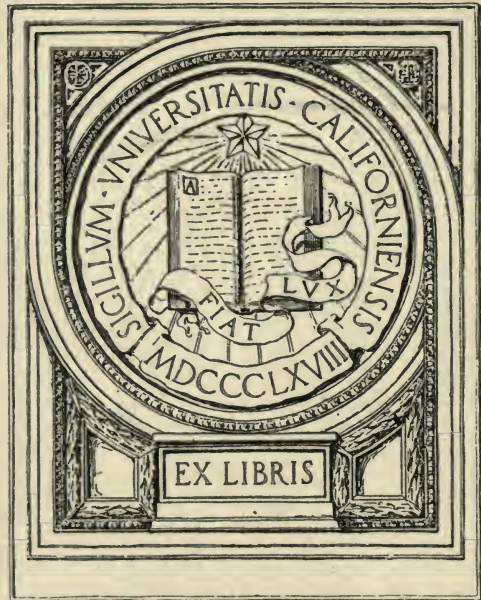


UC-NRLF

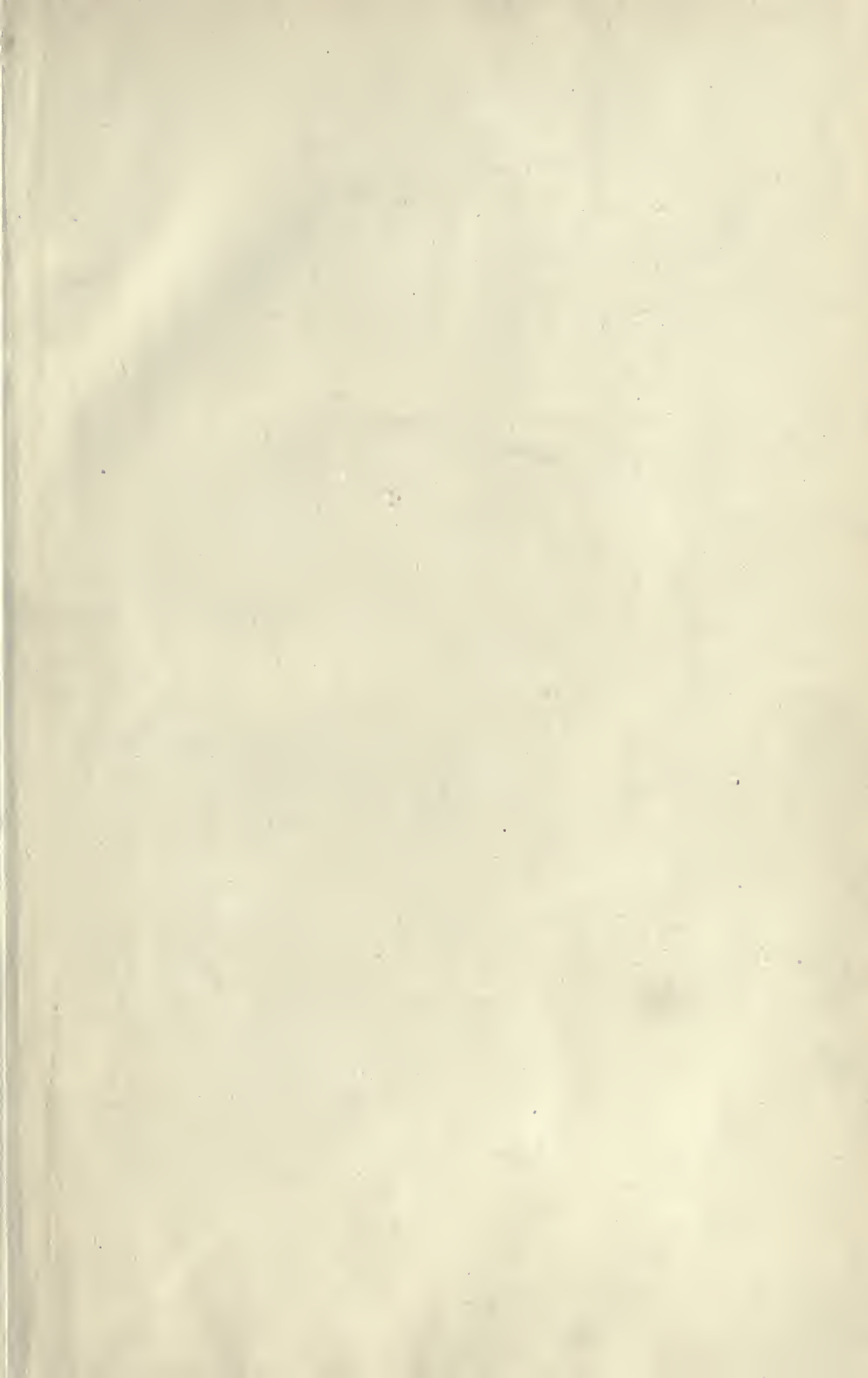


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Department of  
Public Instruction

Oakland, California.



The Board of Education wishes to inform the patrons of the Oakland public schools that the following courses are offered in certain schools:

FOREIGN LANGUAGES IN ELEMENTARY SCHOOLS.

