grade pupil tested practically at grade in all three, one fifth grade pupil tested slightly above his grade, and the other fifth grade pupil tested about an average for a fourth grade pupil, which brings the fifth grade average or mean about a half year below standard for that grade.

Charts VI and VII are histograms giving data based on the Stanford Achievement Tests, which were given to grades 3 to 8 inclusive. Chart VI shows two pupils who are actually in the eighth grade making an achievement rating of but grade 4. The spread in this grade ranges from grade 4 to grade 10 or above. The spread is as great in the seventh grade, for here it ranges from grades 3 to 9 inclusive. The spread decreases considerably in the lower grades. Chart VII gives much the same picture in a little different form. The grade achievement extends from grade 2 and below to grade 10 and above, with the greatest numbers in the second, third,

and fourth grades. Table LXXVIII gives the grade placement according to these tests and the actual grade placements in percentages in all six schools combined. While the third grade is the lowest grade given the tests, 17 per cent of all pupils taking the tests achieved but a grade of 2 or below, and but 2.7 per cent of the same number achieved a grade of 8 or above. In the third grade the percentages of actual numbers taking the tests and the achievement made are the most nearly equal, while the greatest difference is in the eighth grade, where 14 per cent of the total number taking the tests were in the eighth grade and but 3 per cent made the achievement for that grade. In all schools combined the achievement is far below standard.

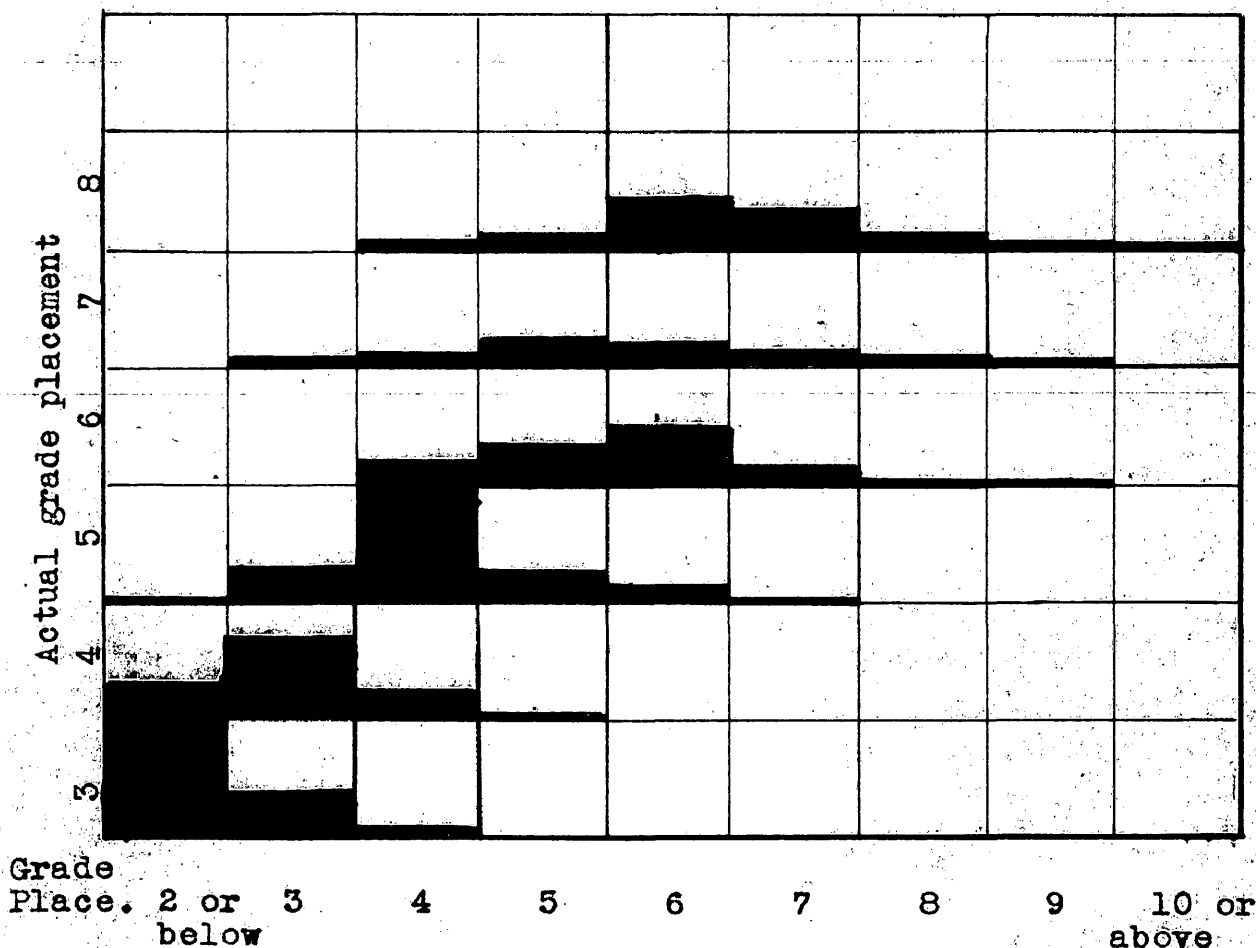
Summary and conclusions. Various types of survey tests, usually consisting of batteries of tests, were devised to meet the demand for school surveys.

The tests used in this survey were the Stanford Achievement, Form V, Primary and Advanced. The former were given to the third grade and the latter to grades four to eight inclusive.

From a study of Tables LXII to LXXVII inclusive one realizes there are vast differences in achievement results obtained by pupils in the same grade in the same school as well as by those in the same grade in different schools. One of the chief reasons for this difference in achievement is the difference in mental ability found in different pupils, which will be studied in Chapter VIII.

CHART VI

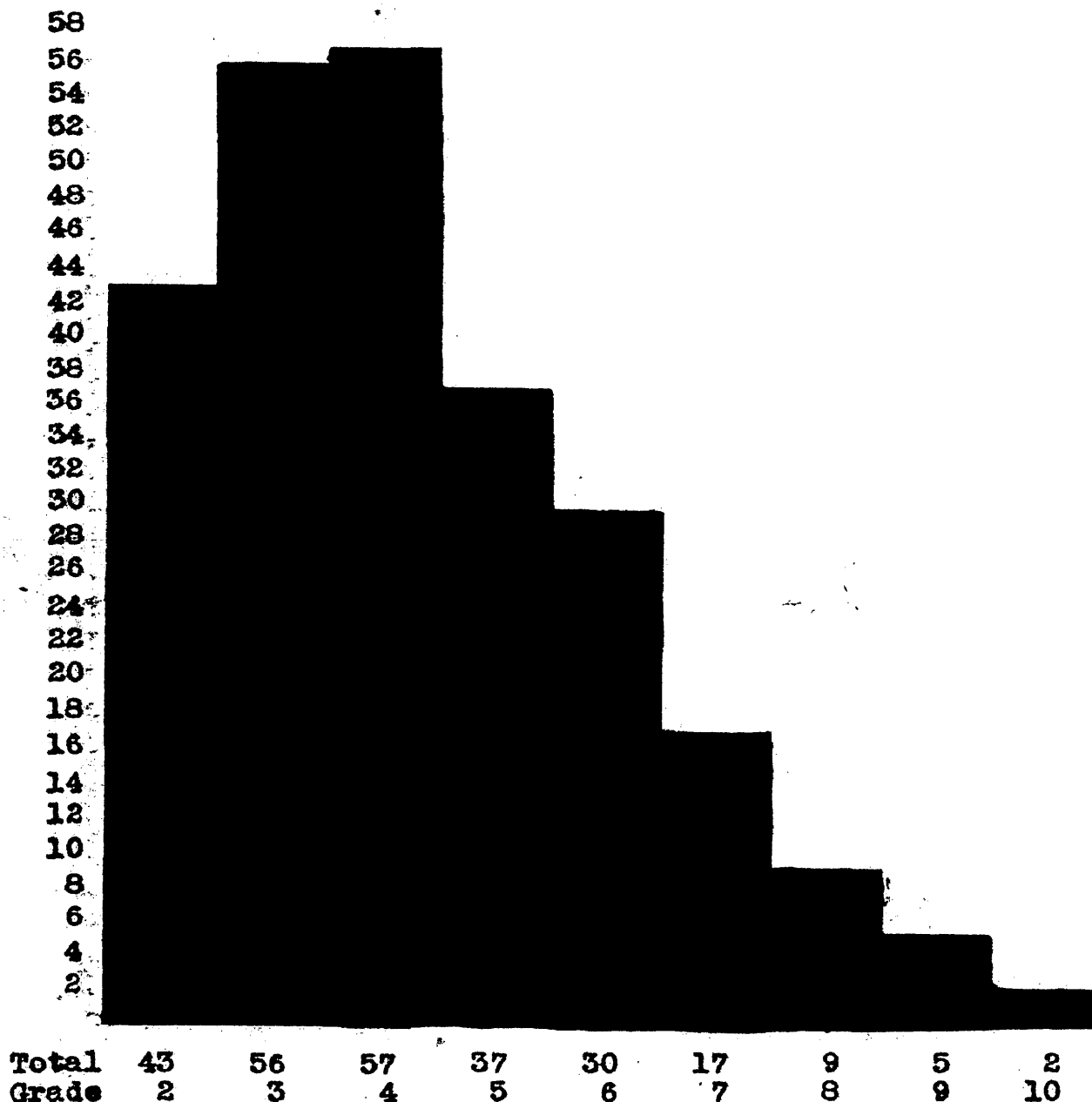
HISTOGRAM SHOWING THE COMPARATIVE NUMBER OF PUPILS
IN EACH GRADE IN ALL SIX DISTRICTS COMBINED AS DE-
TERMINED BY THE STANFORD ACHIEVEMENT TESTS, PRIMARY
AND ADVANCED, FORM V, OCTOBER, 1931



Grade placement by Stanford Achievement Tests.
This histogram indicates 2 eighth grade pupils received a grade placement of 4th grade, 3 a grade placement of 5th grade, 14 a grade placement of 6th grade, 11 a grade placement of 7th grade, 3 a grade placement of 8th grade, 2 a grade placement of 9th grade, and 2 a grade placement of 10th grade or above. etc.

CHART VII

HISTOGRAM SHOWING GRADE ACHIEVEMENT OF THE PUPILS OF ALL SIX SCHOOLS COMBINED ACCORDING TO THE STANFORD ACHIEVEMENT TESTS



Grade achievement by Stanford Achievement Tests.
 Each half space in height represents one pupil in the grade.
 The chart should be interpreted as follows: 43 pupils received a grade of 2 or below, 56 received a grade achievement of grade 3, etc.

TABLE LXXVIII
 GRADE PLACEMENT IN PERCENTAGE IN EACH GRADE
 ACCORDING TO THE STANFORD ACHIEVEMENT TESTS
 AND PERCENTAGE OF ACTUAL GRADE PLACEMENT OF
 THE PUPILS OF ALL SIX SCHOOLS COMBINED

	2 and 3 below	4	5	Grade 6	7	8	9	10
Stanford 17 Achievement	22	22	14	12	7	3	2	.7
Actual ¹	19	16	22	16	13	14		

¹The Stanford Achievement Tests were given to grade 3 to 8 inclusive.

This table should be read as follows: according to the Stanford Achievement Tests, 17 per cent of the total enrollment of all the six schools combined in grades 3 to 8 inclusive received a grade of 2 or below, 22 per cent received a grade placement of grade 3, etc., while but 19 per cent of the total enrollment were actually in grade 3, etc.

The numbers tested in Felton, Honby, and New Era Schools are so small it is difficult to devise accurate comparative data with slightly larger schools.

Castaic Union, Honby, and Newhall pupils appear to be farther behind in their grades, generally speaking, than do the pupils of the other districts. As was stated in Chapter VI, quite a number of boys, somewhat over age, under juvenile court jurisdiction, are living in these districts. This has a tendency to make achievement ratings lower than they should be. In grade averages or means Castaic Union and Newhall Schools do not have a single grade at grade or above grade, while Saugus has the third and fourth grades at grade, but the remaining four grades are below grade. Castaic Union's sixth grade is 2.0 years below grade, which is the lowest of any in the six districts. The highest above grade in all the districts was made by New Era's fifth grade, with but one pupil in the grade, or 1.1 years above his grade. By taking a single pupil in one of the other districts, Honby School has one sixth grade boy whose achievement grade is 2.9 years above standard for that grade. This was the highest above grade any pupil made in all the districts of the survey.

Probably one reason for so much spread in grade standings in the same grade is on account of so seldom retaining weak pupils a second year in the same grade. Reasons favoring yearly promotions, such as keeping children of the same age and physical development together to avoid severe social problems, seem to more than off set reasons for retaining

many children in their grades from year to year because they are not entirely up to grade standards.

CHAPTER VIII

MENTAL ABILITY OF THE PUPILS

Purpose of the chapter. The purpose of the chapter is to interpret the meaning of intelligence or mental ability, and to give the results of tests of mental ability expressed in intelligence quotients given in each district of the survey.

A comparison of mental and achievement ages found by giving standard tests will determine if pupils are working up to their mental capacity in the various school subjects and will enable an evaluation to be placed upon the efficiency of the curriculum or the work of a school system. In this survey an attempt has been made to determine if the pupils tested are working up to their ability.

Definition of intelligence. Monroe, DeVoss, and Kelley, in their Educational Tests and Measurements, state:

The word "intelligence" has been a handicap to the measurement movement. Like many other terms with long-established usage which psychology has adopted, it has several well recognized meanings. Because it has been associated with genius, feeble-mindedness, and insanity, it carries taboo of personal and intimate things. Because it has been the chief characteristic which distinguished man from other animals, and because it has frequently stood as an attribute to Deity, it has a sacred and spiritual significance which leads some to resent its measurement, and causes others to regard it as the sum total of man's mind and soul. In order to think clearly of the results of intelligence tests, we must relieve the concept of some of its handicaps.

Educational practice demands a prediction of the pupil's probable school success. The word "intelligence" is generally accepted as a name for such a prediction.¹

¹W. S. Monroe, J. C. DeVoss, and F. J. Kelley, Educational Tests and Measurements, Houghton Mifflin Co., Boston, 1924, pp. 332-333.

W. S. Monroe, in his Introduction to the Theory of Educational Measurements, says:

For practical purposes general intelligence may be thought of as the measurement of the pupil's general capacity to do the work of the school.¹

Intelligence has been expressed in mental age and intelligence quotient, which are terms all tests of mental ability use.

Charles Russell, in his Standard Tests, states:

As in the achievement measures in the age scale, - - - so in the measures of ability the mental age indicates the relative ability of pupils in terms of the average ability of pupils of a like age.²

A. J. Levine and L. Marks, in their Testing Intelligence and Achievement, say:

The intelligent quotient (I. Q.), is the ratio, expressed decimally, between the mental age and the chronological age. It is computed by dividing the percentage by the chronological age.³

Use of the intelligence test. One important use of the intelligence test is for the purpose of caring for the individual needs of the pupil through classification.

F. C. Touton and A. B. Struthers, in their Junior High School Procedure, state:

The wise and careful use of intelligence and educational tests in connection with all other available data that concern the pupil is a step in the direction of the administration of a socially efficient educational program, since it aids in the realization of the junior high school object-

¹W. S. Monroe, Introduction to the Theory of Educational Measurements, Houghton Mifflin Co., Boston, 1923, p. 235.

²Charles Russell, Standard Tests, Ginn & Co., Boston, 1930, p. 258.

³A. J. Levine and L. Marks, Testing Intelligence and Achievement, The Macmillan Co., New York, 1928, p. 130.

ives in caring for the individual needs of pupils.¹

The above not only applies to the junior-high school grades, but to all other grades as well.

It is very essential to have intelligence tests given in any school system where a comprehensive survey is being made, for without them there would be no way of determining how nearly the school classes are working up to their respective grades.

The achievement results in a school may be very satisfactory as revealed by subject tests, but without tests of mental ability little evaluation can be placed on the curriculum or teaching. In such a case it might be the average intelligence is quite high. In a case where the achievement results are low, only by intelligence tests can it be determined if the pupils are working to their mental capacity. If such is true the tests of mental ability will substantiate the assumption that the average mental ability of the pupils is much below the norm for pupils of their age.

Intelligence tests used. Haggerty Intelligence Test, Delta I, was used in the third grade, but since so many of the pupils tested secured scores so low as to prohibit obtaining mental ages for each child, the third grade was omitted from Charts VIII to XIII inclusive. National Intelligence Tests, Scale A, was used to test the fourth, fifth, and sixth grades. Haggerty Intelligence Test, Delta

¹F. C. Toulton and A. B. Struthers, Junior High School Procedure, Ginn & Co., Boston, 1926, p. 52.

II, was used in the seventh grade, and the Terman Group Test of Mental Ability in the eighth grade.

In charting to show comparison of mental ages and educational ages, Charts VIII to XIII, all of the above tests were used on the one chart for each school. Had separate charts been used for each grade or even for each test, it would have necessitated too many charts, when but one can give the required data, since there are so few pupils in each school.

The tests selected were used because the writer has had more experience in using them than other tests of mental ability often used in school surveys.

Classification of Intelligence Quotients. Charles Russell, in his Standard Tests, Table LXXIX, classifies intelligence quotients as follows: those below 69 are feeble-minded, those from 70 to 79 borderline, from 80 to 89 backward, from 90 to 109 normal, from 110 to 119 bright, and 130 and upward very superior.

In this study pupils having intelligence quotients of from 91 to 110 will be considered as of normal intelligence, because the intelligence quotients in the tables are in such intervals as from 91 to 100, 101 to 110, etc. This is practically the same range of intelligence quotients as is quoted above. Pupils receiving more than 110 I. Q. are considered as above normal in intelligence and those receiving less than 90 I. Q. are considered below normal intelligence.

In tabulating results, each grade in all the districts

TABLE LXXIX
CLASSIFICATION OF INTELLIGENCE QUOTIENTS¹

Intelligence Quotients	Classification
0 - 69	Feeble-minded
70 - 79	Border-line
80 - 89	Backward
90 - 109	Normal
110 - 119	Bright
120 - 129	Very bright
130 and upward	Very superior

This table should be read as follows: pupils who have an intelligence quotient of 0 - 69 are classified as feeble-minded, etc.

¹Charles Russell, Standard Tests, New York, Ginn & Company, 1930, p. 272.

is tabulated together, thus having a separate table for each grade as is given in Tables LXXX to XCI. Two tables are made for each grade, one giving the score and mental age for pupils in each district and the other the intelligence quotient for such pupils.

Results of the intelligence tests. Tables LXXX to XCI give the results of the intelligence or mental ability tests in the six schools. As was stated in Chapter VII, it is difficult to form just comparison among schools, when the greater number of them have such few pupils enrolled in each grade.

In Table LXXX New Era and Saugus each has pupils tying for the highest score, one in the former school and three in the latter, making a score of 80-83. Castaic Union has one pupil making a score of 78-79 and New Era one with a score of 67-69. This results in the two pupils constituting the third grade in New Era School being above the norm. The author of the test gives 67-69 as the norm at the end of the second year. The writer used this as the third grade norm, since the test was given at the beginning of the third grade. Both Honby and Newhall have no third grade pupils up to the norm, which results in 100 per cent below the norm for each of these schools in this grade. Castaic Union has 90 per cent and Saugus 50 per cent below the norm. The mean mental age of Saugus is 7 years 10 months, the highest of the five schools. New Era is the next in rank with a mean of 7 years 6 months, Castaic is next with a mean of 6 years 10 months, Newhall is next with a mean of 6 years 6 months, and the

TABLE LXXX
 SCORES AND MENTAL AGES OF THE THIRD GRADE PUPILS
 AS DETERMINED BY THE HAGGERTY INTELLIGENCE TEST,
 DELTA I, OCTOBER, 1931

Score	Mental age	School				
		Castaic	Honby	New Era	Newhall	Saugus
80-83	10-0			1		3
78-79	9-10	1				
75-77	9-6					
72-74	9-2					
70-71	8-10					
67-69	8-6			1		
64-66	8-2	1			1	
60-63	7-10	1			3	
57-59	7-6	1			1	
54-56	7-2				2	
46-52	6-10	3			4	2
38-44	6-6	2	1		6	
30-36	6-2				6	1
Below 30	Under 6-0	1	1		4	
Total		10	2	2	27	6
Mean score		52	33	56	43	62
Mean mental age		6-10	6-2	7-6	6-6	7-10

The score on the line is the norm at the end of the second year, as given in the manual of directions.

Note: The mental age for score is as given for median for score of the groups given in the manual of directions for Delta I.

This table should be read as follows: one pupil in Castaic School made a score of 78-79, which is a mental age of 9 years 10 months, etc.

TABLE LXXXI
 INTELLIGENCE QUOTIENTS DERIVED BY HAGGERTY INTELLIGENCE TEST, DELTA I, OF THE THIRD GRADE PUPILS,
 OCTOBER, 1931

Intelligence quotients	Castaic	Honby	School New Era	Newhall	Saugus
111-120			1		2
101-110	1			1	
91-100	1		1	2	1
81-90	4			5	2
71-80	3	1		14	1
61-70				2	
Below 60	1	1		3	
Total	10	2	2	27	6
Mean	81	64	107	75	90

The numbers between the lines are the number of pupils of normal intelligence, those above the lines are above normal intelligence, and those below the lines are below normal intelligence.

This table should be read as follows: Castaic Union School has one third grade pupil whose intelligence quotient falls within the interval of 101-110, etc.

TABLE LXXXII
 SCORES AND MENTAL AGES OF FOURTH GRADE PUPILS AS
 DETERMINED BY NATIONAL INTELLIGENCE TESTS, SCALE A,
 OCTOBER, 1931

Score	Mental age	Castaic Union	Honby	School New Era	Newhall	Saugus
92-94	11-6				1	
89-91	11-4				1	
86-88	11-2		1			
83-85	11-0					
80-82	10-10				1	
77-79	10-8					
74-76	10-6			1	2	
71-73	10-3					1
68-70	10-0				2	
65-67	9-10					2
62-64	9-8	1				
59-61	9-5	1	1			
56-58	9-3	1				
53-55	9-0					
50-52	8-10				2	
47-49	8-7				2	1
44-46	8-5				1	
41-43	8-2					
Below 41	---	4			11	
<hr/>						
Total		7	2	1	23	4
Mean score		42	73	74	48	62
Mean mental age		8-2	10-4	10-5	8-7	9-7

The numbers between the lines are scores of average mental ability, those above the lines are above average mental ability, and those below the lines are below average mental ability.

This table should be read as follows: one fourth grade pupil in Castaic School received a score of 62-64 in the test, which gives him a mental age of 9 years 8 months, etc.

TABLE LXXXIII
 INTELLIGENCE QUOTIENTS DERIVED BY NATIONAL INTEL-
 LIGENCE TESTS, FORM A, OF FOURTH GRADE PUPILS,
 OCTOBER, 1931

Intelligence quotients	Castaic Union	Honby	New Era	Newhall	Saugus
141-150				1	
131-140					
121-130		1		1	
111-120				4	2
101-110	1		1	1	2
91-100		1		2	
81-90	2			4	1
71-80	2			4	
61-70				5	
Below 60	2			1	
Total	7	2	1	23	5
Mean	76	111	103	90	106

The numbers between the lines are the number of pupils of normal intelligence, those above the lines are above normal intelligence, and those below the lines are below normal intelligence.

This table should be read as follows: Castaic Union School has one fourth grade pupil whose intelligence quotient falls within the interval of 101-110, etc.

TABLE LXXXIV
 SCORES AND MENTAL AGES OF FIFTH GRADE PUPILS AS
 DETERMINED BY NATIONAL INTELLIGENCE TESTS, SCALE
 A, OCTOBER, 1931

Score	Mental age	Castaic Union	Felton	Honby	New Era	Newhall	Saugus
131-133	14-3				1		
128-130	14-0						
125-127	13-11					1	
122-124	13-5						
119-121	13-3						
116-118	13-0						
113-115	12-10						
110-112	12-7						
107-109	12-5						
104-106	12-2			1		1	
101-103	12-0	1					
98-100	11-10			1		2	
95-97	11-8	1					
92-94	11-6						
89-91	11-4					1	
86-88	11-2	1	1			2	1
83-85	11-0						
80-82	10-10					4	1
77-79	10-8						
74-76	10-6			1		1	
71-73	10-3	3		1		2	
68-70	10-0					2	
65-67	9-10					1	
62-64	9-8	1				2	2
59-61	9-5	1	1			1	
56-58	9-3						
53-55	9-0					4	1
50-52	8-10	2					
47-49	8-7	1					
44-46	8-5	1				2	1
41-43	8-2						
Below 41	---	4					1
Total		16	2	4	1	26	7
Mean score		57	73	87	130	74	61
Mean mental age		10-1	10-4	11-2	14-3	10-5	9-6

TABLE LXXXIV (Continued)
SCORES AND MENTAL AGES OF FIFTH GRADE PUPILS AS
DETERMINED BY NATIONAL INTELLIGENCE TESTS, SCALE
A, OCTOBER, 1931

The numbers between the lines are the number of pupils who are up to grade according to the manual of directions. This table should be read as follows: one fifth grade pupil in Castaic Union School has a score of 101-103, giving him a mental age of 12 years 0 months, etc.

TABLE LXXXV

INTELLIGENCE QUOTIENTS DERIVED BY NATIONAL INTELLIGENCE
TESTS, FORM A, OF FIFTH GRADE PUPILS, 1931

Intelligence quotient	Castaic Union	Felton	Honby	New Era	Newhall	Saugus
131-140				1		
121-130					1	
111-120	1	1	1		5	
101-110	1		2		7	2
91-100	4		1		4	
81-90	3	1			5	2
71-80	2				3	
61-70	1				1	1
Below 60	4					2
Total	16	2	4	1	26	7
Mean	77	98	105	131	97.5	78

The numbers between the lines are the number of pupils of normal intelligence, those above the lines are above normal intelligence, and those below the lines are below normal intelligence.

This table should be read as follows: Castaic Union School has one fifth grade pupil whose intelligence quotient falls within the interval of 111-120, etc.

TABLE LXXXVI

SCORES AND MENTAL AGES OF SIXTH GRADE PUPILS AS
DETERMINED BY NATIONAL INTELLIGENCE TESTS, SCALE

A, OCTOBER, 1931

Score	Mental age	Castaic Union	Felton	Honby	New Era	Newhall	Saugus
143-145	15-3			1			
140-142	15-0						
137-139	14-9						
134-136	14-6						
131-133	14-3						
128-130	14-0						
125-127	13-9						
122-124	13-5					1	
119-121	13-3				1	1	
116-118	13-0			1			
113-115	12-10						
110-112	12-7		1			1	
107-109	12-5						2
104-106	12-2					5	
101-103	12-0			1		2	
98-100	11-10					4	1
95-97	11-8						
92-94	11-6						
89-91	11-4						
86-88	11-2					1	
83-85	11-0					2	
80-82	10-10	1		1		2	
77-79	10-8						
74-76	10-6			1		1	
71-73	10-3						
68-70	10-0					2	
65-67	9-10					1	
62-64	9-8						
59-61	9-5					1	
56-58	9-3						
53-55	9-0					1	1
50-52	8-10	1					
47-49	8-7						
44-46	8-5					1	
41-43	8-2	1					
Below 41	---					1	

TABLE LXXXVI (Continued)
 SCORES AND MENTAL AGES OF SIXTH GRADE PUPILS AS
 DETERMINED BY NATIONAL INTELLIGENCE TESTS, SCALE
 A, OCTOBER, 1931

Score	Mental age	Castaic Union	Felton	Honby	New Era	Newhall	Saugus
Total		3	1	5	1	27	4
Mean score		57	112	103	121	86	92
Mean mental age		9-3	12-8	12-1	13-4	11-1	11-5

The numbers between the lines are scores of average mental ability, those above the lines are above average mental ability, and those below the lines are below average mental ability.

This table should be read as follows: one sixth grade pupil in Castaic Union School received a score of 80-82 in the test which gives him a mental age of ten years ten months, etc.

TABLE LXXXVII

INTELLIGENCE QUOTIENTS DERIVED BY NATIONAL INTELLIGENCE TESTS, FORM A, OF SIXTH GRADE PUPILS, OCTOBER, 1931

Intelligence quotients	Castaic Union	Felton	Honby	New Era	Newhall	Saugus
131-140			1			
121-130			1			1
111-120				1	5	1
101-110		1			1	
91-100			2		11	1
81-90	1		1		3	
71-80					4	1
61-70	1				2	
Below 60	1				1	
Total	3	1	5	1	27	4
Mean	67	108	106	120	94	104

The numbers between the lines are the number of pupils of normal intelligence, those above the lines are above normal intelligence, and those below the lines are below normal intelligence.

This table should be read as follows: Castaic Union School has one sixth grade pupil whose intelligence quotient falls within the interval of 81-90, etc.

TABLE LXXXVIII
 SCORES AND MENTAL AGES OF SEVENTH GRADE PUPILS AS
 DETERMINED BY HAGGERTY INTELLIGENCE TEST, DELTA II,
 OCTOBER, 1931

Score	Mental age	School				
		Castaic Union	Honby	New Era	Newhall	Saugus
130-132	16-9					1
127-129	16-5					1
124-126	16-0			1		
121-123	15-8					1
118-120	15-4			1		1
115-117	15-0	1		1		
112-114 ¹	14-9			1		
109-111	14-6	1				
106-108	14-2					1
103-105	13-11			1		
100-102	13-8			1		
97-99	13-4					
94-96	13-1	1		2		
91-93	12-10	1		2		
88-90	12-7			1		
85-87	12-4			1		
82-84	12-1			1		
79-81	11-10			1		
76-78	11-7					
73-75	11-4					
70-72	11-1		1	1		
67-69	10-10		1			
64-66	10-7			1		1
61-63	10-4			1		
58-60	10-1	1				
55-57	9-10					
52-54	9-7					
49-51	9-5	1				
46-48	9-2			1		
Total		6	2	1	17	6
Mean score		87	70	87	100	112
Mean mental age		12-5	11-0	12-5	13-7	14-8

TABLE LXXXVIII (Continued)
SCORES AND MENTAL AGES OF SEVENTH GRADE PUPILS AS
DETERMINED BY HAGGERTY INTELLIGENCE TEST, DELTA II,
OCTOBER, 1931

¹This score is the norm for the seventh grade as given in the manual of directions.
The mental age for the score is as given for the median for the score of the groups given in the manual of directions.
This table should be read as follows: one seventh grade pupil in Castaic Union School received a score of 115-117 in the test which gives him a mental age of 15-0, etc.,

TABLE LXXXIX
 INTELLIGENCE QUOTIENTS DERIVED BY HAGGERTY INTEL-
 LIGENCE TEST, DELTA II, OF SEVENTH GRADE PUPILS,
 OCTOBER, 1931

Intelligence quotient	Castaic Union	Honby	School New Era	Newhall	Saugus
141-150					1
131-140				1	
121-130				2	2
111-120	1			4	2
101-110	3			1	
91-100				2	
81-90		1	1	5	1
71-80		1		1	
61-70	2			1	
Below 60					
Total	6	2	1	17	6
Mean	94	81	88	100	118

The numbers between the lines are the number of pupils of normal intelligence, those above the lines are above normal intelligence, and those below the lines are below normal intelligence.

This table should be read as follows: Castaic Union School has one seventh grade pupil whose intelligent quotient falls within the interval of 111-120, etc.

TABLE XC
 SCORES AND MENTAL AGES OF EIGHTH GRADE PUPILS AS
 DETERMINED BY TERMAN'S GROUP TEST OF MENTAL AB-
 ILITY, FORM A, OCTOBER, 1931

Score	Mental age	School				
		Castaic Union	Honby	New Era	Newhall	Saugus
151-160	16-11					1
141-150	16-5					
131-140	16-0					
121-130	15-6	1			3	1
111-120	15-1					
101-110	14-7				1	1
91-100 ¹	14-1				4	2
81-90	13-8	1			6	
71-80	13-2	1			2	
61-70	12-9		1	1	3	
51-60	12-3	2			2	
41-50	11-9	1				
31-40	11-4	1			1	1
Total		7	1	1	22	6
Mean score		68	63	68	84	101
Mean mental age		12-11	12-9	12-11	13-8	14-4

¹This score is the norm for the eighth grade as given in the manual of directions. This table should be read as follows: one eighth grade pupil in Castaic Union School received a score of 121-130, which gives a mental age of 15 years, 6 months, etc.

TABLE XCI
 INTELLIGENCE QUOTIENTS DERIVED BY TERMAN GROUP TEST
 OF MENTAL ABILITY, FORM A, OF EIGHTH GRADE PUPILS,
 OCTOBER, 1931

Intelligence quotient	School				
	Castaic Union	Honby	New Era	Newhall	Saugus
121-130				1	2
111-120	1			2	1
101-110	2			3	1
91-100				11	
81-90	2	1		4	1
71-80	1		1	1	
61-70					1
Below 60	1				
Total	7	1	1	22	6
Mean	91	90	80	97	104

The numbers above the lines are the number of pupils above normal intelligence, those between the lines are of normal intelligence, and those below the lines are below normal intelligence.

This table should be read as follows: one eighth grade pupil in Castaic Union School has an intelligence quotient of from 111-120, etc.

lowest is Honby with a mean of 6 years 2 months. From a study of Table LXXXI, the picture is somewhat more encouraging for Newhall, as this school has three pupils out of a total of twenty-seven of normal intelligence, while under the previous table not a single third grade pupil received a score up to grade. New Era and Saugus tie in having the highest intelligence quotient, in the interval of 111-120, there being one pupil in the former district and two in the latter. New Era's second pupil, two from Castaic Union, and one from Saugus also come within the normal range. Honby, again, has 100 per cent below normal I. Q. In the mean for the grade, New Era has the highest or 107. Saugus, with a mean I. Q. of 90, ranks second, Castaic Union third with 81, Newhall fourth with 75, and Honby, with 64, is fifth or the lowest in the group.

Table LXXXII gives the normal score between the lines for the fourth grade, as is taken from the manual of directions of the National Intelligence Tests. For this grade the norm scores extend from 62 to 70. New Era's one pupil in this grade has a score of 74-76, or above the norm. Newhall has one pupil with a score of 92-94, this being the highest in the group. Newhall and Castaic Union have pupils receiving a score of below 41, the lowest in the group. The mean score of Castaic Union is 42, giving a mental age of 8 years 2 months, the lowest mean in the group of schools. New Era's single pupil made a score of 74 with a mental age of 10 years 5 months, the highest in the group. The mean of Honby,

with but two pupils in the grade, is a score of 73 and a mental age of 9 years 7 months. In this grade both Castaic Union and Newhall are far below the mean score for the grade, while the other three districts scored quite well. Table LXXXIII shows the intelligence quotients of the fourth grade as determined by the National Intelligence Tests. In this, like the preceding table, Newhall has the highest I. Q. in the grade or in the interval of 141-150, and both Castaic Union and Newhall have the lowest, or below 60 I. Q. In this grade Honby has the highest mean I. Q., or 111. Saugus, with but five pupils, ranks second with an I. Q. of 106, and New Era third with 103. In I. Q., the ranking order is a little different than in the total score, as in the latter New Era ranked first. Newhall, with both the greatest extremes, has a mean I. Q. of 90 and Castaic Union, 76, the lowest of the five schools. As is also shown in Table LXXXII Castaic Union and Newhall are the weakest of those in the group.

As taken from the manual of directions, the norm scores of the fifth grade are shown between the lines in Table LXXXIV. This extends from 83 to 88. In this table New Era, with but one pupil in the grade, has the highest score, or in the interval of 131-133, which gives a mental age of 14 years 3 months. This is by far much higher than the means of this grade in the other schools. Honby is the next highest, the mean of the four scores in this school being 87 with a mental age of 11 years 2 months. The mean score of Newhall

is 74 with a mental age of 10 years 1 month. In this grade, Saugus is the lowest with a mean score of 61 and a mental age of 9 years 6 months. Table LXXXV gives New Era's one pupil the highest standing in I. Q., 131. The remaining four schools have I. Q's. below 100, Felton 98, Newhall 97.5, Saugus 78, and Castaic Union 77. In this grade Castaic Union and Saugus Schools have mean I. Q's. much below those for normal children, and Felton, Honby, and Newhall Schools have normal I. Q's. New Era's one pupil has an I. Q. that is much above normal.

Table LXXXVI, again, gives the norms between the lines. For the sixth grade the norm scores extend from 101 to 106. Honby's sixth grade has the highest single score, or in the interval of 143-145, and Newhall the lowest, or below a score of 41. New Era, again with but one pupil in this grade, has a total score of 121 and a mental age of 13 years 4 months, which is higher than the mean of any other district in the group. Next higher in rank is the one pupil of Felton School, with a score of 110-112 and a mental age of 12 years 7 months. Honby, with five pupils in this grade, has a mean score of 103 and a mental age of 12 years 1 month. All three of the remaining schools have mean scores below the norms, Saugus having 92 with a mental age of 11 years 5 months, Newhall 86 with a mental age of 11 years 1 month, and Castaic Union, the lowest of all, 57 and a mental age of 9 years 3 months. From Table LXXXVII New Era's one pupil has an I. Q. of 120, which is much higher than the mean I. Q. of

any of the other schools. Felton's one pupil in this grade ranks next to New Era with an I. Q. of 108. The mean of Honby's five pupils is an I. Q. of 106, and that of the four pupils of Saugus is 104. Newhall's mean, while still of normal I. Q. is lower, or but 94. Castaic Union has a mean I. Q. of 67, which is much below that of normal.

Table LXXXVIII gives the scores and mental ages of the seventh grade pupils according to Haggerty Intelligence Test, Delta II. In this table, Saugus has the highest single score, 127-129, and Castaic Union the lowest, 50-52. Saugus has the highest mean score, 112, which gives a mental age of 14 years 8 months, and Honby has the lowest, 70, with a mental age of 11 years. Newhall's mean score of 100, with a mental age of 13 years 7 months, ranks second from the highest in the group. Next in rank come the remaining two districts in the group, Castaic Union and New Era, which tie with a score of 87 and a mental age of 12 years 5 months. Table LXXXIX gives the I. Q.'s. of the seventh grade pupils in the five schools as determined by the Haggerty Intelligence Test, Delta II. The highest single I. Q. is in the interval of 141-150, which is obtained by a Saugus pupil. Both Castaic Union and Newhall Schools have pupils with I. Q.'s. in the interval of 61 to 70. The highest mean I. Q., 118, is in the Saugus School. Newhall ranks second with a mean I. Q. of 100. Castaic Union is third with a mean I. Q. of 94. The remaining two districts, Honby with two pupils and New Era with but one, have mean I. Q.'s. of 81 and 88 respectively, both of which are below normal.

Table XC gives the scores and mental ages of the eighth grade pupils as determined by Terman's Group Test of Mental Ability, Form A. In this test the norm score, according to the manual of directions, is a score of 89, but the interval of 91-100 is chosen in this study. The mean score of 101 with a mental age of 14 years 4 months is obtained by the Saugus School, the highest in the group. Newhall ranks second with a mean score of 84, which gives a mental age of 13 years 8 months. Castaic Union and New Era tie for the next place with a mean score of 68 and a mental age of 12 years 11 months. Honby's score, with but one pupil, is 63, giving a mental age of 12 years 9 months. From a study of Table XCI, it is seen New Era's one pupil with an I. Q. of 80 is the only mean I. Q. falling below normal. Saugus has a mean I. Q. of 104, which is the highest obtained in the five schools. Newhall, with a mean I. Q. of 97, ranks second from the highest. Castaic's mean is 91 and the one pupil in Honby has an I. Q. of 90.