Free instruction in foreign languages will be given in the seventh and eighth grades of the following schools next term beginning July 31, 1916:

University School, 48th and Webster Sts.: French, German, Spanish, and Latin.

Intermediate School, 12th Ave. and E. 19th St.: Latin and German.

Vocational School, 12th and Market Sts.: Spanish.

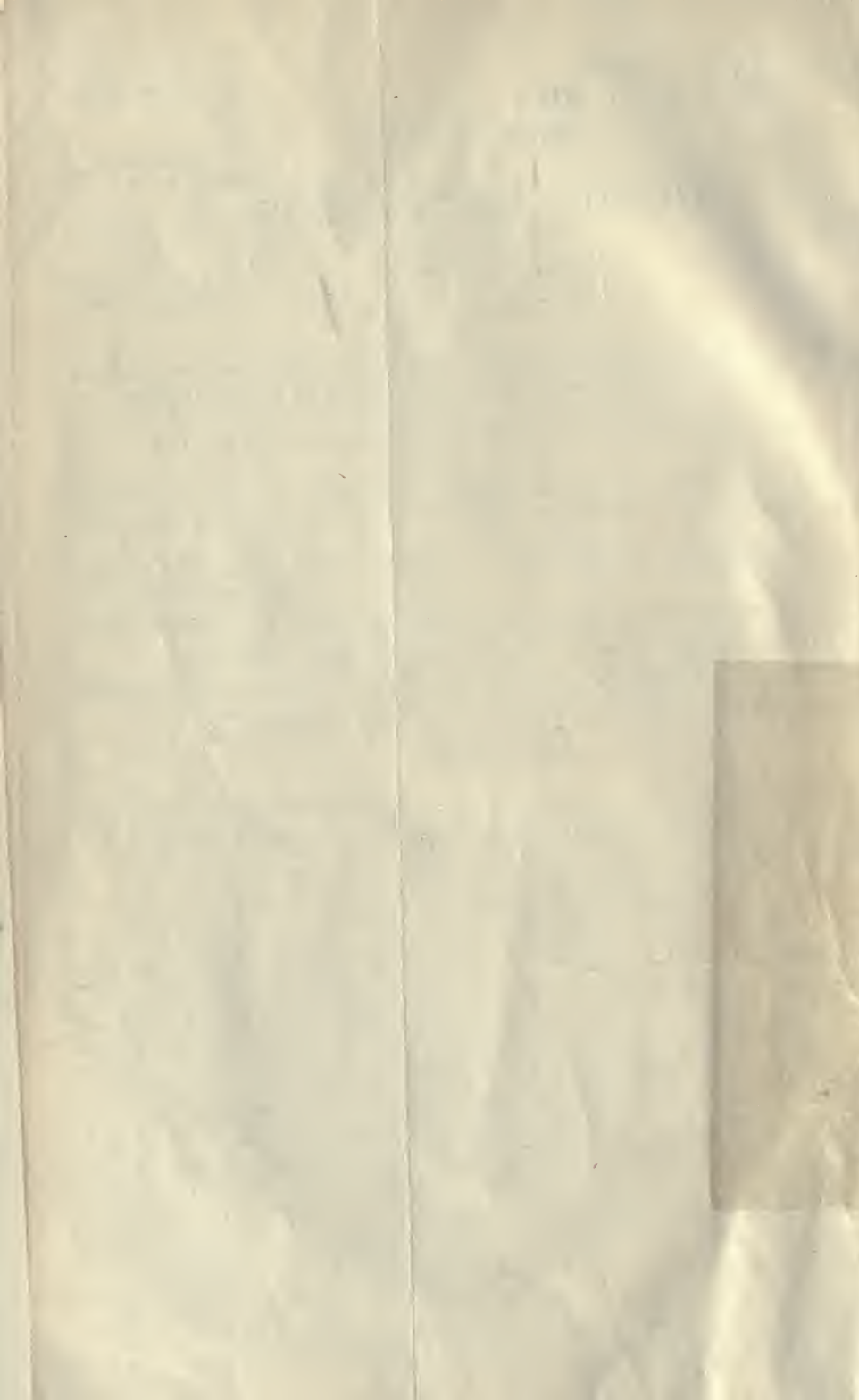
Pupils who complete satisfactorily two years' work in a foreign language in the grammar school are given one unit of high school credit.