Table XCII gives the mean I. Q. of each grade in the six districts. From this table Castaic Union seems to have by far the weakest group of children mentally in its school and New Era and Saugus are approximately equal in having the best groups mentally. Castaic Union has but the seventh and eighth grades obtaining normal I. Q.'s., the other grades being below normal. From a study of this table Castaic Union then would be expected to achieve the poorest results and New Era and Saugus the best. The third grade in Newhall with a

TABLE XCII
TABLE GIVING THE MEAN INTELLIGENCE QUOTIENTS
OF ALL GRADES OF THE SIX DISTRICTS

School	Grade					
	3	4	5	6	7	8
Castaic Union	81	76	77	67	94	91
Felton ¹	--	--	98	108	--	--
Honby	64	111	105	106	81	90
New Era	107	103	131	120	88	80
Newhall	75	90	97.5	94	100	97
Saugus	90	106	78	104	118	104

¹Felton has pupils only in the fifth and sixth grades. This table should be read as follows: Castaic Union School has a mean I. Q. of 81 in the third grade, 76 in the fourth grade, 77 in the fifth grade, 67 in the sixth grade, 94 in the seventh grade, 91 in the eighth grade, etc.

mean I. Q. of 75 is that school's weakest grade mentally. The remaining grades in Newhall range in mean I. Q. from 90 to 100, all being in the lower level of normal I. Q's. Honby's third grade has the lowest mean I. Q., 64, of any of the schools. With the exception of Honby's seventh grade with an I. Q. of 81, this school has normal I. Q's. in all the grades.

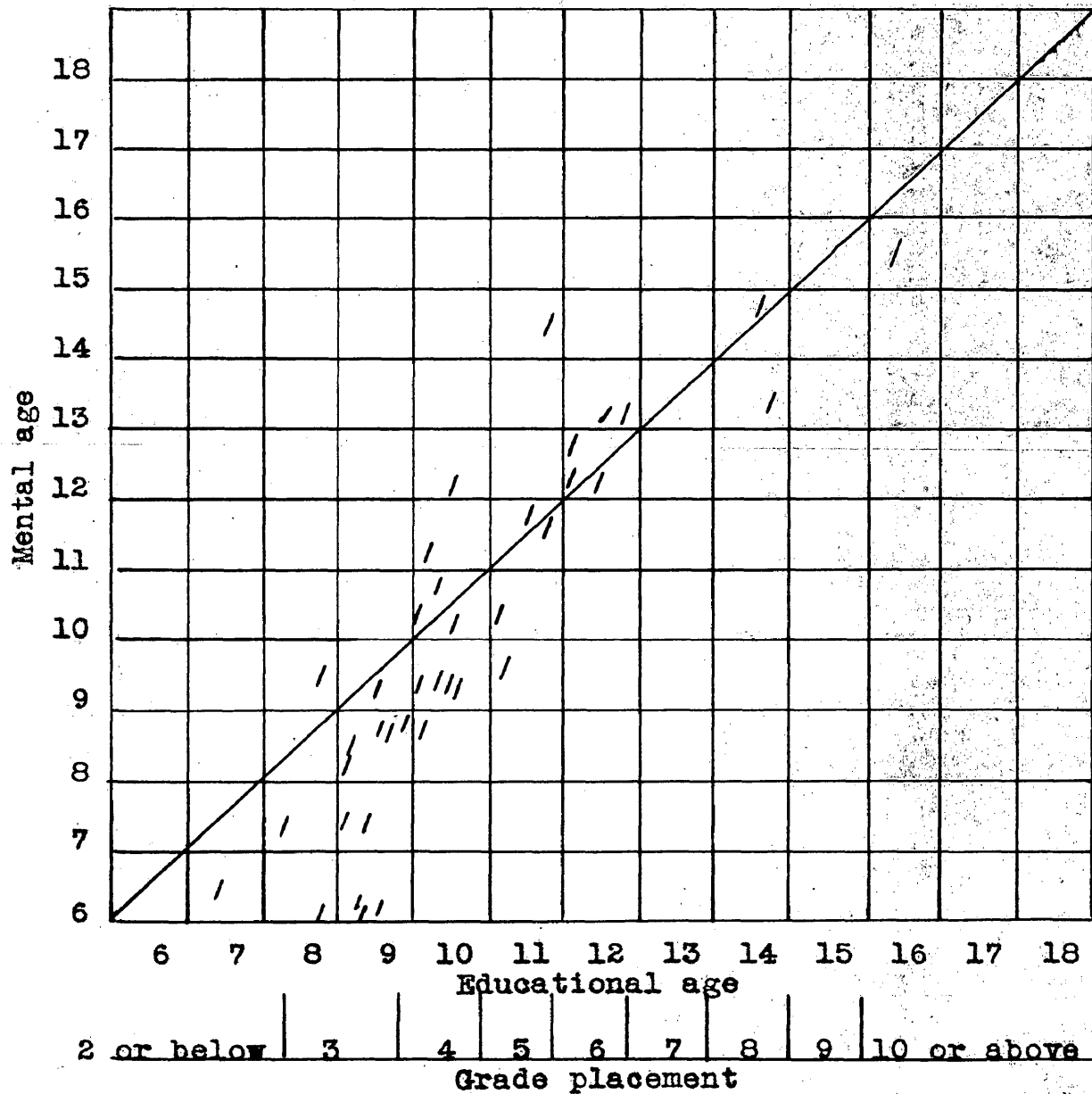
From a study of Charts VIII to XIII one has a comparison of mental ability and achievement in the six schools. While Castaic Union from Table XCII has the lowest I. Q. means, Chart VIII gives this school as working more nearly up to their capacity than any of the other schools with the exception of Felton School with its three pupils as is shown in Chart IX. From Chart XI New Era School is doing the poorest work in comparison to its mental ability of all the schools. Newhall School, Chart XII, while not working up to its capacity, is doing better than some of the others. Saugus is also doing much poorer work than the mean I. Q. of the various grades in the school show it should be doing. Honby School, while not as high in achievement as Castaic Union School, is much better than Saugus, New Era, and Newhall.

From the above it is shown the schools with the highest mean I. Q's. are, generally speaking, doing less in proportion to their ability than the schools with the lowest mean I. Q.

Summary and conclusion. The purpose of the chapter was to make a study of the mental ability of the pupils in these schools to secure information as to what might be expected of

CHART VIII

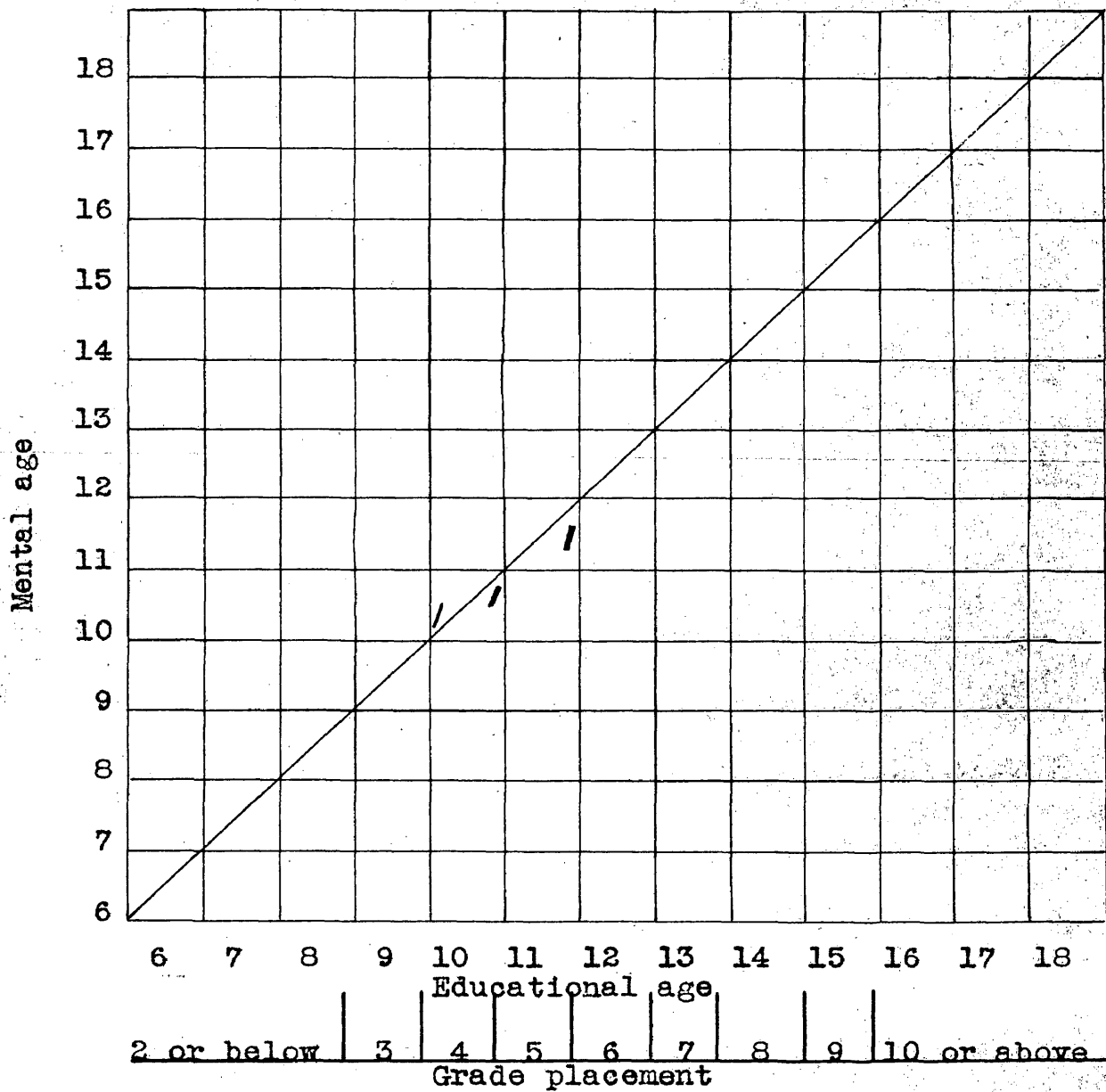
CHART SHOWING THE COMPARISON OF THE MENTAL AGES
AND THE EDUCATIONAL AGES OF THE PUPILS OF CAS-
TAIC SCHOOL



Note: This chart is made from results obtained from tests given grades four to eight inclusive. Each number "1" indicates the placement of one pupil.

CHART IX

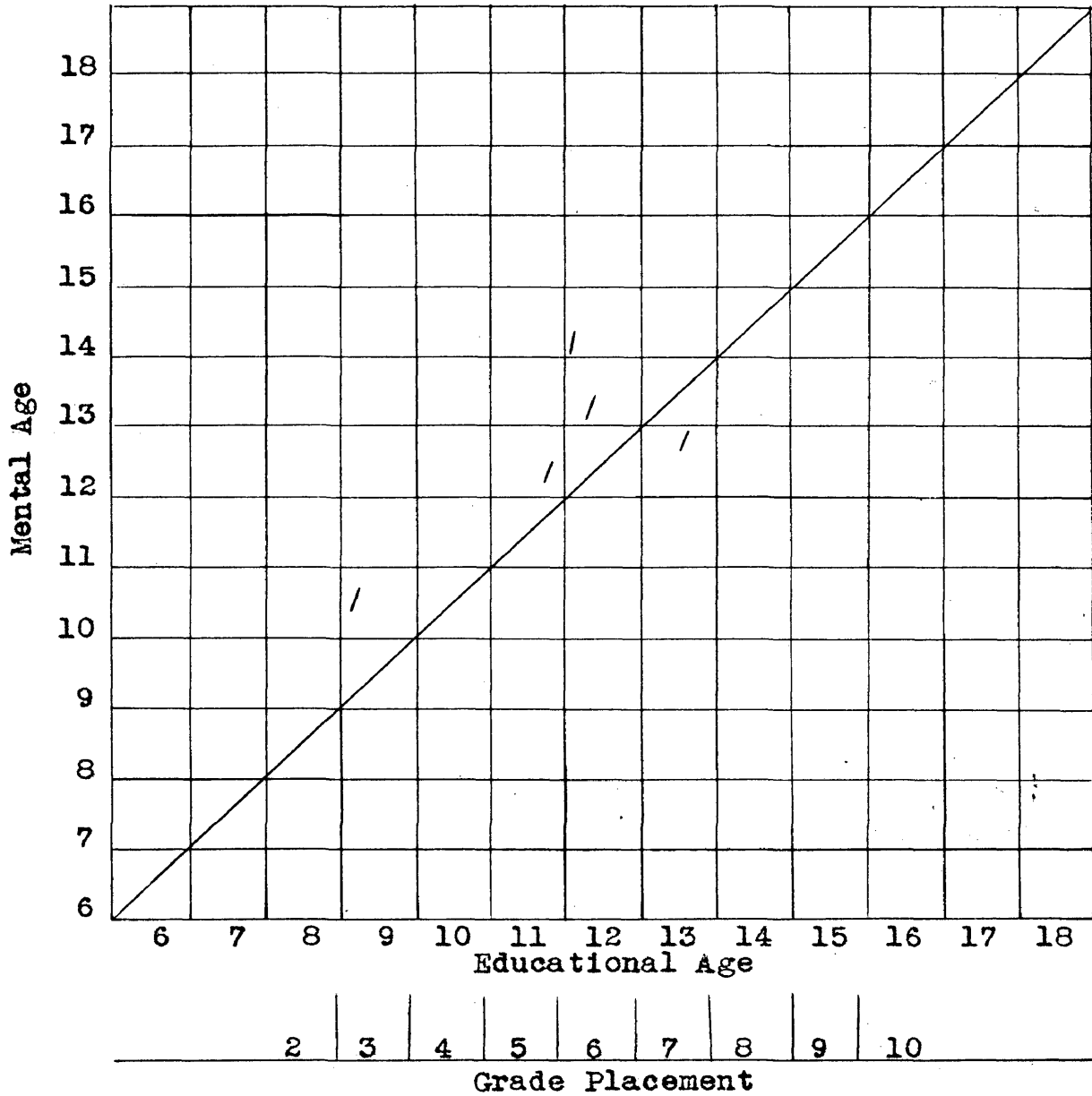
CHART SHOWING THE COMPARISON OF THE MENTAL AGES AND
THE EDUCATIONAL AGES OF THE PUPILS OF FELTON SCHOOL



Note: This chart is made from the results obtained from tests given grades fifth and sixth. Each figure "1" represents the placement of one pupil.

CHART XI

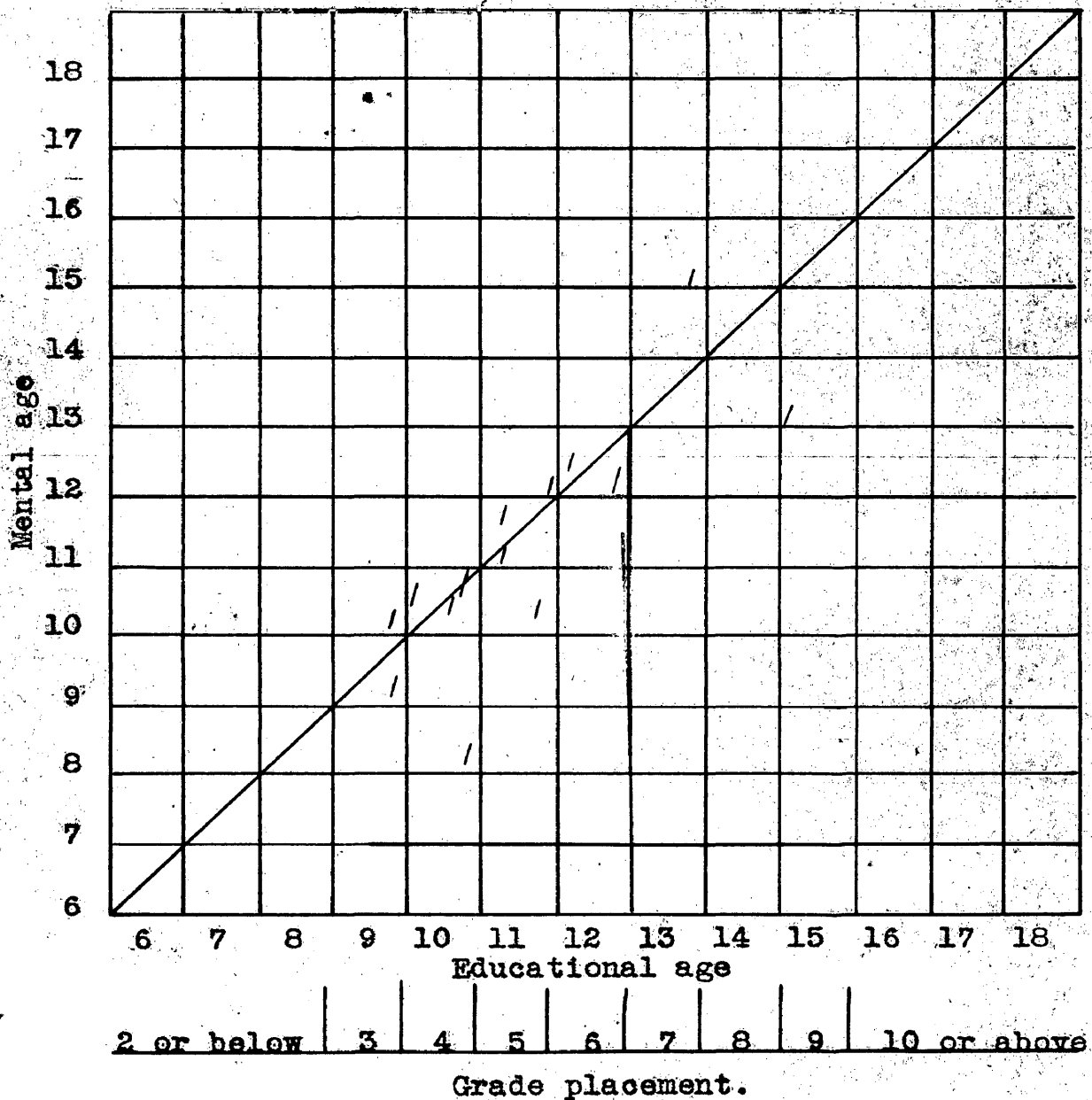
CHART SHOWING THE COMPARISON OF THE MENTAL AGES AND EDUCATIONAL AGES OF THE PUPILS OF NEW ERA SCHOOL



Note: This chart is made from the results obtained from tests given grades four to eight inclusive. Each number "1" indicates the placement of one pupil.

CHART X

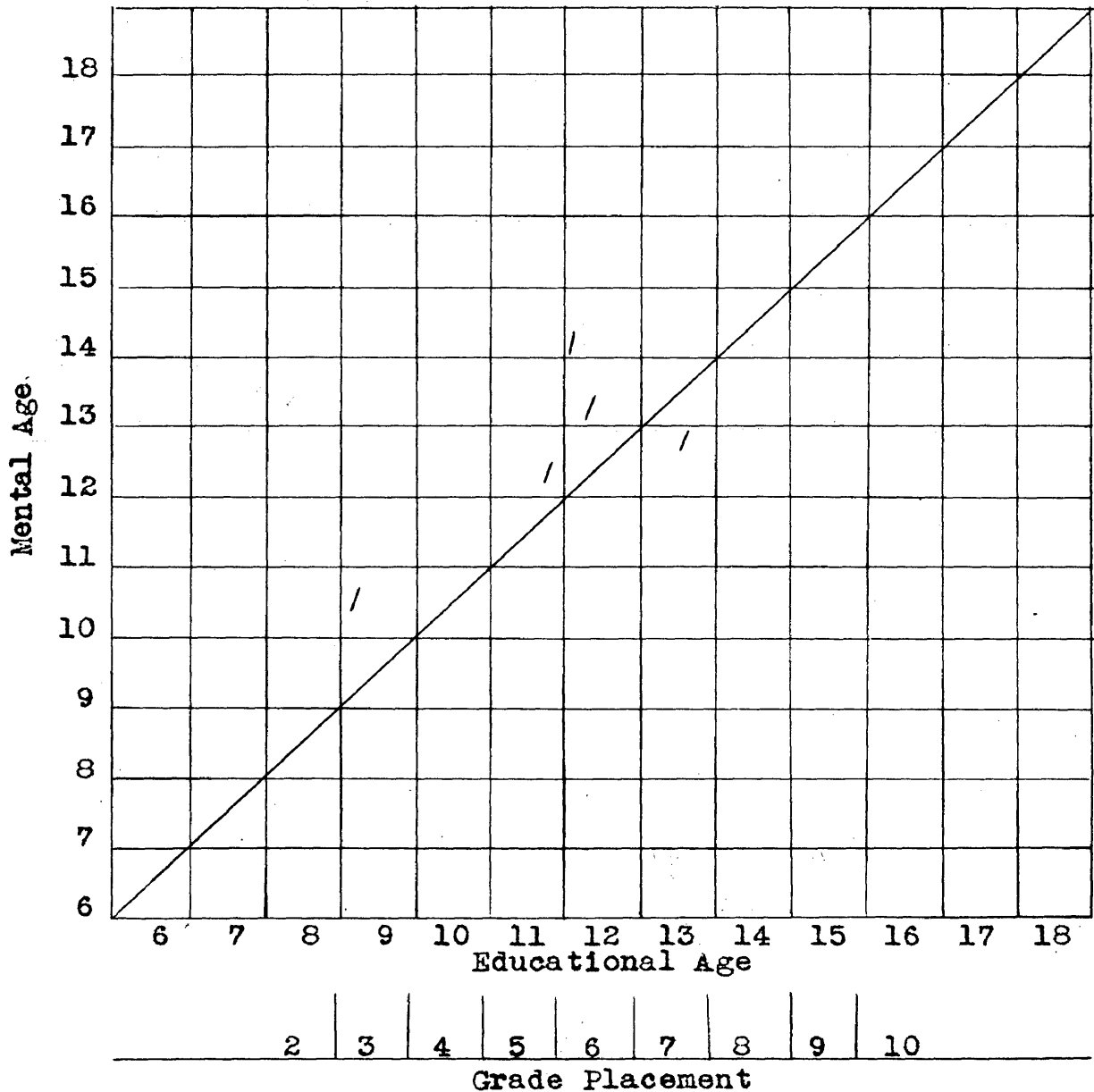
CHART SHOWING THE COMPARISON OF THE MENTAL AGES AND EDUCATIONAL AGES OF THE PUPILS OF HONBY SCHOOL



Note: This chart is made from the results obtained from tests given grades four to eight inclusive. Each figure "1" represents the placement of one pupil.

CHART XI

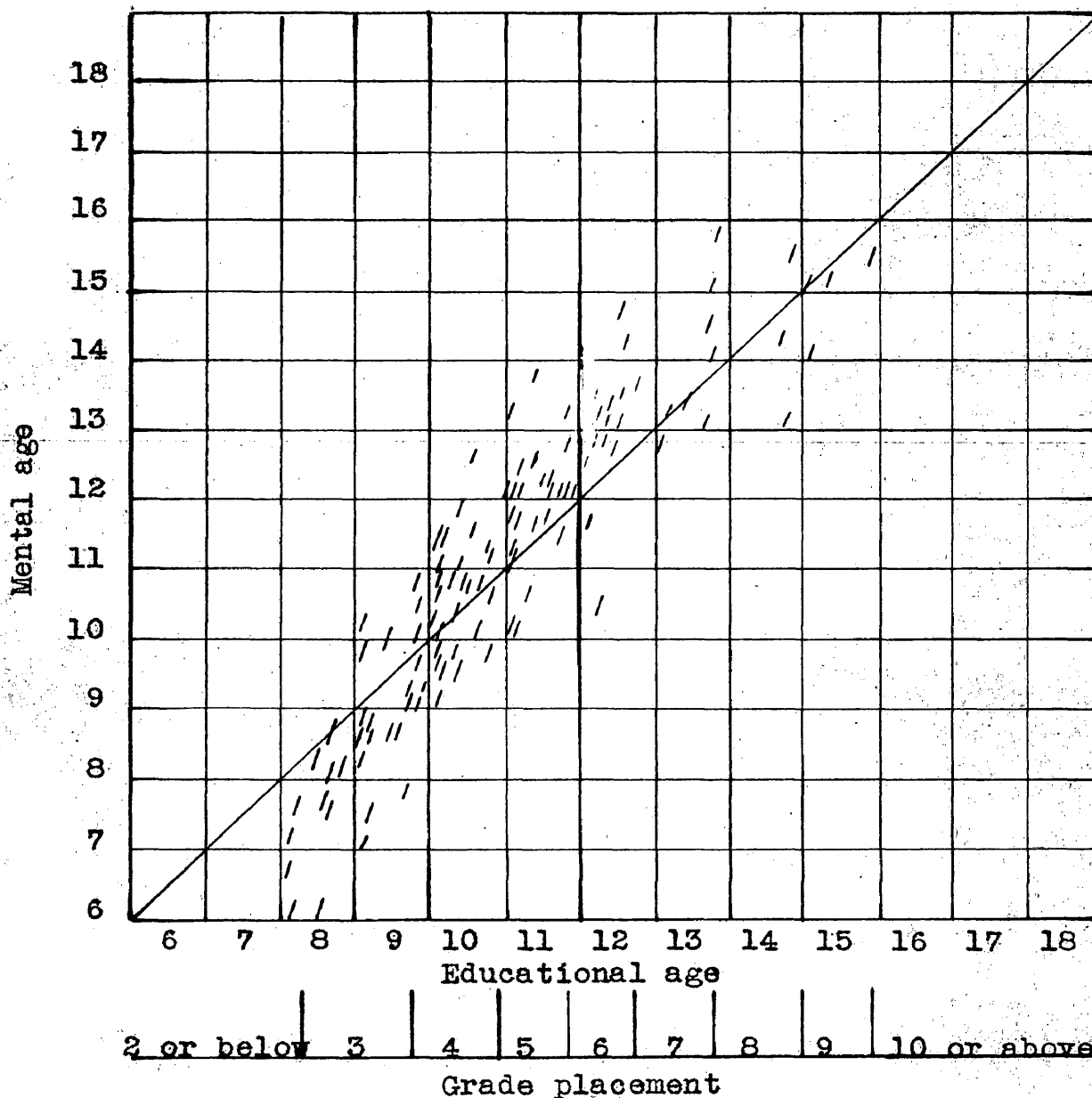
CHART SHOWING THE COMPARISON OF THE MENTAL AGES AND
EDUCATIONAL AGES OF THE PUPILS OF NEW ERA SCHOOL



Note: This chart is made from the results obtained from tests given grades four to eight inclusive. Each number "1" indicates the placement of one pupil.

CHART XII

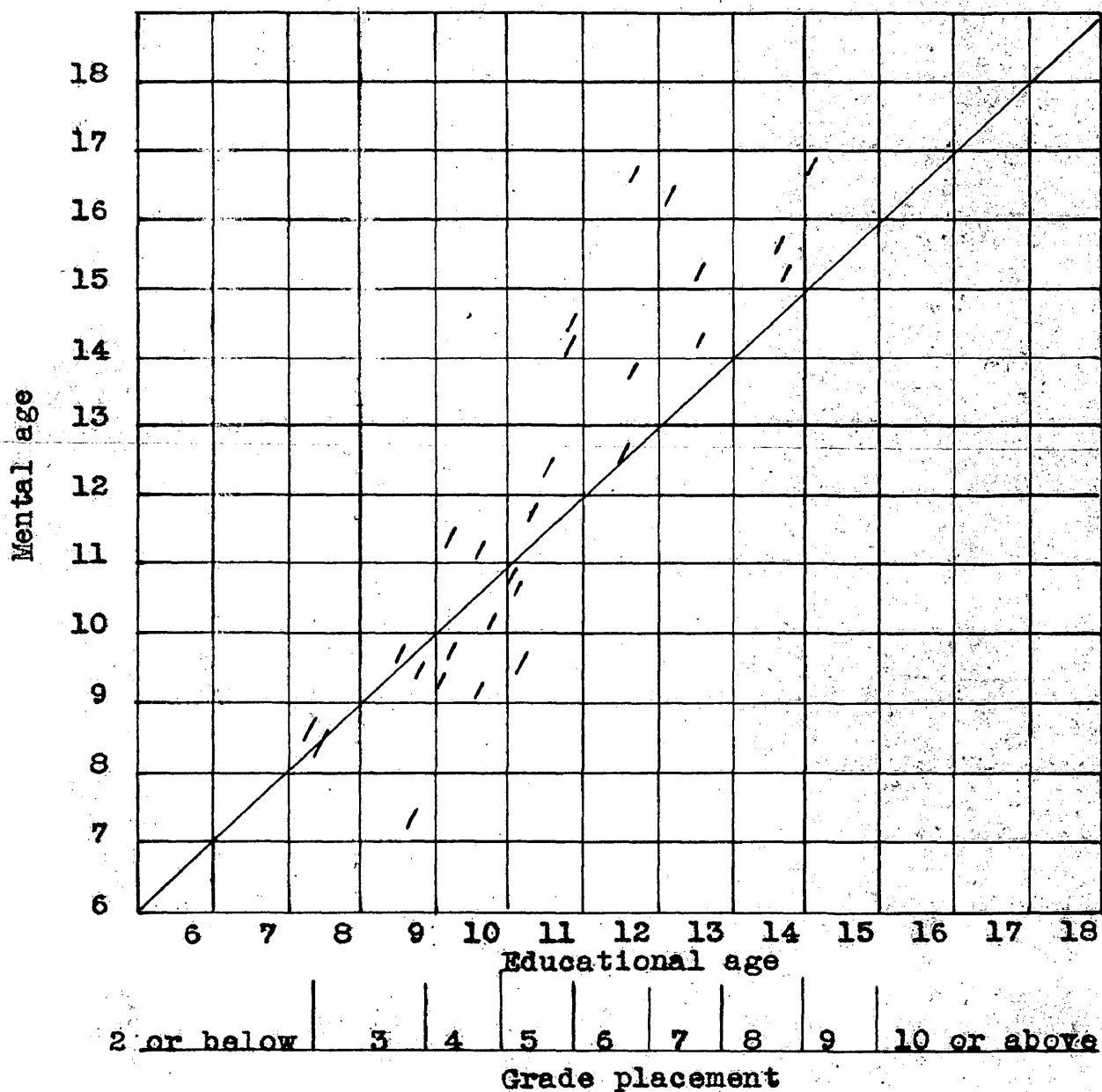
CHART SHOWING THE COMPARISON OF THE MENTAL AGES AND THE EDUCATIONAL AGES OF PUPILS OF THE NEWHALL SCHOOL



Note: This chart is made from results obtained from tests given grades four to eight inclusive. Each figure "1" indicates the placement of one pupil.

CHART XIII

CHART SHOWING THE COMPARISON OF THE MENTAL AGES
AND THE EDUCATIONAL AGES OF THE PUPILS OF SAU-
GUS SCHOOL



Note: This chart is made from results obtained from tests given grades four to eight inclusive.
Each number "1" indicates the placement of one pupil.

these children in the matter of achievement in their school work. From these data one can determine to some extent if the curriculum is satisfactory.

The word intelligence has been used to express various meanings. The meaning given it in relation to intelligence testing is one of prediction, or to enable school authorities to predict a child's ability to achieve results in school studies.

The words intelligence quotient or I. Q. mean the ratio between mental age and chronological age of an individual expressed decimally.

One important use of intelligence tests is to determine the needs of individual pupils through classification. A second use made of them is that it is necessary to have them given in schools when a comprehensive survey is being made of them to determine if the pupils are working up to their capacity, which is the use being made of such tests given in this study.

The intelligence tests used in this survey are Haggerty, Delta I, in the third grade, National Intelligence Tests, Scale A, in the fourth, fifth, and sixth grades, Haggerty Intelligence Tests, Delta II, in the seventh grade, and Terman Group Test of Mental Ability in the eighth grade.

Classification into that of normal mental ability, above normal mental ability, and below normal mental ability, the approximate classification used by Charles Russell in his Standard Tests, as is shown in Table LXXIX, was used.

Tabulation results are shown in Tables LXXX to XCI inclusive. Table XCII gives the mean I. Q's. of each grade in the various districts in the survey. From this table Castaic Union School has the lowest means in the various grades and New Era and Saugus have the highest. With the exception of the third grade, Newhall's mean I. Q's. in the grades have a smaller range than any of the other schools. Felton School is not considered as it has but fifth and sixth grade pupils. As a whole, the range in the mean I. Q's. in the various grades is not greater than might be expected. Were there larger numbers of pupils in the various grades, the range of these means would be less. The range in the Newhall School means, and to some extent in Castaic Union and Saugus, the schools with the largest enrollments, substantiate this.

In relationship of educational ages to mental ages from Charts VIII to XIII inclusive, Castaic Union School is working more nearly up to its capacity than any of the other schools in the survey with the exception of the three pupils enrolled in Felton School. New Era School is doing the poorest work of all the districts in the survey according to its ability. Generally speaking, the schools with the highest mean I. Q's. are doing less in proportion to their ability than the schools with the lowest mean I. Q's.

CHAPTER IX

CURRICULA AND TIME ALLOTMENT

Aim of education. Strayer and Englehardt in their The Classroom Teacher have the following to say concerning this topic:

The schools of a democracy are organized to provide an opportunity for individual growth and development to the end that each may live a happy and productive life. They must concern themselves, as well, with the development of ideals and purposes which will enable the individual to find his greatest good in service for the group. We shall always value the individual in a democratic society. He will always be worth our best effort in order that he may realize in his life the most that is possible. We must, more and more, however, seek to establish the idea of responsibility and to develop the practice of cooperative endeavor for all who are to be thought of as worthy citizens of our society.

We shall always find it necessary to teach the "three R's" and to give information which is provided in science, history and the fine arts. As we come to recognize more clearly the function of education in a democracy, we shall stress more and more that education which will explain the meaning and purposes of a democratic society and which will give larger opportunity for participation in the duties of citizenship, even while boys and girls are still enrolled in our schools.¹

According to Inglis in his Principles of Secondary Education, there are three fundamental aims of secondary education.

Three important groups of activities require the participation of the individual and establish three fundamental aims for secondary education, as for all education, in America..... Thus the three fundamental aims of secondary education are:

(1) The preparation of the individual as a prospective citizen and cooperating member of society -- the Social-Civic Aim.

(2) The preparation of the individual as a prospective worker and producer -- the Economic-Vocational Aim.

(3) The preparation of the individual for those activ-

¹George D. Strayer and N. L. Englehardt, The Classroom Teacher, American Book Company, New York, 1921, pp. 11-12.

ities, which, while primarily involving individual action, the utilization of leisure, and the development of personality, are of greatest importance to society -- the Individualistic-Vocational Aim.¹

To develop the Social-Civic Aim is an important purpose of the informal school, as this aim receives its greatest stress in this type of school. In establishing the Wiggins Trade School, Los Angeles City is putting into practice the second aim, the Economic-Vocational Aim, much more than has been done through the older traditional type of schools.

Purpose of the chapter. The purpose of the chapter is to state the aim of education in general and not that of any particular type of school. In this chapter the statute subjects are given and the proportion of the school day certain ones of them must be taught. A short discussion of the course of study of Los Angeles County is given. A little comparative data are necessary to determine if the schools in the survey are functioning properly in accordance with recommendations of the State Curriculum Commission and the Los Angeles County Board of Education concerning time allotments in the various elementary school subjects. An attempt is made to do this. Graduation requirements and what health work should be done in connection with the schools and what is actually being done in this important part of school work also are told in this chapter.

Statute subjects and their time allotment. On prescribed courses for the elementary schools the State School Code

¹Alexander Inglis, Principles of Secondary Education, Houghton Mifflin Co., New York, 1918, pp. 367-368.

gives the following:

3.761. The course of study in the elementary schools of each city, county, and city and county, shall include instruction in the following prescribed branches in the several grades in which each may be required in the course of study adopted in pursuance of this Article, viz: (1) reading, (2) writing, (3) spelling, (4) language study, (5) arithmetic, (6) geography, (7) history of the United States and of California, (8) civics including a study of the Constitution of the United States, (9) music, (10) art, (11) training for healthful living, (12) morals and manners, and such other studies not to exceed three as may be prescribed by the board of education of the city, county, or city and county.

3.762. A minimum of fifty per cent of each school week must be devoted to reading, writing, language study, spelling, and arithmetic in grades one to six inclusive, and a minimum of six hundred minutes of each school week must be devoted to such subjects in grades seven and eight.¹

The Los Angeles County course of study. The Los Angeles County course of study is now divided into the Teachers' Guide, Primary Unit, and Teachers' Guide, Intermediate Unit, the former being for grades one to three and the latter for grades four to six. Some mimeographed material has been sent out by the county office during the past year concerning the course of study for the seventh and eighth grades, which is not yet ready for distribution to the schools. The Primary Unit has been in the schools for two years and the Intermediate Unit for but one year. Both units are largely compiled for use in the informal school.

While the county superintendent of schools wishes much of the school work in the Los Angeles County Schools to be of an informal nature, he has repeatedly stated that teachers introduce it slowly enough in their schools to have the

¹School Code of the State of Calif., 1931, pp. 167-168.

support of their respective communities as a whole. He and his rural supervisors also state for eighth grade teachers to bear in mind their pupils will be in high school the following year and to give them work that will benefit them in their high school work.

Table XCIII gives the suggested time allotment in the first six grades as given in the Primary and Intermediate Units as adopted by the Los Angeles County Board of Education. Under this time allotment schedule arithmetic is given in the "skills and drills" period, in which also are included spelling, writing, and remedial work in English. In the fourth and sixth grades this is 250 minutes per week and in the fifth grade 300 minutes. In the state curriculum study arithmetic alone is given 215 minutes in the fourth grade and 220 in the fifth and sixth grades. In the fourth grade the curriculum study recommends 85 minutes for spelling, 80 minutes for writing, and 215 minutes for arithmetic, or 380 minutes for the three subjects, while the Los Angeles County course of study suggests 250 minutes for the three subjects and remedial work in English combined.

In music the state curriculum study suggests 75 minutes weekly in the fourth grade, while the Los Angeles County course of study suggests 150 minutes or twice the time allotment suggested by the state commission.

In comparing Table XCIX giving the suggested time allotments by the state curriculum study and Table XCIII giving the same as suggested by the Los Angeles County Course of study, there is practically no uniformity in their sug-

TABLE XCIII
TABLE GIVING SUGGESTED TIME ALLOTMENTS FOR GRADES
ONE TO SIX IN LOS ANGELES COUNTY

Subject	Grade					
	1	2	3	4	5	6
Workshop period	300	300				
Recess	100	100	150	150	150	150
Lang., social studies, and Health Education	250					
Music, rhythm, and literature	250	300	300			
Language and reading	300			150	150 ¹	150 ¹
Lang., spelling, writing		150	150			
Health Ed. or Phys. Activities		100	100	100	100	100
Reading		250	250			
Soc. studies, lang., and art			300			
Drill period in numbers			100			
Social studies work period,				300	300 ²	300 ²
Skills and drills, reading, lang. and penmanship				250		
Reading				300		
Music				150	150	150
Skills and drills period ³				250	300	250
Arts, crafts, and lang. activities					250	250
Reading and music					300	300
Total	1200	1200	1350	1650	1650	1650

TABLE XCIII

TABLE GIVING SUGGESTED TIME ALLOTMENTS FOR GRADES

ONE TO SIX IN LOS ANGELES COUNTY

¹Language only.

²Social studies and reading.

³Arithmetic is included in this period.

This table should be read as follows: The Los Angeles County course of study suggests 300 minutes per week be devoted to workshop in each the first and second grades, etc.

gestions. Since the Los Angeles County course of study makes so many combinations, which is typical of the informal school program, it is difficult to make comparisons with the state curriculum study suggestions in time allotments which has every subject's time allotted separately.