ORCHESTRA.

Free instruction in orchestral instruments will be given during the coming term in the seventh and eighth grades of the Intermediate, Vocational, and University Schools.

THE VOCATIONAL SCHOOL.

Pupils who have completed the sixth grade will be admitted to this school, the purpose of which is to provide preparatory trade and related academic instruction for boys and girls who desire to prepare for practical wage-earning occupations and to continue at the same time a general education. Practical shop instruction will be given to those boys who desire to learn printing or some branch of the machinery or building trades, as machine shop practice, pattern making, blacksmithing, forging, carpentry, cabinet making, electrical construction, and such principles of constructive design as apply to the trades taught, and to girls who desire training for the occupations of dressmaking and millinery. A regular student who has selected his trade will spend half of his time in the shop upon work which directly prepares for his occupation, and the other half upon such academic subjects as English, history, arithmetic, geography, drawing, and music. By omitting shop work, an opportunity is offered mature pupils to enroll in two different classes and complete two grades in one term.





DEPARTMENT OF  
PUBLIC INSTRUCTION  
OAKLAND CALIFORNIA

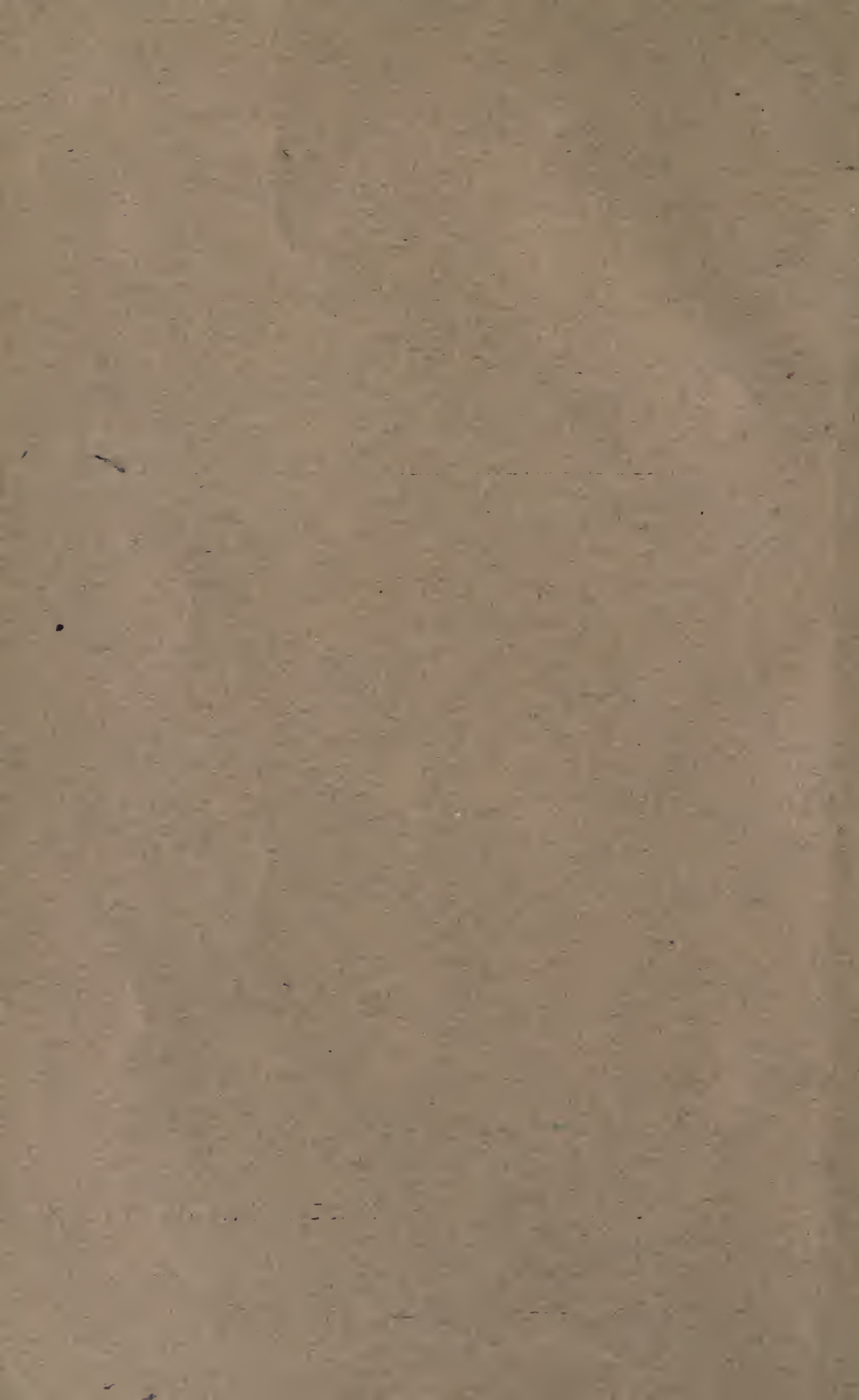
SCHOOL DIRECTORY

1916-1917

BOARD OF EDUCATION BULLETIN

NUMBER 2

NOVEMBER, 1916



BOARD OF EDUCATION  
OF THE  
CITY OF OAKLAND

City Hall, Fourteenth and Washington Streets.

OFFICERS

MISS ANNIE F. BROWN, President.