In following the Los Angeles County course of study, teachers are given a maximum amount of freedom concerning it, and may adapt it to suit the conditions in their respective schools.

Time allotments of subjects of schools within the group.

In making tables to show the time allotment among elementary school subjects, no table was made for the Felton School since that school has but the second, fifth and sixth grades. To make a table for Felton would not be advisable, as there would be little means of comparison with the suggested time allotment as compiled by the California Curriculum Commission.

In time allotment of subjects in the five schools, Tables XCIV to XCVIII inclusive, little is done in these schools with science and practical arts as separate subjects. More work that might be placed under each subject is given in these schools, but it is designated under miscellaneous. The Newhall School, Table XCVIII, is the only one in the group that has time allotment under practical arts, which is the time given to sewing in the seventh and eighth grades.

The State Curriculum Commission has no time allotment in arithmetic, Table XCIX, in the first grade. Castaic Union, Table XCIV, has an allotment of 150 minutes, Honby, Table XCV, 75 minutes, New Era, Table XCVI, 175 minutes, and Newhall,

TABLE XCIV
THE SCHEDULE OF WEEKLY TIME ALLOTMENTS OF THE
CASTAIC UNION SCHOOL AMONG ELEMENTARY SCHOOL
SUBJECTS

Subjects	Grade								Total
	1	2	3	4	5	6	7	8	
Arithmetic	150	150	150	225	225	225	300	300	1725
Lang. study	150	135	210	225	225	225	250	250	1670
Reading	225	225	225	135	135	135	300	300	1680
Spelling		40	60	45	75	75	75	75	445
Writing	60	60	60	90	75	75	30	30	480
History					150	150	120	120	540
Civics							60	60	120
Geography				90	150	150	90	90	570
Science									
Art	90	90	90	120	120	120	50	50	730
Health. Liv.	100	100	100	100	100	100	150	150	900
Prac. arts									
Music	90	90	150	120	120	120	40	40	770
Opening Ex.	30	30	30	30	30	30	30	30	240
Miscellaneous	255	230	225	220	195	195	105	105	1530
Recess	100	100	100	100	100	100	100	100	800
Total	1250	1250	1400	1500	1700	1700	1700	1700	12200

This table should be read as follows: in Castaic Union School 150 minutes per week is devoted to arithmetic in the first grade, etc.

TABLE XCV

THE SCHEDULE OF WEEKLY TIME ALLOTMENTS OF THE HON-
BY SCHOOL AMONG THE ELEMENTARY SCHOOL SUBJECTS

Subjects	Grade								Total
	1	2	3	4	5	6	7	8	
Arithmetic	75	75	75	225	225	225	225	225	1350
Lang. Study	150	150	150	200	200	200	200	200	1450
Reading	300	300	300	200	200	200	200	200	1900
Spelling	100	100	100	200	200	200	200	200	1300
Writing	100	100	100	100	100	100	100	100	800
History				120	120	120	120	120	600
Civics								50	50
Geography				130	130	130	130	80	600
Science									
Art	125	125	125	75	75	75	75	75	750
Health. Liv.	100	100	100	100	100	100	100	100	800
Prac. Arts									
Music	75	75	75	75	75	75	75	75	600
Opening Ex.	50	50	50	50	50	50	50	50	400
Miscell.	25	25	25	25	25	25	25	25	200
Recess	100	100	100	150	150	150	150	150	1050
Total	1200	1200	1200	1650	1650	1650	1650	1650	11850

This table should be read as follows: In Honby School 75 minutes per week is devoted to arithmetic in the first grade, etc.

TABLE XCVI
THE SCHEDULE OF WEEKLY TIME ALLOTMENTS OF THE NEW
ERA SCHOOL AMONG THE ELEMENTARY SCHOOL SUBJECTS

Subjects	Grade								Total	
	1	2	3	4	5	6	7	8		
Arithmetic	175	175	175	225	225	225	225	225	1650	
Lang. Study	100	100	100	200	200	200	200	200	1300	
Reading	250	250	250	200	200	200	200	200	1750	
Spelling	75	75	75	75	75	75	75	75	600	
Writing	175	175	175	75	75	75	75	75	900	
History					150	150	150	120	570	
Civics								30	30	
Geography				200	150	150	150	150	800	
Science										
Art	150	150	150	150	150	150	150	150	1200	
Health. liv.	100	100	100	100	100	100	100	100	800	
Prac. arts										
Music				Included in opening exercises						
Opening ex.	75	75	75	75	75	75	75	75	600	
Miscellaneous										
Recess	100	100	100	150	200	200	200	200	1250	
Total	1200	1200	1200	1450	1600	1600	1600	1600	11450	

This table should be read as follows: in New Era School 175 minutes per week are devoted to arithmetic in the first grade, etc.

TABLE XCVII
THE SCHEDULE OF WEEKLY TIME ALLOTMENTS OF THE NEWHALL
SCHOOL AMONG ELEMENTARY SCHOOL SUBJECTS

Subjects	Grade								Total
	1	2	3	4	5	6	7	8	
Arithmetic	25	70	125	225	225	250	250	250	1420
Lang. Study	100	100	125	150	150	120	200	200	1145
Reading	450	405	375	300	150	200	120	120	2120
Spelling		130	125	150	100	150	100	100	855
Writing	75	75	75	100	75	100	75	75	650
History					150	90	150	150	540
Civics								50	50
Geography				225	150	100	125	125	725
Science						40			40
Art	100	100	120	75	150	60	50	50	705
Health. Liv.	100	100	100	100	100	100	100	100	800
Prac. Arts							80	80	160
Music	100	100	100	100	100	120	90	90	800
Opening Ex.	50	50	75	35	25	25	25	25	310
Miscell.	50	20	30	90	175	195	185	135	980
Recess	50	50	100	100	100	100	100	100	700
Total	1200	1200	1350	1650	1650	1650	1650	1650	12000

This table should be read as follows: in Newhall School 25 minutes per week are devoted to arithmetic in the first grade, etc.

TABLE XCVIII

THE SCHEDULE OF WEEKLY TIME ALLOTMENTS OF THE SAUGUS SCHOOL AMONG THE ELEMENTARY SCHOOL SUBJECTS

Subjects	Grade								Total
	1	2	3	4	5	6	7	8	
Arithmetic		60	90	220	225	225	225	225	1270
Lang. Study	200	140	200	300	150	150	150	150	1440
Reading	200	200	200	180	150	150	150	150	1380
Spelling					100	100	100	100	400
Writing	200	200	200	200	100	100	95	95	1150
History					150	150	200	200	700
Civics								60	60
Geography					120	120	120	120	480
Science									
Art					90	90	90	90	360
Health. Liv.	100	100	100	100	100	100	100	100	800
Prac. Arts									
Music	200	200	200	200	120	120	120	120	1280
Opening Ex.	200	200	260	200	50	50	50	50	1060
Miscellaneous					195	195	170	110	670
Recess	100	100	100	100	100	100	100	100	800
Total	1200	1200	1350	1500	1650	1650	1650	1650	11850

This table should be read as follows: in Saugus School 60 minutes per week are devoted to arithmetic in the second grade, etc.

In the first four grades the school is an entirely informal one. This is the reason for so much time being given to certain subjects in the schedule as above.

TABLE XCIX
SUGGESTED SCHEDULE OF WEEKLY TIME ALLOTMENTS DIS-
TRIBUTED AMONG ELEMENTARY SCHOOL SUBJECTS AS REOR-
GANIZED TO CONFORM WITH THE 1925 LAW¹

Subjects	Grade								Total
	1	2	3	4	5	6	7	8	
Arithmetic		140	215	215	220	220	220	220	1450
Lang. Study	120	125	165	170	185	190	205	215	1375
Reading	435	395	325	245	190	160	145	140	2035
Spelling	30	80	85	85	90	80	75	75	600
Writing	70	70	75	80	75	70	60	60	560
History					90	110	150	170	640
Civics	30	30	45	75	20	20	30	35	165
Geography			60	130	150	150	120	75	685
Science	25	25	25	25	20	20	20	25	185
Art	90	90	90	90	80	75	75	75	665
Health. Liv.	120	120	120	120	125	125	135	135	1000
Prac. Arts	25	25	25	30	45	60	85	100	395
Music	75	75	75	75	75	75	70	70	590
Opening Ex.	20	20	20	20	20	20	15	15	150
Miscellaneous					50	75	80	90	295
Recess	100	100	110	110	110	110	100	100	840
Total	1140	1295	1435	1470	1545	1560	1585	1600	11630

¹From the California Curriculum Study.

This table should be read as follows: 140 minutes a week should be spent on arithmetic in the second grade, etc.

Table XCVII, 25 minutes in this subject. Saugus, Table XCVIII, is the only one of the five districts that does not allot arithmetic a time in the first grade. The time allotments in the second and third grades in arithmetic in all five schools conform quite closely to the Study Curriculum's suggestion. In the seventh and eighth grades Castaic Union's allotment in this subject is 300 minutes, while the Commission recommends but 220 minutes. Of the total time allotted to arithmetic, Castaic Union with 1725 minutes and Honby with 1650 minutes both exceed the Commission's allotment of 1450 minutes. Newhall, with 1420 minutes, is the nearest in total time. Honby has 100 minutes less and Saugus 180 minutes less than the suggested allotment in arithmetic.

In language study in the first grades, Castaic Union, Honby, New Era, and Newhall have about the same time allotment as that recommended, or 120 minutes. Saugus has 200 minutes in this allotment, but this school is organized entirely on the informal school plan in the first four grades, and consequently part of this 200 minutes, the writing allotment of 200 minutes, and the music allotment of 200 minutes are devoted to language and art. The most of the upper grades in the various schools conform quite closely to the time allotments recommended for those grades in language. In total time in this subject all the schools have about the time allotment suggested.

In reading Newhall School has an allotment of 450 minutes per week in the first grade, while the Commission's

recommendation is 435. The other districts have little more than half of the suggested allotment. Since Newhall School has but its first grade in the one room, and the other districts from three to eight grades in each room, it may be lack of time of the teacher that prohibits more nearly meeting the suggested allotment by the other schools. In Castaic Union the seventh and eighth grade allotment is 300 minutes in each, while the curriculum study suggests but 145 minutes in the seventh grade and 140 minutes in the eighth grade. Newhall has but 120 minutes allotted to reading in each of these two grades. In total time allotment the Commission places it at 2035 minutes weekly. Newhall is the only school that exceeds this amount by having 2120 minutes allotted to this subject.

Spelling should be given an allotment of 30 minutes per week in the first grade according to the Commission's suggestion. Castaic Union, Newhall, and Saugus make no allotment to spelling in the first grade. The upper grade allotment in this subject is practically equal to that suggested by the Commission. The total time allotted to spelling by the Commission is 600 minutes weekly. Castaic Union School has an allotment of 445 minutes weekly and Honby has 1300 minutes allotted, or more than double the time suggested.

The Commission suggests a time allotment of 90 minutes for history in the fifth grade, which is the earliest grade giving history a place in the curriculum. Honby allots 120 minutes to this subject in the fourth grade. The total time

the Commission allots to history is 640 minutes. Saugus is the only school in the group that exceeds this allotment by having 700 minutes devoted to this subject. Newhall and Castaic Union each have 540 minutes allotted, which is the smallest amount of time given this subject by this group of schools.

In civics, the Commission suggests it be taught in every grade, varying from 20 minutes, the smallest amount of time, in the fifth and sixth grades to 75 minutes in the fourth grade. Civics in the five schools given in the time allotment is confined to the United States Constitution study in the eighth grade in all but Castaic Union, where it is taught in the seventh and eighth grades. Much civics is taught in all the schools incidentally with reading and other subjects, but no special time allotment is given it as such. The Commission suggests 165 minutes weekly. Castaic Union with 120 minutes comes nearest of any in meeting this allotment.

Geography is taught as a subject beginning with the fourth grade in all schools except Saugus, where it doesn't begin until the fifth grade. The Commission suggests it begin in the fourth grade. The time allotments in the various schools vary from a total of 480 minutes in the Saugus School to 800 minutes in New Era. Since Saugus doesn't begin geography until the fifth grade, this decreases the total time allotment of the subject for this school. The Commission suggests 685 minutes as a total. Newhall with 725 minutes allotted

to this subject conforms quite closely to the suggested time.

Science is given an allotment of time in every grade by the Commission or a total of 185 minutes. Newhall's sixth grade is the only school in the group giving a separate allotment to this subject. This is 40 minutes per week. All the other schools and the other grades in Newhall School teach science incidentally, as through the time allotted to reading.

Art is given from 75 minutes in the upper grades to 90 minutes in the lower grades by the Commission, or a total of 665 minutes. Saugus allots art separately in the four upper grades only, which decreases the total more than it would be if the time devoted to art in the lower grades was allotted to this subject. The total time allotted art in Saugus is 360 minutes. Castaic Union, Honby, and Newhall, all have allotments of over 700 minutes in this subject and New Era has 1200 minutes, or nearly twice the allotment suggested by the Commission.

The Commission suggests 1000 minutes be devoted to healthful living. All five districts allot 800 minutes to this subject. These districts allot their twenty minutes daily period as required by law for physical education under this subject.

Practical arts is given a place in each grade by the Commission, varying from 25 minutes in the lower grades to 100 minutes in the eighth grade. Newhall is the only district designating time under this subject. This 160 minutes in Newhall is devoted to sewing in the seventh and eighth grades. The total of the Commission's suggestion is 395.

minutes under this subject. All these schools have a certain amount of hand work, but it is included under the heading of miscellaneous.

The allotments to music by the commission are 75 minutes in each of the first six grades and 70 minutes in the seventh and eighth grades, or a total of 590 minutes. New Era School makes no special allotment to music, but includes this subject under the heading of opening exercises. All the schools except New Era exceed the total of the Commission's allotment by from a few minutes to 690 minutes by Saugus. The lower grades of Saugus include other subjects under their music in their strictly informal school program.

Under opening exercises the Commission allots but 240 minutes as a total. All the schools exceed this total under this topic. As is stated above, New Era School includes music under this topic.

The heading miscellaneous has no allotments in the first four grades by the Commission, and from 50 to 90 minutes in the four upper grades, or a total of 295 minutes. New Era has no allotments under this topic, and Saugus has them but in the four upper grades. Castaic Union has a total of 1530 minutes under this topic, which is the greatest of any of the schools. Honby has the least of any, or 200 minutes. Newhall has 980 minutes as a total and Saugus in the four upper grades has 670 minutes.

The Commission suggests a total of 1140 minutes weekly for the first grade. Castaic Union has a total of 1250 minutes in its first grade schedule and the rest of the five

schools have but 1200 minutes. Castaic Union has the longest upper grade schedule, or 1700 minutes and New Era, with 1600 minutes has the shortest. The other three districts have 1650 minutes in their upper grade schedule. The Commission's schedule is longer than any of the districts in the second and third grades.

The total time allotment of all grades is 11,630 minutes as suggested by the Commission. New Era, with but 11,450 minutes, is the only district having less than the time the Commission suggests and the other districts have more. Castaic Union has the longest of all the districts, or 12,200 minutes. Newhall is but 200 minutes less in its total than Castaic Union.

Since none of the districts have a work shop, it is somewhat difficult for the districts to allot the proper time to practical arts. While there appears to be much difference between the time allotments as suggested by the Commission and those of the various schools in the survey, Tables C to CIV inclusive, if the teachers had definitely segregated their allotments under the different subjects, the difference would not be so great.

Health program. The school is held much more responsible today for the health of the child than in previous generations. One of the California statute subjects now is training for healthful living. The school has the three following responsibilities concerning the health of the child:

- (1) The school should teach the basic principles of physiology and hygiene so the child will be able to protect

TABLE C

TABLE GIVING COMPARISON OF SCHEDULES OF TOTAL WEEKLY TIME ALLOTMENTS OF ALL GRADES AS SUGGESTED BY THE STATE CURRICULUM COMMISSION AND THAT GIVEN BY THE CASTAIC UNION SCHOOL.

Subjects	Total weekly minutes by curriculum Com.	Total weekly minutes allowed by Castaic	Difference in the two allotments
Arithmetic	1450	1725	+275
Language Study	1375	1670	+295
Reading	2035	1680	-355
Spelling	600	445	-155
Writing	560	480	- 80
History	640	540	-100
Civics	165	120	- 45
Geography	685	570	-115
Science	185	---	-185
Art	665	730	+ 65
Healthful Living	1000	900	-100
Practical Arts	395	---	-395
Music	590	770	+180
Opening Exercises	150	240	+ 90
Miscellaneous	295	1530	+1235
Recess	840	800	+ 40
Total	11630	12200	+590

This table should be read as follows: the total weekly time allotment for arithmetic as suggested by the Calif. Cur. Study is 1450. Castaic gives 1725 minutes per week for arithmetic, or 275 min. more than is suggested by the Cur. Study.

TABLE CI

TABLE GIVING COMPARISON OF SCHEDULES OF TOTAL WEEKLY TIME ALLOTMENTS OF ALL GRADES AS SUGGESTED BY THE STATE CURRICULUM COMMISSION AND THAT GIVEN BY THE HONBY SCHOOL

Subjects	Total weekly minutes by Curriculum Com.	Total weekly minutes allowed by Honby	Difference in the two allotments
Arithmetic	1450	1350	-100
Language Study	1375	1450	+ 75
Reading	2035	1900	-235
Spelling	600	1300	+700
Writing	560	800	+240
History	640	600	- 40
Civics	165	50	-115
Geography	685	600	- 85
Science	185	---	-185
Art	665	750	- 85
Healthful Living	1000	800	-200
Practical Arts	395	---	-395
Music	590	600	+ 10
Opening Exercises	150	400	+250
Miscellaneous	295	200	- 95
Recess	840	1050	+210
Total	11630	11850	+220

This table should be read as follows; the total weekly time allotment for arithmetic as suggested by the Calif. Cur. Study is 1450. Honby gives 1350 minutes per week for arithmetic, or 100 minutes less than is suggested by the Cur. Study.

TABLE CII

TABLE GIVING COMPARISON OF SCHEDULES OF TOTAL WEEKLY TIME ALLOTMENTS OF ALL GRADES AS SUGGESTED BY THE STATE CURRICULUM COMMISSION AND THAT GIVEN BY THE NEW ERA SCHOOL

Subjects	Total weekly minutes by Curriculum Com.	Total weekly minutes allowed by New Era	Difference in the two allotments.
Arithmetic	1450	1650	+200
Language Study	1375	1300	- 75
Reading	2035	1750	-285
Spelling	600	600	--
Writing	560	900	+340
History	640	570	- 70
Civics	165	30	-135
Geography	685	800	-115
Science	185	---	-185
Art	665	1200	+535
Healthful Living	1000	800	-200
Practical Arts	395	---	-395
Music	590	In opening exercises	
Opening Exercises	150	600	+450
Miscellaneous	295	---	-295
Recess	840	1250	+410
Total	11630	11450	-180

This table should be read as follows: the total weekly time allotment for arithmetic as suggested by the Calif. Cur. Study is 1450 min. New Era gives 1650 min. per week for arithmetic, or 200 minutes more than is suggested by the Cur. Study.

TABLE CIII

TABLE GIVING COMPARISON OF SCHEDULES OF TOTAL WEEKLY TIME ALLOTMENTS OF ALL GRADES AS SUGGESTED BY THE STATE CURRICULUM COMMISSION AND THAT GIVEN BY THE NEWHALL SCHOOL

Subjects	Total weekly minutes by Cur. Commission	Total weekly minutes allowed by Newhall	Difference in the two allotments
Arithmetic	1450	1420	- 30
Language Study	1375	1145	-230
Reading	2035	2120	+ 85
Spelling	600	855	+255
Writing	560	650	+ 90
History	640	540	-100
Civics	165	50	-115
Geography	685	725	+ 40
Science ¹	185	40	-145
Art	665	705	+ 40
Healthful Living	1000	800	-200
Practical Arts	395	160	-235
Music	590	800	+210
Opening Exercises	150	310	+160
Miscellaneous	295	980	+685
Recess	840	700	-140
Total	11630	12000	+370

¹Science is included in reading allotment by all except one grade.

This table should be read as follows: the total weekly time allot. for arithmetic as suggested by Calif. Cur. Study is 1450 min. Newhall gives 1420 min. per week to arithmetic, or 30 min. less than is suggested by the Cu. Study.

TABLE CIV

TABLE GIVING COMPARISON OF SCHEDULES OF TOTAL WEEKLY TIME ALLOTMENTS OF ALL GRADES AS SUGGESTED BY THE STATE CURRICULUM COMMISSION AND THAT GIVEN BY THE SAUGUS SCHOOL

Subjects	Total weekly minutes by Cur. Commission	Total weekly minutes allowed by Saugus ¹	Difference in the two allotments
Arithmetic	1450	1270	-180
Language Study	1375	1440	+ 65
Reading	2035	1380	-655
Spelling	600	400	-200
Writing	560	1150	+590
History	640	700	+ 60
Civics	165	60	-105
Geography	685	480	-205
Science	185	---	-185
Art	665	360	-305
Healthful Living	1000	800	-200
Practical Arts	395	---	-395
Music	590	1280	+690
Opening Exercises	150	1060	+910
Miscellaneous	295	670	+375
Recess	840	800	- 40
Total	11630	11850	+220

¹First four grades entirely on informal plan.
This table should be read as follows: the total weekly time allotment for arithmetic as suggested by the Cal. Cur. Study is 1450 min. Saugus gives 1270 min. to arithmetic, etc.

his health.

(2) The school should provide supervised physical exercise through various types of games.

(3) Medical examination of all school children should be given so as to detect diseases and physical defects and cure them as far as possibly can be done.

The teacher should be continually on the alert for symptoms of communicable diseases, such as coughing, inflamed eyes, running nose, rashes, etc. The school nurse should daily inspect all children who are not feeling well or who have symptoms of contagious disease, and have the physician diagnose suspicious looking cases her lack of special training prohibits her from making. The duty of the school nurse includes making home visits, encouraging parents and guardians to have physical defects remedied, and secure dental treatment for children whose teeth need attention.

In Castaic Union, Felton, Honby, and New Era Schools most of the health instruction is given by the teacher as they do not employ the services of a school nurse. Newhall School employs a school nurse six days per month and Saugus School but one. The nurse divides this time into half days, thus visiting Saugus twice monthly, and Newhall from three to five times a week. Since the nurse lives in Newhall, she comes to the school any time she is called by the principal, often being at the school part of each day during the week.

Any child not feeling well or whom the teacher feels has symptoms of a contagious disease in the Newhall School is sent to the nurse for inspection. Frequently the nurse

takes such children home, advising their parents to consult a physician, when she deems it necessary.

The nurse visits each home in the Newhall District when a child has been absent two days, if the teacher of the child does not know the child to be absent from the community. While doing home visiting, the nurse frequently encourages the mother to have medical attention given her children, who are in need of such. Many mothers respond favorably, thus doing all possible to remedy the child's physical defects. Quite frequently the nurse makes dental appointments at the clinic for children whose families are unable to afford private dental work, and she takes the children to the clinic who have no other means of transportation. At frequent intervals throughout the year, the nurse weighs and measures the children and advises parents concerning diets for those under and over weight.

A Los Angeles County clinic is located at San Fernando, nine miles from Newhall. The clinic gives chest examinations to all people in the vicinity who request them. All people in the school districts who are not financially able to pay, after meeting social service requirements, are given free medical and dental service. Much of the service was curtailed to adults and older school children in the spring of 1932 on account of the period of depression decreasing county funds available for such work. Once each year the clinic gives free immunization for diphtheria and vaccination for smallpox to all children in these school districts, when parents or guardians give written consent for such treatment.

Through the clinic at San Fernando, pre-school clinics are held in Newhall twice each month, which are open to every family in the community that has pre-school children.

With the special attention given to pre-school children, the clinic service to all families unable to meet the cost of medical attention who have met social service regulations, and with the attention given the school children's health through the services of the school nurse, Newhall School especially, is doing all it can afford to care for the children's health and physical defects. With access to the services of the clinic at San Fernando, the other schools have much protection for their children's health. It would be better for the remaining schools to have more services from a school nurse, as this official often can detect minor physical defects before they develop into serious ones, where the teacher and parent are unable to do so.

Graduation requirements. The Los Angeles County Board of Education has adopted a rule that requires the eighth grade teacher or principal in schools of less than five teachers to have at least three years of teacher college training to enable the teacher to recommend eighth grade pupils for graduation without being required to pass an examination in the eighth grade subjects compiled by the board. In schools of five teachers or more the principal is required to hold at least an A. B. Degree to graduate his eighth grade pupils upon his own recommendation.

In recommending eighth grade pupils for graduation

without examination, the eighth grade teacher or principal of the school fills out blanks sent out by the office of the county superintendent of schools, on which the pupils' names are placed alphabetically and the grade the pupil receives. The grades are of a four point system, 1, 2, 3, and 4 being used, one representing the highest grade and four the lowest. If a pupil is given a grade of four, the teacher or principal is required to make a statement on the back of the blank stating his reasons why he feels the pupil should be graduated. Pupils receiving grades of four may be given special consideration by the county board of education and graduated, or the board may refuse them graduation if it feels the teacher's or principal's request for the pupil's graduation is not reasonable. It is on quite rare occasions that the board fails to approve a teacher's or a principal's recommendation for an eighth grade pupil's graduation.

Summary and conclusions. The aim of education as considered by Inglis not only applies to secondary education, but to all education as Inglis stated. He considers the aim of a three fold nature, or that of (1) Social-Civic Aim, (2) Economic-Vocational Aim, and (3) Individualistic-Avocational Aim.

The fact that the Los Angeles County course of study suggested time allotments in the various subjects is somewhat vague, and that of the California Curriculum Study so definite for each subject makes quite a contrast. The former, however, enables a teacher to follow his own inclinations much more effectively, and does not bind him to hard and fast

rules and regulations as the latter would tend to do. Hence, the former is following more the present tendencies and is stressing more the children and less the subjects, while the latter appears to have subjects as the main objective and considers the children secondary to subject matter.

Present conditions cause the schools to assume more of the responsibility for the health of the children than was formerly done. Of the six schools in the survey, Newhall School is doing most to meet this responsibility that has fallen to the schools to assume. Saugus, considering its small enrollment, is also doing considerable in this line. The remaining four schools are doing but little to promote the health of the children in their schools. This laxness on their part has been partially on account of failing to realize their responsibilities and partially on account of a shortage of finances to carry on an efficient health program in their schools.

The eighth grade graduation requirements are exceptionally fair to both the pupils and the teachers. The Los Angeles County Board of Education realizes that the teacher should be the best able to judge a pupil's fitness for graduation and to a large extent throws the entire responsibility of graduation of her pupils upon the teacher. This board offers every encouragement for teachers to graduate pupils at the proper age, thus seriously considering their social environment of at least equal importance to their mental ability.

While no detailed study of curricula has been made in

these schools, the writer considers the Los Angeles County Board of Education is doing all in its power to care for the needs of the individual pupils in its county by giving them first consideration and curricula second.

CHAPTER X

ADMINISTRATION

Purpose of the chapter. The purpose of the chapter is to examine into the general administration of the six schools in the survey. This will include, first of all, a few statements regarding the local boards of trustees, who, according to law, have certain definite regulations over their respective school districts. Of no less importance is the county administration, for the office of the county superintendent of schools has certain definite duties to perform regarding the small independent districts. The library service also comes under this chapter heading. The attendance in A. D. A. is considered as it is largely through this average daily attendance that boards of trustees fix the number of teachers to be employed the year following the computation in average daily attendance is made. Records and reports are an important item in any school system, and hence are given some study in this chapter. The nature and amount of insurance the districts carry is given some consideration, for it is a civic obligation the board of trustees owes to its district to keep the district fully insured against loss by fire, etc. The state, to bring the schools more nearly on a sound business basis, has required all school districts to make yearly budgets at the close of the year preceding that in which the money is to be expended. The yearly budgets of these schools for 1931-1932 are examined and tables made of them. Practically all school supplies are now pur-

chased through the county office and the manner of purchase is explained. This chapter also aims to show the type of janitorial service given in the different schools. Current expenses were given in the chapter on finances, but since this item is purely an administrative one, it will be dealt with more fully in this chapter. While the topics given in this chapter are quite varied, all belong to a chapter by themselves.

The boards of trustees. Castaic Union District is governed by a board of five members, for by state law all union and consolidated districts within the borders of the state have this number. All of the remaining districts have boards of three members each. In both types of districts board members are chosen the last Friday of March of each year, one each year in the regular districts, and either one or two each year, depending upon the number of vacancies, in union districts. The first day of May of each year the boards are required by law to meet and organize by electing a president and a clerk of each board. Among the important duties of the trustees are to hire teachers, principals, janitors, and other district employees, make up the yearly budget and submit it to the county superintendent of schools for his correction, if any, and his approval, have the school buildings and grounds taken proper care of, purchase all necessary school and janitor supplies, draw warrants on the funds of their respective districts, for salaries, supplies, etc.

Meetings of the boards. According to law, all boards of trustees are required to set dates for their regular meetings, of which the clerk or secretary to the board must keep the minutes. Of these six districts, Castaic Union is the only one that nearly always has its regular meetings on the stated evenings. Since this board has five members, it would be more difficult for the clerk to arrange for the regular meeting to be called at another time other than that set by the board as its regular meeting night. The other five districts frequently change their regular meetings from their set evenings to evenings that are more convenient for all of the board members. The boards of trustees in these districts seldom meet during the day, for their occupations require their services at that time. Castaic Union and Newhall School principals attend the meetings of their respective boards. The principal of the Newhall School has a special contract calling for his services as secretary to the board. The principal, therefore, keeps the minutes, makes out the school warrants, and attends to most of the clerical work of the board. While the principal has held a contract as secretary to the board since the opening of the school year of 1930-1931, it was not until the board was organized with two new members in May 1932, that the clerk, one of the new members on the board, requested the principal to be present at each meeting and carry on the work as secretary. The principal is very happy to be secretary to the board in fact and not in name only, as was formerly the case, for it causes him to feel he is a part of the administration and able to give

constructive advice on certain matters that his work as principal causes him to be more familiar with than the board, since it so seldom gets to visit the school and its plant.

County administration. The office of the county superintendent of schools has certain duties to perform for the school districts. Many of these are of an approval nature, that is approving reports, yearly budgets, etc., required of trustees and teachers. Teachers' contracts and all warrants drawn against a district's school money must also be approved by the county office. The County Board of Education, of which the county superintendent is secretary, prescribes the county course of study for all schools not in the chartered city class. A woman in charge of curriculum in the county office working with large numbers of teachers in the county formed into various committees compile the various units of the course of study, which in turn must meet the approval of the County Board of Education. State and county school moneys are apportioned by this office to the various school districts in the county.

The county office maintains an appointive service similar to that found in teachers' colleges and universities. Any superintendent, principal, or board member in need of teachers is encouraged to consult the assistant superintendent of schools in charge of this department before filling vacancies in his school. Some board members seem to feel they can hire their teachers without the assistance of the county office, while many welcome all the advice this depart-

ment is able to give them before hiring new teachers.

Library service. All six districts in the survey are members of the county library, and for this service pay from \$30 yearly at Felton to \$200 yearly at Newhall. The county library sends a truck to the various districts several times yearly delivering books which were ordered by those districts and to return to the county library books that the various districts do not wish to retain. When teachers order books, they may send in requisitions with the principal's signature or they may take the requisition blanks signed by the principal to the school department of the county library and select books for their rooms from the stacks. Except at the opening of the fall term, teachers and principals may select books from the stacks in the library and take them in their own conveyances, thus eliminating any delay in the delivery of the books. The county library service includes maps, dictionaries, both an unabridged one for the classroom and abridged ones for individual pupils in the upper grades, and magazine subscriptions. The number of magazines is limited to districts in proportion to the amount of money paid the library by the districts for its services.

The county library also maintains a teachers' department, where teachers employed in the county may borrow professional books in unlimited numbers for a month at a time.

As a whole, the service rendered by the county library is very efficient and enables small schools, such as this survey is made of, to have far better service than were the

districts to supply their own by purchasing their library books and other materials furnished by the library as individual districts.

Attendance in average daily attendance. Table CV gives the average daily attendance of each of the six districts for the past five years. From 1926-1929 Castaic and Live Oak are given separately. From 1929-1930 to 1930-1931 these two districts are given together under Castaic Union. From a study of this table Castaic Union and Newhall are the only ones that have more of an administrative problem now than they had five years ago. With Castaic and Live Oak unionizing, the transportation situation has greatly added to the administration problem, for some of the pupils are transported for a distance of seven miles. Newhall, having increased gradually in the past five years, has required new rooms to be built on its plant and also has added some to the transportation. These have added to its administrative difficulties.

Records and reports. The records and reports in small schools are quite simple and few in number, for the teachers and principals are all doing full time teaching duty. Consequently, all records and reports in these small schools must be compiled before or after school hours. The state school register, from which various reports are compiled, is the chief record of the schools.

Los Angeles County adopted an individual permanent record form beginning with the school year of 1930-1931.

TABLE CV
 TABLE GIVING THE AVERAGE DAILY ATTENDANCE IN
 ALL SIX DISTRICTS FOR THE PAST FIVE YEARS

District	Year				
	1926- 1927	1927- 1928	1928- 1929	1929- 1930	1930- 1931
Newhall	149	160	169	170	180
Saugus	45	49	40	41	39
Castaic	39	43	42	64	49
Honby	21	16	16	16	19
Live Oak ¹	16	28	16		
Felton	10	8	12	12	10
New Era	9	11	11	12	6

¹Live Oak District unionized with Castaic District in 1928-1929, after which date the attendance of the two districts is given together.

This table should be read as follows: the average daily attendance in Newhall School was 149 in 1926-1927, 160 in 1927-1928, etc.

This form cares for the census or registration data that the state law requires to be obtained each three years. There is also space for standard test data and yearly grades for the pupil, thus making it a cumulative record card. The schools have the option of using a form of report card which has met the approval of the office of the superintendent of schools or of choosing their own form. For economical reasons, the schools in the survey use the previous form.

All teachers of one teacher schools and principals of more than one teacher are required by the county superintendent of schools to submit to his office an attendance report for their schools at the close of each school month. This is to enable the county office to audit the montly reports, thus saving much inconvenience for the teachers as well as the county office at the close of the year, when the yearly attendance reports have to be compiled and submitted to the office of the county superintendent of schools. The yearly attendance reports of the state must be submitted to the superintendent by all teachers and in schools of more than one teacher the principal must compile a summary of the teachers' reports including his own, if he teaches a grade, into a principal's report. From these reports the county office compiles its yearly attendance report to submit to the state office on which basis the state appropriates state money to the county, which is later apportioned on the same basis to the various districts in the county by the county superintendent. State requisitions must also be submitted to the

county office requisitioning state text books. These are submitted by the teacher or principal of each school when additional state text books are needed. Usually these are not sent in more than twice yearly, or at the close of each semester. The county office requires such reports from the boards of trustees as to the amount of money paid for library service, yearly budget reports, etc., which are made mandatory on the county by the state. The county office requires lists of all employees of the districts sent in giving the monthly salary, etc. Yearly contracts in quadruplicate for all employees must be submitted to the county office for its approval. If approved, two copies are kept on file and two returned, one for the trustees and the other for the employee. Minor miscellaneous types of reports are required of the teachers and clerks of trustees from time to time by the county office.

Insurance. All of the schools except Felton, whose building is owned by the Standard Oil Company, are well covered by fire insurance at the expense of their respective districts. Honby and New Era, having the smallest buildings, carry but \$2,000 and \$3,000 of fire insurance respectively. Saugus carries \$5,000 insurance against fire, Castaic Union \$15,000, and Newhall \$80,000. Newhall has carried \$30,000 insurance protecting it from damage by earthquake, but the board of trustees plans to reduce this amount to \$20,000 during the summer of 1932. The Newhall board also plans to reduce their fire insurance to \$60,000 at the same time. New-

hall's insurance policies are to be so divided so practically one third of the total amount will expire each year, where it now largely falls due every three years. The Newhall School plant is insured for more than it would cost to replace at the present time, should it be destroyed by fire.

Annual budget and budget appropriation. As stated in the purpose of the chapter, all school districts are required by law to submit budgets in June of each year estimating their total expenditures for the following school year. Tables CVI and CVII give the budget requests of all six districts for the school year of 1931-1932. Each year boards of trustees are requested by the county office to ask for larger sums than they expect to expend to protect balances in their funds to be carried over to the following school year. Referring to the tables it appears unreasonable for New Era to request \$600 for operation of the school plant, the same amount for the maintenance of the school plant, and \$400 for capital outlays. In scoring this school district's building in the winter of 1931-1932, the writer was unable to see where the operation of the school plant should exceed \$200 yearly. The building did not appear to have had \$600 spent on it in repair for several years combined. The amounts requested in Honby and Felton Districts seem to be much more conservative than in the other four districts. Newhall's amount requested for maintenance is the most reasonable this district has requested for this item for several years. Both Castaic Union's and Newhall's requests for

TABLE CVI
 BUDGET REQUESTS OF CASTAIC UNION, FELTON, AND
 HONBY SCHOOL DISTRICTS, 1931-1932

Item	Castaic Union	District Felton	Honby
General Control	\$ 125	\$ 50	\$ 10
Teachers' Salaries	5,950	1,350	1,440
Other Ex. of Instruction	500	150	150
Library	100	30	50
Oper. of School Plant	1,500	95	175
Main. of School Plant	650	250	175
Fixed Charges	300	0	15
Capital Outlays	1,550	0	300
Aux. Agencies & Sun. Ex.	4,250	0	180
Total	\$14,925	\$1,925	\$2,495

This table should be read as follows: in their budget requests in June 1931 Castaic Union School requested \$125 to be expended during the following school year for General control, Felton School \$50 for the same item, Honby School for the same item, etc.

TABLE CVII
 BUDGET REQUESTS OF NEWHALL, SAUGUS, AND NEW
 ERA SCHOOL DISTRICTS, 1931-1932

Item	Newhall	District Saugus	New Era
General Control	\$ 150	\$ 90	\$ 12
Teachers' Salaries	11,184	3,800	1,404
Other Ex. of Instruction	500	300	200
Library	200	60	40
Oper. of School Plant	2,400	900	600
Main. of School Plant	1,000	800	600
Fixed Charges	900	100	40
Capital Outlays	4,800	200	400
Au. Agencies and Sundry Ex.	3,900	900	0
Total	\$25,034	\$7,150	\$3,296

This table should be read as follows: in their budget requests in June 1931 Newhall School requested \$150 to be expended during the following school year for General Control, Saugus School \$90 for the same item, New Era School \$12 for the same item, etc.

auxiliary agencies are large on account of so much pupil transportation. Newhall requested \$4,800 for capital outlay to protect its building fund balance, and not to expend that amount during the year for that item. In comparing item with item in the different districts, it appears strange Castaic Union should request \$500 for other expenses of instruction and Newhall the same amount for the same item, when the former's yearly average daily attendance for the school year of 1930-1931 was 49 and the latter's 180.

One objection to requesting more money under the different items than is to be actually expended during the school year is that the yearly budget must be printed in a local paper, which causes patrons of the respective districts to feel the trustees are not economical with the school districts' finances.

Supplies and requisitions. In compliance with the state law, all supplies on the purchasing lists approved by the county board of education are secured by the purchasing department of the office of the county superintendent of schools. This approved list in Los Angeles County comprises practically all supplies used in the school room and most of the janitor supplies. Furniture and supplies not on the required list to be purchased through the county office may be purchased by the local boards of trustees direct or through the county purchasing department.