MR. D. W. PRATT, Secretary.

MEMBERS OF THE BOARD OF EDUCATION.

	Address.	Telephone.
MR. LOUIS ABER,	Hotel St. Mark, Oakland.....	Oakland 6000
MR. HARRY L. BOYLE,	978 75th Ave., Oakland..	Elmhurst 718
MISS ANNIE F. BROWN,	600 29th St., Oakland.....	
MR. F. B. COOK,	1831 10th Ave., Oakland.....	Merritt 2511
MR. W. H. EDWARDS,	820 54th St., Oakland....	Piedmont 6896
	Business: City Hall, Oakland.....	Lakeside 3600
DR. A. S. KELLY,	First Natl. Bank Bldg., Oakland..	Oakland 442
MRS. H. E. HAWES,	1522 23d Ave., Oakland.....	Fruitvale 2008

## HEALTH DEVELOPMENT AND SANITATION.

Name	Position	Address
Foster, Dr. N. K.....	Director .....	609 Santa Ray Avenue.
Wythe, Dr. Margaret.....	Assistant to Director .....	4247 Terrace Street.
Morken, Miss Jean M.....	Nurse .....	3531 Grove Street.
Hartwick, Miss Ethel.....	Nurse .....	668 57th Street.
Hughes, Miss Helen H.....	Nurse .....	295 23rd Street.
Connelly, Miss Velma.....	Nurse .....	476 Wickson Street.
Lyons, Miss Jane .....	Nurse .....	6444 Hillegass Avenue.
Meyer, Miss Marguerite.....	Nurse .....	525 Oakland Avenue.
Cole, Miss Clare A.....	Nurse .....	3531 Grove Street.
Pallady, Miss Lucile .....	Nurse .....	593 31st Street.

### ATTENDANCE

Shane, Mr. C. N.....	Attendance Officer .....	5719 College Avenue.
Hammond, Mr. William A...	Assistant Attendance Officer.....	3020 Champion Street.

## BUSINESS DEPARTMENT

### EXECUTIVE OFFICES

Pratt, Mr. Dan W.....	Secretary and Business Manager.....	3040 Market Street.
Yorker, Miss E.....	Assistant Secretary.....	1813 Harrison Street.
Hannaford, Mr. A. L.....	Chief Clerk .....	3529 West Street.