In requisitioning supplies through the county office, the teacher or principal fills out requisition blanks which

must be signed by the clerk of trustees or any two members of the board of trustees. One copy is then sent to the purchasing department of the county superintendent's office. This department then sends a copy of the requisition to one or more school supply houses to get prices on the supplies to be ordered. After securing prices the department places the order and has the supply house send the supplies direct to the district and bills the district direct. Upon receipt of the supplies the school board draws a warrant on its district's funds in payment of them.

In the smaller districts little organization is needed to allow teachers to requisition supplies. Newhall School has the teachers place their supply order with the janitor each Friday and he fills their orders from the supply room during the week end. The teachers in the one teacher schools have direct control over their supplies.

New equipment and fixtures. But little new equipment has been added to the schools in the survey within the past five years. Castaic Union School purchased a 16" paper cutter at the beginning of the present school year. At the beginning of the school year of 1930-1931 Newhall School purchased a portable mimeograph and a two drawer steel filing cabinet. This year this school purchased a 14" carriage Underwood typewriter and two treadle Singer Sewing machines for use of the seventh and eighth grade sewing class.

Maintenance of plants. In maintenance of plants, Castaic Union has done but little which has been mainly on account of shortage of funds. However, the plant appears to

be kept in quite good condition, except a coat of paint would help the looks of the external part of the building. Felton School had a large expenditure of money for maintenance of its plant in 1927-1928, as is given in Chapter IV, Table XXVI. The present condition of this plant does not show any such expenditure. Honby School, Table XXVII, gives an excessive maintenance charge in 1930-1931. The building is in very ordinary condition to have had \$736.92 expended for maintenance at such a recent date. New Era's plant is kept quite well painted and in a fair condition of repair, although at the present time it is much in need of a new floor. Table XXVIII gives from \$82.40 in 1927-1928 to \$368.47 expended for this item each year of the period. Table XXIX gives Newhall's yearly maintenance cost ranging from \$365.26 in 1926-1927 to \$3,047.95 in 1929-1930. This plant is well cared for as the amount of money expended for that purpose should warrant it. In the school election of 1932 in Newhall, the excessive high cost of maintenance during the past several years aided in defeating the former clerk for re-election. Saugus School, Table XXX, has a yearly maintenance cost of from \$208.80 in 1929-1930 to \$860.51 in 1926-1927 during the past five year period. This school plant is of wood construction and has been built for some time. The school plant is kept in very good condition.

Generally speaking, the school plants are kept in good condition. With the small amount of taxable property to assess in Honby and New Era Districts, it would be very expensive to keep those plants in excellent condition.

Janitorial service. Felton, Honby, and New Era Schools employ older school children to do what little janitor work is done in those schools. At times the teacher is employed for this work in these schools. Castaic Union and Saugus Schools employ the services of part time janitors who do the work after school hours. Newhall School is the only one in the group that is large enough to afford a full time janitor.

The Newhall School janitor arrives at the building as early as five thirty or six o'clock in the winter to allow time for the rooms to heat and to do the dusting before the opening of school. During the morning of each school day he cares for the grounds and the auditorium, when it is not used for school purposes. He takes his lunch hour from eleven to twelve. During the noon hour he clears away lunch refuse and sweeps the kindergarten room. Immediately after two o'clock he begins to sweep the primary rooms and is kept quite busy until about five o'clock, when he locks the building and leaves the grounds. During the summer vacation his time is spent in caring for the lawn and shrubbery and in giving the building and furniture a thorough renovating. All desks in the building are re-varnished at this season. As a whole, the services of the Newhall janitor are very satisfactory, for he keeps the building and grounds in very good condition.

Current expenses. Tables XXIV to XXX, Chapter IV, give current expenses of the six districts from 1926-1927 to 1930-1931. Live Oak's current expenses are given in Table XXV from 1926-1927 to 1928-1929, after which it unionized with

Castaic. Castaic Union's current expense increased gradually until 1929-1930, when it rose to \$10,022.73. It decreased to \$9,560.76 the next year. This excessive increase in 1929-1930 was largely on account of that being the first year after the unionizing of Castaic and Live Oak School Districts. In 1928-1929 Live Oak's current expense was the least of the three year period, because during that year but one teacher was employed, where previously the district employed two teachers. The total current expense of Felton District was much the highest in 1927-1928, when the maintenance of the school plant was \$536.60, while the highest for this item during the other four years of the period was but \$34.14 in 1930-1931. Except this one year the total current expense ranged approximately from \$1,400 to \$1,600. The current expense in Honby District during the period was approximately from \$1,900 to \$2,300, except in 1930-1931, when it amounted to \$2,604.50. The excessive expenditure was the result of the maintenance of the school plant being \$736.92 this year. The nearest approach to this amount was in 1929-1930, when but \$188.97 was expended for this item. New Era's current expense has gradually increased during the five year period from \$1,796.70 to \$2,269.65. This has been the result of practically a gradual increase in the expenditures for maintenance of the school plant. Newhall School's current expense gradually increased from \$10,466.94 in 1926-1927 to \$18,611.88 in 1929-1930. It decreased to \$16,680.19 in 1930-1931. The gradual increase was partially on account of a somewhat gradual increase in average daily attendance, but

mainly on account of an increase in the maintenance of the school plant. This item increased from \$365.26 in 1926-1927 to \$3,047.95 in 1929-1930, but it decreased to \$1,700.26 in 1930-1931, as was previously stated. Saugus School's total current expense has remained more nearly equal during the five year period than any of the six districts. The highest total current expense was \$5,962.30 in 1926-1927 and the lowest was \$5,490.98 in 1927-1928.

Summary and conclusion. In summing up the contents of the chapter, the local boards of trustees and the office of the county superintendent of schools jointly administer the small independent school districts in the county. Each has its duties quite plainly enumerated by the State School Code.

The county library serves the six districts in the survey in quite an efficient manner, enabling such small districts to have library service much superior to what each of the districts could independently supply for themselves.

The average daily attendance is an important item in any school system, since state and county school money is appropriated on this basis. Newhall School is the only one in the group increasing during the five year period from 1926-1927 to 1930-1931.

The records and reports in schools as small as these are quite few in number and simple in form. Little is done in these schools in the matter of keeping records and reports, other than those made mandatory by the state and county.

Annual budgets are made mandatory by the state. The budget requests by the different districts are frequently larger than the amounts to be expended on account of the districts wishing to protect balances in their funds from the previous year. Some of the districts do not appear to be at all conservative in their budget requests.

In compliance with the state school law, most of the supplies used by these schools are purchased through the purchasing department of the office of the county superintendent of schools.

The insurance carried by these school districts is more in most cases than the districts would reasonably be expected to be able to collect in case of destruction of school property by fire. Newhall School is the only one of the six districts carrying protection against damage by earthquake.

Very little has been purchased in the past two years in the line of new equipment and fixtures in these school districts.

Janitorial service in the smaller of these schools is done by the older children or by the teachers and by adults in the Castaic Union, Newhall, and Saugus Schools. The Newhall School is the only school of the group employing a full time janitor.

Current expenses have gradually increased, generally speaking, from year to year during the past five years. Much of this gradual increase has been the result of increase in maintenance of school plants and some for the increase in enrollment. One is inclined to feel the finances have not

been economically cared for in some of the school districts in the survey.

As a matter of more efficient administration, it is recommended that all of these schools, except Castaic Union, unionize or consolidate with the Newhall School, which has sufficient building and ground space to accommodate the pupils of all five districts with but very little initial expense.

CHAPTER XI

TEACHING STAFF

The aim of the chapter. The aim of the chapter is to examine into the training, certification, experience, and salaries of the teachers employed in the six districts, the amount of teacher turnover, to what extent these teachers are getting additional training while in service, the amount of teacher load in the different districts, and the amount of supervision given the teachers, both through the county office and the local units.

Training, certification, experience, and salaries of teachers. Table CVIII gives personal information about the teachers of the Newhall School and Table CIX of the teachers in the other five districts. In training, Newhall School has two teachers employed who have had two years beyond the high school, three teachers with three years, one with three and a half years, one with four years, and one with five years. Of the eight teachers employed in Newhall five graduated from normal school or teachers' colleges requiring three years training, two with four years training, and one graduated from a four year course in a university. But two teachers in the school have A. B. Degrees. Only one teacher has taken one year of graduate work. One teacher has taken no summer work, three teachers have attended two summer sessions, one three summers, one five summers, one seven summers, and one eleven summers. The one attending seven summers has taught twenty-three years and the one attending e-

TABLE CVIII
PERSONAL INFORMATION CONCERNING THE NEWHALL TEACHERS¹

Items	A	B	C	D	E	F	G	H
1. Education								
a. High school graduate	x	x	x	x	x	x	x	x
b. College								
(1) Years attended			2		1			
(2) Graduate								
c. Normal school								
(1) Years attended	4	4		3	1	3½	3	3
(2) Graduate	x	x		x		x	x	x
d. University								
(1) Years attended	1						1	
(2) Graduate							x	
e. Bachelor's Degree	x						x	
f. Master's Degree								
g. Graduate work								
(1) Years	1							
h. Summer term work	11	2	7	3	2	2	5	
i. Other work				x		x		
2. Professional training								
a. Years	2	1	1	1	½	1	1	
3. Experience								
a. Years in all ²	20	5	23	2	2	5	3½	8
b. Years in Newhall	2	1	6	2	1	3	1	6½
4. Certificate held								
a. Kindergarten Primary								x
b. General Elementary	x	x	x	x	x	x	x	
c. Jr. High Credential	x							
d. Secondary	x							
e. Administrative	x		x					
5. Native of California	x			x	x	x		

x Check indicates teacher has attained the item indicated.

¹ Teachers are known by letter.

² In total experience the present school year is included.

TABLE CIX

PERSONAL INFORMATION CONCERNING THE TEACHERS¹ OF CAS-
TAIC UNION, FELTON, HONBY, NEW ERA, AND SAUGUS SCHOOLS

Items	A	B	C	D	E	F	G	H
1. Education								
a. High school graduate	x	x	x	x	x	x	x	x
b. College						x	x	
(1) Years attended						2	4	
(2) Graduate							x	
c. Normal school	x	x	x					
(1) Years attended	3	3	3					
(2) Graduate	x	x	x					
d. University	x			x	x			x
(1) Years attended	2			4	4			3½
(2) Graduate	x			x	x			
e. Bachelor's Degree	x			x	x			
f. Master's Degree	x							
g. Graduate work	x							
(1) Years	1							
h. Summer term work					1	2	1	4
2. Professional training								
a. Years	1	1	1	1	1		1	1
3. Experience								
a. Years in all ²	8	3½	5	1	1	8½	16	8
b. Years in pres. position ²	3½	3½	3	1	1	1	5	4
Certificate held								
a. Kindergarten Primary								
b. General Elementary		x	x	x	x	x	x	x
c. Jr. High Credential							x	
d. Secondary	x							
e. Administrative								
5. Native of California								

x Check indicates teacher has attained the item indicated.

¹ Teachers are known by letter.

² In total experience the present school year is included.

leven summers twenty years. The teacher attending seven summers has had but two years training beyond the high school and the one who has attended eleven summers has had a year of graduate work.

In certification, but one teacher in Newhall has a kindergarten-first grade credential permitting her to teach only in the kindergarten and first grade. All the remaining seven teachers have general elementary certification, one of whom has junior high certification and general secondary certification in addition thereto. Two of these teachers hold the administrative credential.

All of the Newhall teachers are experienced, their experience ranging from two to twenty-three years. Only one teacher came to Newhall inexperienced, which was the year before the study was made. In experience in Newhall, three have been in the school but one year, two two years, one three years, one six years, and one six and a half years.

Four of the eight teachers in the Newhall School are natives of California.

Of the eight teachers in the five smaller districts in the survey, three are graduates of three year teacher colleges, one has attended college two years, one four years, one has attended university two years in addition to her teacher college attendance, one has attended university three and a half years, and two four years. Three out of the eight teachers have A. B. Degrees, which is a better per cent in this respect than the eight teachers in the Newhall School have. In summer school attendance these teachers have at-

tended much less than the Newhall teachers. Two teachers have attended but one summer, one two summers, and one four summers.

In certification, seven of these teachers have the general elementary credential, one of whom has the junior high credential in addition thereto. The other teacher has the general secondary credential. Not a single teacher in the group has the administrative credential.

In years of experience, these teachers range from one to sixteen. Two teachers are having their first year's experience, one has three and a half years' experience, one five years, two eight years, one eight and a half years, and one sixteen years. The year this study is made is the first year for three of the teachers in their present positions, one has been three years in her present position, two three and a half years, one four years, and one five years.

Table CX gives the salaries of the teachers of both groups, that is the Newhall teachers in one and the teachers of the other districts combined in the other group. Newhall's highest salary paid is \$2171.25 and the highest in the second group is \$2025, the salary of two of those teachers, both of whom are principals. The lowest salary is \$1341.25, which is paid to a Newhall teacher. Since this salary is paid for half day services, in proportion to that paid to other teachers she is paid the highest salary of any teacher in either group. The lowest salary in the two groups is \$1350, which is received by one of the second group. Three teachers in

TABLE CX
SALARIES OF THE TEACHERS IN ALL SIX DISTRICTS

Teacher	Newhall	Other five districts
A	\$2171.25	\$2025
B	1433.75	1665
C	1526.25	1665
D	1526.25	1350
E	1433.75	1440
F	1526.25	1404
G	1433.75	2025
H ¹	1341.25	1665
Mean	\$1549.06 $\frac{1}{4}$	\$1654.87 $\frac{1}{2}$

¹This teacher in Newhall teaches but half day sessions. This table should be read as follows: Teacher A in Newhall School receives a yearly salary of \$2171.25 and the same teacher in the other districts receives a yearly salary of \$2025, etc.

the second group receive \$1665 each, which is more than is received by any teacher in Newhall, except by the principal of that school. With this amount paid these three teachers and the \$2025 paid each of the two principals in this group, the mean salary of the second group is \$1654.87, while the mean salary of the Newhall teachers is but \$1549.06.

No further comparison of teachers' salaries is made because practically all districts have different conditions and different salary schedules. On account of the exceedingly large surplus of teachers and the general depression throughout the land, salaries are being reduced in most of the districts in the survey for the school year of 1932-1933.

Teacher turnover. Teacher turnover has been tremendous in some of the districts in this survey during the five year period from 1927-1928 to 1931-1932, as is shown in Table CXI. Saugus School, which has but two teachers, has had only one change in teachers during the period, or but a ten per cent turnover. Newhall has had six, seven, and eight teachers in its faculty during this period and a teacher turnover of 132 per cent. Castaic Union, during the same period, has a teacher turnover of 166 per cent. Felton ranks next in teacher turnover, as it has had 400 per cent, or but one teacher remaining a second year during the period. Honby School had one teacher remain two years during the period, or from 1926 to 1928. During the school year of 1930-1931 the teacher died during the year, necessitating two teachers

TABLE CXI
 TEACHER TURNOVER IN THE SIX DISTRICTS
 1927-1928 TO 1931-1932

District	Per centage of turnover
New Era	600
Honby	500
Felton	400
Castaic Union	166
Newhall	132
Saugus	10

This table should be read as follows: the percentage of teacher turnover in New Era School from 1927-1928 to 1931-1932 was 600, etc.

during that year. This gives Honby a teacher turnover of 500 per cent for the period. New Era School has had the highest teacher turnover of any of the six districts. It had a different teacher each year of the first four years of the period and two teachers the fifth year, making the teacher turnover 600 per cent for the period.

The two chief reasons for such tremendous teacher turnover in Honby and New Era Schools are failure on the part of the teachers to be able to give the type of service these districts expect and the teachers securing more desirable positions elsewhere. The former was the cause of a new teacher in Honby School at the beginning of the year of 1931-1932 and the latter for the cause of the change in New Era at the same time. The change in New Era during the year of 1931-1932 was largely on account of the first cause. This teacher resigned her position in the early spring of 1932.

All school authorities approve of a much less turnover in teachers than Felton, Honby, and New Era have had during the five year period of the study to enable the teachers to do their most efficient work for the children and the communities in general. With Felton School to be suspended in the summer of 1932 and in all probability to become a part of Newhall School District in the summer of 1933, this change will eliminate such rapid turnover for this little district. The excessive turnover of Honby and New Era is another excellent reason why these districts should unionize or consolidate with Newhall. Unionizing or consolidating would do

much to eliminate petty jealousies in a small community regarding the little one room school by causing the people's interests to center more on the larger school and the little town in which the school is located.

Training in service. M. R. Trabue, Chairman of the Division of Elementary Education in the University of North Carolina has the following comment regarding this topic:

It is generally agreed that learning follows activity by the students rather than by the instructor; that the amount of learning is approximately in proportion to the satisfactions which the student obtains in or through his activities; that the use which will later be made of what has been learned will be in proportion to the similarity of the situation in which it is learned to those situations in life in which it may be used to advantage; and that effective drill should grow out of vital needs discovered in real life situations by the pupils.¹

At the time the article from which the above quotation is taken was written the University of North Carolina employed six instructors, who in addition to giving extension courses in education made frequent visitations to the classrooms of the teachers enrolled in their extension courses. These visitations were of a supervisory nature, enabling the instructors to give the teachers visited constructive criticism, thus improving their teaching technique under the expert supervision of their instructors. The author of the article feels this form of training teachers in service is excellent, as there is more effective learning when the teacher is in his own classroom.

Of the sixteen teachers employed in the six schools in

¹M. R. Trabue, Training Teachers on the Job, School Life, November, 1930.

the survey but two took advantage of extension courses during the two year period, 1930-1931 to 1931-1932. Attempts were made by the rural supervisor to secure extension courses in the vicinity of Newhall but not enough teachers were interested in the same course to justify any being given.

Teachers' meetings are called two or three times yearly in Newhall by members of the county superintendent's office to secure direct contact with the small group of teachers north and north-east of the Los Angeles City District, of which group the teachers of the six districts in the survey form the major part, for the purpose of training them for more effective work.

Tables CVIII and CIX giving personal information of the teachers in these schools give the teachers and the number of summer sessions, if any, each has attended. All except one in the group of Newhall teachers have secured training while in service in this manner to improve themselves in their work and but four of the teachers in the second group have done so.

Other means of securing training while in service, such as reading educational magazines and books, were given little attention in this study, as it is difficult to gather authentic data as to the quality and quantity of such reading individual teachers do.

Two teachers from the Newhall School visited with relatives in Switzerland during the summer of 1931 and also toured other portions of Europe, thus bringing their classes

first hand information concerning manners and customs of the people with whom they had direct contact.

Teacher load. The comparison of teacher load is only made with schools within the group. The only available data on teacher load are with schools in city systems, and a comparison with them would be unfair to the small schools. The numbers quoted in the different schools in Table XII, Chapter III, are taken early in the school year of 1931-1932. Later in the year the numbers enrolled increased somewhat in Honby, Newhall, and Saugus Schools. In Castaic Union School the primary teacher has twenty-six pupils in the first, second, and third grades, the intermediate teacher twenty-six pupils in the fourth, fifth, and sixth grades, and the principal but thirteen pupils in the seventh and eighth grades. The numbers are very small, particularly in the seventh and eighth grades for one teacher, but since two of the teachers have three grades each, and one two grades, a fewer number of pupils in two or more grades is a greater teacher load than more pupils would be in but one grade. It is, therefore, difficult to compare situations of this kind with schools having but one grade to a room.

Little need be said concerning the teacher load of Felton School, for it has but four pupils, one of which is in the second grade, two in the fifth grade, and one in the sixth grade.

Honby School at the time the data was obtained had twenty-one pupils in all eight grades. Later in the year this number increased to twenty-nine pupils. With all the

grades and this number of pupils, the teacher in the Honby school has a much greater teacher load than any other teacher in the six schools.

In New Era School the enrollment is ten pupils in all eight grades. With this small number and with the opportunity to combine certain classes, the teacher load is very light.

Newhall School is quite fortunate in having such a small teacher load in most of its rooms. From grades one to six inclusive one teacher gives her full time to one grade with the exception of the fifth grade teacher who has the seventh grade the first hour of the morning. The principal has the seventh and eighth grades most of the day. In grades one to six inclusive the numbers in each room varied from twenty-five pupils in the second grade to thirty-one in the first grade, when the data was obtained. The first grade teacher has the seventh grade reading three days per week after the dismissal of her first grade in the afternoon, and the seventh and eighth grade drawing one fifty minute period per week. The second grade teacher has the seventh and eighth grade girls in sewing an eighty minute period once each week after dismissing her grade. Both the second and the third grade teachers assist in clerical work and stencil cutting after the dismissal of their regular classes. The sixth grade teacher has the music in grades five to eight inclusive, during which time teachers whose music she is having teach history and geography in the sixth grade. From Table XII, Chapter III, the principal, who has

the seventh and eighth grades, had thirty-nine pupils in the two grades when the data were taken. Later in the year this number increased to forty-two. Since other teachers in the school system assist one another, particularly the principal, who has much the largest number of pupils in his room, the teacher load in the various grades is fairly well distributed.

From Table XII, Chapter III, Saugus School had twenty-three pupils in the first four grades and twenty-two pupils in the four upper grades, each group having one teacher. Later these numbers increased to approximately thirty in each room. While these numbers do not make an excessive teacher load, thirty pupils in four grades is much more of a teacher load than forty would be in but one grade.

Generally speaking, the teacher load in the schools in the survey is not excessive with the possible exception of Honby School.

Supervision of instruction. About twice each school year one of the assistant county superintendents visits the schools in the vicinity of Newhall. If a teacher or principal requests a special visit by one of the assistants to give aid in a difficult problem, the county office cooperates splendidly on such occasions. The visual education department of the county office will send a representative to visit a school whenever requested to do so by the teacher or principal, and will give advice and assistance in the use of visual educational materials furnished by that department. Such materials consist of pictures, prints, films, etc., largely

of historical and geographical nature.

Los Angeles County Schools have two general rural school supervisors, each having a distinct portion of the county as his area to supervise. The general rural supervisor for the schools in the survey supervises all the rural schools north and north-east of Los Angeles City School District, or in the desert portion of the county. This supervisor was formerly a county superintendent of schools in one of the central California counties. He visits and gives constructive criticism and advice on school matters from one to three times monthly.

There are a number of special supervisors in the county, but it is on very rare occasions that any of them visit these schools. During the past two years the county director of physical education visited several of the schools but once, while the others have not visited them at all. The time of the special supervisors seems to be devoted to the rural schools south and east of Los Angeles City, leaving all of the supervision of the schools in the survey to be done by the general rural supervisor for the desert area of the county.

But little supervision through local units can be done, as the principals of Castaic Union, Newhall, and Saugus Schools are full time teaching principals. Practically all the supervision that can be given under such conditions is to consult with the teachers before and after school hours on various types of problems arising in their school work. The Newhall principal calls teachers' meetings after school hours when the need arises to advise his teachers concerning

their school work.

Summary and conclusions. The training of the teachers in the two groups differ to some extent, the second group having more training than the first, which is the Newhall teachers. The second group has more recently trained teachers, who had to meet higher educational requirements to receive certification than did the teachers who received their training at an earlier time. Newhall School has the teacher with the least training and the one with the most experience. Each group has one teacher with one full year of graduate work. The Newhall School group has had more training in service than the other group, which is probably on account of having had less training in the beginning.

The salaries of the second group average more than they do in the Newhall group, but the lowest paid full time teacher is in the second group.

The teacher turnover has been tremendous in the one teacher schools, New Era School having the most in the five year period or 600 per cent. Saugus School has had the least turnover during the period or but 10 per cent. Consolidation of these schools would probably lessen the amount of teacher turnover.

But little has been accomplished in training in service among the teachers, with the exception of summer school attendance by part of the teachers. All but one teacher of the Newhall group has attended two or more summers during her teaching period, and but four of the second group have attended one or more summer sessions.

Data on teacher load in small schools are difficult to give. With the exception of the Honby School, the teachers in the schools in the survey have very light to average teacher loads.

Supervision of instruction is practically limited to the general rural supervisor and visits once or twice yearly by one of the assistant county superintendents of schools. The principals of Castaic Union, Newhall, and Saugus Schools are full time teaching principals and can give very little time to classroom supervision.

In conclusion, much more efficient local supervision could be given if all the schools except Castaic Union would unionize or consolidate with Newhall School, for by so doing the principal would have at least half time for the supervision of his school.

CHAPTER XII

GENERAL CONCLUSIONS AND RECOMMENDATIONS

Purpose of the chapter. The above title gives the purpose of this last chapter, which is merely a summing up of the conclusions arrived at in the other chapters of the survey and to make general recommendations, most of which have been given some consideration earlier in the survey. An attempt is made to make these recommendations more in detail at this time than was formerly done.

Administration. In Chapter X under Administration, it is stated the schools in the survey are administered jointly by the local boards of trustees and the office of the county superintendent of schools, each having its specific duties to perform as is provided by the statutes of the state. Since boards of trustees usually delegate much more of their power of administering the schools to the principals and district superintendents in larger schools, it is reasonable to assume if a plan of consolidation were entered into the principal of the Newhall School would attend to many of the administrative duties now performed by the local boards of trustees, particularly in the case of the smaller schools of the group. By having the local administration centered in one person, much more efficient administration should be had, than where it is now divided among four or five separate boards of trustees who are untrained and inexperienced in school administration, where the principal has had both training and experience in it.

School plants -- new buildings. The school plants of the six districts in the survey vary in type and condition from plants that scored below 500 out of 1000 points as allowed by the Strayer-Englehardt score card to above the 700 class. Those scoring below 500 are Felton, which in all probability never will be used for school purposes after the close of the school year of 1931-1932, as is stated in Chapter V, Honby, and New Era. Honby and New Era Districts are both in need of new buildings, but since the assessed valuations in both districts are quite limited, it is doubtful if they will have them for some years. Each of these two districts yearly tax themselves quite heavily for maintenance and capital outlays. Even after their money is expended for these purposes, their buildings are far below the standard set for rural schools. To continue to practically waste their districts' money on buildings of this type is false economy, when these districts could unite with Newhall at no greater cost than to keep their separate districts.

The other three districts have plants scoring above 500, thus enabling them to be usable for school purposes according to standard requirements. Of these Saugus scored the least, or 576 points out of 1000. This plant is constructed of wood and will deteriorate quite rapidly, as it has been built for some years. There is some advocacy for a new building in this district at the present time. It, likewise, would be more economical for this district to consolidate with Newhall rather than bond itself for a new building.

Castaic's building scored 681 out of 1000 points, making it quite a good building for a small community. By using the school auditorium for a classroom, this school will not need additional room to care for its enrollment for the school has had practically no growth during the past five years.

Newhall's building scored the highest of all the six districts, or 715 out of a possible score of 1000 points. The building is not only quite modern but it also has sufficient room for several years' growth, if its future growth is no more rapid than its growth has been during the past five years.

Teaching staff. Chapter XI discusses this topic somewhat in length.

In considering the teaching staff of the six districts as two distinct groups, the teachers of Newhall forming one and the teachers of the other five districts forming the other, eight teachers in each group, the teachers of the Newhall group as a whole began teaching with less training than the other group, but they have had more experience and have taken advantage of summer session work more than the second group. Since they have had more teaching experience, they began teaching at an earlier time when certification was less exacting. For these teachers to keep up with added requirements from time to time, it has necessitated their attendance at summer sessions, where the more recently trained teachers were forced to meet present requirements before ob-

taining certification. The mean age of the Newhall group would be somewhat higher than the second group. The teacher turnover has been least in Saugus, or ten per cent during the past five years and greatest in New Era during the same period, or 600 per cent. The turnover in the one room schools has been much greater than in the other schools in the study. Consolidation would tend to reduce the percentage of teacher turnover. It is difficult to compare teacher load of such small schools with city systems which have the only available data regarding it. Hence, no effort was made to make this comparison. Honby School with as many as twenty-nine pupils in all the grades has the largest teacher load, and Felton with but four pupils in three grades has the smallest teacher load of any school in the group.

Educational re-adjustments. The only educational re-adjustment recommended under the present situation is in the Newhall School.

For the past year the sixth grade teacher in the Newhall School has taught music in the fifth, sixth, seventh, and eighth grades. While doing so the teachers of the fifth and the seventh and eighth grade rooms were required to teach history and geography in the sixth grade room. Since the principal has had as many as forty-two pupils in the seventh and eighth grades, he has had little opportunity to visit other classrooms during school hours. As has been stated elsewhere in this study, grades one to six inclusive have had one teacher for each grade with 25 to 31 pupils in a room. The re-adjustment is to have one teacher each for

grades one, six, seven, and eight and three teachers for grades two to five inclusive. By so doing the teachers of grade six, seven, and eight will be able to carry on departmental work effectively. This seems necessary for the sixth grade teacher is the only one in the upper grades qualified to teach music. The home room teacher of the eighth grade then will teach arithmetic in the three grades, the home room teacher for the seventh grade history and geography, and the home room teacher of the sixth grade music and English. The remaining subjects except drawing in the eighth grade and the sewing in the seventh and eighth grades will be taught by the home room teachers in their respective rooms. The drawing in the eighth grade will be taught by the first grade teacher after dismissing her own class in the afternoon. By the principal having approximately twenty pupils in his home room and having his drawing taught by the first grade teacher, he will be more able to leave his class occasionally to visit other rooms in the building and have more of an opportunity to do some supervising than if he were to have the seventh and eighth grades combined with over fifty pupils in his room next school year as the present numbers in the sixth and seventh grades indicate. While divided grades in grades two to five inclusive with approximately forty-five pupils to a room is not for the best interests for those pupils, the writer feels it is of greater advantage for the principal to have a small class part of the day, which will enable him to be in a position to keep

closer contact with his school than he has been able to do during the past two years.

If these six schools, five by omitting Felton, with the exception of Castale Union, were to consolidate, much better re-adjustments could be made, as there would be two more teachers to divide the enrollment among, thus requiring less divided grades than is necessary under the recommended plan of re-adjustment.

Reorganization alternatives. In considering a scheme of reorganization among the school districts in the survey, one of two schemes is recommended, the first being considered much the better. Before giving either plan it is thought best to state some of the advantages of consolidation as given in "The Consolidated Rural School" by Louis W. Rapeer. This author states in referring to consolidation in the state of Utah:

Looking back upon these years of experience, it can be said that consolidation has accomplished among other things, the following:

1. Erased boundary-lines and worked for the common good of all the people.
2. Stimulated the "getting together" habit.
3. Expended school money more judiciously.
4. Eliminated a number of district trustees of but ordinary qualifications.
5. Created in their place a board of education consisting of five very competent members.
6. Abandoned poor, isolated buildings.
7. Erected new, modern, central school buildings, with improved lighting, heating and ventilating systems.
8. Introduced a high quality of school supervision.
9. Retained special help of the juvenile court in working with delinquent pupils, and engaged the services of trained nurses to examine each pupil at least once each week.
10. Raised the standard of efficiency of the whole teaching force.
11. Made a standard rural high school possible.

12. Reduced truancy to a minimum.
13. Classified and graded the schools better.
14. Overcome local petty prejudice; made the remote country child associate with children of other localities; gave him a broader view, and extended his circle of friends and acquaintances.
15. Fostered a taste for the best that life can give, and enriched the whole life of the people.
16. Placed strong class leaders in every school.
17. Made pupils progressive, contented, comfortable, and happy.
18. Safeguarded the health of the children.
19. Made better school legislation necessary.¹

The foregoing advantages found in consolidation as stated by Rapeer are but nineteen out of fifty given in his book. The first advantage given is an important one as too often there is too much rivalry between different districts for the common good. The advantage "made a standard rural high school possible", should be of particular interest to the schools in the survey. While the writer realizes the population is too small at the present time to justify a high school in Newhall or vicinity, consolidation of the elementary schools in this region will aid greatly in some future time, when the population warrants establishing a high school, in securing recognition from Los Angeles City regarding the high school situation.

By consolidating under plan one as given below, the principal need not teach more than half time, thus having the other half of his time to supervise his school, while at the present time there is little opportunity to have efficient supervision in any of the schools.

¹Louis W. Rapeer, The Consolidated Rural School, Chas. Scribner's Sons, New York, 1920. pp. 281-283.

With a larger school under consolidation under plan one, there would be no room in the building having more than one grade or parts of two grades, which would enable the teacher to do more efficient work than conditions at present permit.

At present these schools do not have their school terms divided into definite semesters. Under consolidation the school could be divided into semesters and promotions could be made semi-annually, thus caring more effectively for many children entering these schools during the middle of the year from the Los Angeles City Schools, where they are divided definitely into grades A and B. However, from an educational view point many authorities maintain where schools are divided on the semester basis, children are too frequently required to repeat a half grade, where such is not done if the child were required to repeat an entire grade. Therefore, it is a better arrangement to promote yearly, as is done in the schools in the survey, in place of semi-yearly.

Honby and New Era School buildings are a great expense in maintenance and are far below the standards set for rural school buildings. This is another excellent reason why both should consolidate with Newhall, which has a modern plant.

Other comment on the advantages of consolidation appearing needless, the following are the two alternative plans that the writer feels could be worked out successfully in this region, particularly the first one:

1. From Map I it is seen Honby and Saugus Districts

adjoin Newhall District on the south and New Era District adjoins Honby District on the south and Saugus on the west. Saugus School is but two miles by paved road from Newhall School. Honby School is four and a half miles by paved road from Saugus School. New Era School is but four and a half miles from Saugus School by a fair dirt road. This causes Honby and New Era Schools each to be six and a half miles from the Newhall School. The children living farthest beyond Honby and New Era Schools would not be more than nine or ten miles from Newhall School. While the road to New Era is not an excellent one, there would be but ten to twelve children to transport over it.

Since Newhall School now has classrooms to accommodate approximately double its present enrollment, it is recommended Honby, New Era, and Saugus Districts unionize or consolidate with Newhall District.

Castaic Union District is not in the recommendation to consolidate with the Newhall District because it is ten miles from the Newhall School to the Castaic Union School. Children are transported as much as seven miles beyond the Castaic Union School, which would necessitate transporting them seventeen miles to the Newhall School, if Castaic Union should also consolidate with Newhall. On account of this great distance to transport first grade children, it is recommended that Castaic Union remain a separate district unto itself.

2. The other alternative is that Honby and New Era

Districts consolidate with Saugus.

The second alternative has been suggested for there has been a little agitation for this move in at least two of these three districts that would be effected by the consolidation. In the spring of 1932 the writer brought the idea of Honby District contracting with Newhall District to send their children to the Newhall School for a year before members of both school boards. This was done with the idea of allowing the Honby patrons to have their children in the Newhall School for a year to let them decide if a larger school would be of greater advantage to their children than their one room school. The Honby Board would not consider the proposition seriously at that time.

If plan one were put into effect, it would give Newhall a school of ten teachers including the kindergarten teacher. Under existing conditions there are twelve teachers including the Newhall kindergarten teacher in the four separate school districts. Under consolidation the salaries of two additional teachers and the maintenance of the three small buildings could be applied to the cost of transportation. It is realized state and county money allotted to teachers' salaries cannot be used for anything but that to which it is allotted, but the amount allotted by the state and county for salaries is not sufficient to pay salaries, hence additional money for teachers' salaries must be taken from other funds. For that reason the amount paid for salaries to two teachers could be allotted to transportation. To consolidate under this plan would not only have greater advantages for the three small

districts but also for Newhall District.

To consolidate under plan two, Saugus School would have but a school of three teachers, where under existing conditions Saugus has two teachers and New Era and Honby Schools have one each. The distance to transport children from New Era and Honby Districts would be only two miles less under plan two than under plan one. But little could be gained for any of the three districts in advantages if this plan were put into execution.

If a plan of consolidation were put into operation, it is possible Newhall and vicinity could secure a four year junior high school before Los Angeles City could be prevailed upon to give this area of which the survey is made a full four year high school.

Final conclusions. The problem was to make a comprehensive survey of Newhall and contiguous elementary school districts, which are a part of the Los Angeles City High School District, but independent in the elementary field. This problem was undertaken because many patrons of the high school living in these elementary districts have frequently stated they were greatly in favor of a small high school being established in Newhall or vicinity, as this would avoid such long bus transportation for their children.

Any rapid addition to the present population of Newhall and vicinity will probably have to be made in some unseen manner. This area may increase in population through

the influence of urban centers extending farther to the north.

In the meager way of arriving at the population in the various districts, Newhall alone shows a slow but steady growth. The lack of growth in the other districts may be attributed partially to lack of rainfall, the San Francisco Dam disaster in the Saugus District in 1928, and curtailing of oil production in Felton District.

The school buildings appear to be conveniently located in all the districts. In all probability little or no additional room will be needed in the near future to care for any growth in school enrollment, with the exception of Honby School, for its building is filled beyond capacity at the present time.

The elementary average daily attendance and the assessed valuation of these districts combined are much below that required by state law to form a high school district from an existing one. Even if the law permitted forming a high school district in this area, it would prove too expensive for the community to support.

In total receipts of school money, Newhall alone has increased gradually from year to year, which is on account of its gradual growth in average daily attendance. The other districts total receipts have remained practically the same from year to year.

When computing tax rates on true valuation rather than on assessed valuation, school costs are considerably less than they appear to be.

Newhall and Castaic Union are the only districts that have built plants or have made additions to existing ones within the past five years. Castaic's capital outlay per pupil in average daily attendance is more than twice as much as that of Newhall, but no higher than larger schools for a like period.

Newhall has the largest amount of outstanding bonds and has more nearly reached its bonding capacity than has Castaic Union. However, Newhall's plant can care for future growth more advantageously than can Castaic's. The other districts have no outstanding bonds.

The larger plants of Newhall and Castaic and their greater transportation problems in recent years have caused their current expenses to increase. This item should be reduced with more careful management of school finances and decreasing the number of children transported short distances.

The buildings of Honby, Castaic, and Saugus are poorly located, since they are on main traveled highways, and the building of Saugus is very close to a main line railroad. The other districts' buildings are well located.

Through the use of the Strayer-Englehardt Score Card it was found the buildings of Felton, Honby, and New Era are unfit for school use. The other three buildings have favorable scores, Saugus having the lowest and Newhall the highest.

Since Honby and New Era are both in need of new buildings, and each is but six and one half miles from Newhall,

it is recommended both unionize or consolidate with Newhall. With Saugus but two miles from Newhall and having such a poor location and an inexpensive plant, it is recommended that district also unionize or consolidate with Newhall.

In the study of pupil progress, but few pupils in these districts have made more than normal progress. There has been but little non-promotion during the past few years in most of these schools.

The educational achievement as disclosed by standard tests shows a very great spread in grade standings in the same grade. This may be partially the result of low mental ratings of many pupils and practically all children in these schools being promoted yearly.

In comparing the mental ages through intelligence tests and the achievement grades through educational tests, it is found Castaic Union is working more nearly up to its mental capacity than any of the other schools, with the possible exception of the three pupils in Felton School.

The Los Angeles County Course of Study is quite vague in suggested time allotments for subjects, while the California Curriculum Study is very specific, thus forming quite a contrast. The former allows the teacher to consider children more and subject matter less, while the latter lays the greater stress on subject matter and little or none on children.

In the administration of the schools in the survey, the local boards of trustees have certain definite administrative

duties, and the office of the county superintendent of schools has others, each being enumerated in the State School Code.

Budget requests by some of these boards of trustees are not as conservative as they should be. The amount of insurance carried by some of the boards of trustees on the school buildings is more than the districts would be able to collect in case of destruction of the school property by fire.

Final reasons for recommending the consolidation of all these schools with the exception of Castaic Union are that it would facilitate administration problems and secure better local supervision.

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