### FINANCE

Garrett, Mr. J. A.....	Accountant .....	1500 Everett Avenue.
Wickland, Mr. A. M.....	Bookkeeper .....	930 East 14th Street.
Wentworth, Miss Garland W.	Bill Clerk .....	541 28th Street.
Hughes, Miss Marjorie D.	Stenographer .....	901 59th Street.

### PURCHASING

Bridgman, Mr. H. W.....	Purchasing Agent .....	1015 Grand Avenue.
Richards, Miss Alice.....	Stenographer .....	165 John Street.

## BUILDINGS AND GROUNDS.

Wilson, Mr. Frank J.....	Superintendent of Buildings, Grounds..	96 Frisbie Street.
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# SCHOOLS HAVING SPECIAL FEATURES AND CENTERS FOR SPECIAL WORK

	Grades	Number of Teachers						Departmental Work	Auditorium	Club Rooms	Band	Orchestras	Bath Rooms	Supervised Playgrounds, No. 1	Supervised Playgrounds, No. 2	Special Classes
		Day Elementary Schools	Kindergarten	Evening Elementary Schools	Day High Schools	Evening High Schools										
Allendale.....	1-8	10.56	1													
Bay.....	1-8	17.48	1				◆									
Beulah.....	1-4	1.00														
Campbell.....	1-4	6.12	1													
Claremont.....	1-8	21.60	1				◆									
Clawson.....	1-8	16.32	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cleveland.....	1-6	4.16	.43				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Cole.....	1-8	19.60					◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Dewey.....	1-8	10.52	1				◆									
Durant.....	1-8	25.00	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Elmhurst.....	1-8	20.68	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Emerson.....	1-8	24.40	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Franklin.....	1-6	20.32	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
*Fremont High.....	9-12			1.60	51.00	2.80	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Frick.....	1-6	5.16					◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Fruitvale.....	1-8	11.42	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Garfield.....	1-8	23.80	1	2.00			◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Grant.....	1-8	24.00					◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Harrison.....	1-6	4.08	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Hawthorne.....	1-8	15.72	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Highland.....	1-8	15.52	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Intermediate.....	7-8	19.48					◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Jefferson.....	1-8	18.68	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Lafayette.....	1-6	25.72	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Lakeview.....	1-8	20.20					◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Laurel.....	1-6	4.16	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Lazear.....	1-6	12.24	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Lincoln.....	1-8	26.00					◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Lockwood.....	1-8	17.56	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Longfellow.....	1-8	18.66	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Manzanita.....	1-6	8.70	.57				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
McChesney.....	1-6	12.32	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
McChesney An'x.....	1-2	2.00					◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Melrose.....	1-8	11.72	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Melrose Heights.....	1-8	14.52	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
*Oakland High.....	9-12			7.60	36.63	10.40	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Peralta.....	1-4	4.00					◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Piedmont.....	1-8	15.60					◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Prescott.....	1-8	24.80	1	2.00			◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Santa Fe.....	1-6	12.06	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Sequoia.....	1-7	5.22					◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Stonehurst.....	1-3	1.00					◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
*Technical High.....	9-12			86.02	10.00		◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Tompkins.....	1-6	11.24	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
*University High.....	7-12	4.50		13.65			◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Vocational High.....	7-12	14.89		8.53	1.80		◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Washington.....	1-8	21.68	1				◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
West Oak. Kgtm.....	K		1													
<b>Total.....</b>		<b>624.41</b>	<b>30.00</b>	<b>13.20</b>	<b>195.83</b>	<b>25.00</b>	<b>24</b>	<b>20</b>	<b>18</b>	<b>20</b>	<b>26</b>	<b>17</b>	<b>10</b>	<b>22</b>	<b>6</b>	<b>6</b>

Total Number of Principals and Teachers..... 888.44  
 \*The Number of Day Teachers includes pianists and librarians, but not clerks.

## ALLENDALE SCHOOL.

Penniman and 38th Aves. (E. 14th St. car marked "38th Ave." at 12th and Broadway to Penniman Ave. One block west.)

- Allison, Mr. Benjamin F.**, Principal, 657 Vernon St., Oakland.  
**Peebles, Miss Edith A.** (8B, 8A), 2241 9th Ave., Oakland.  
**Baldwin, Miss S. Florence** (7B, 7A), 1205 1st Ave., Oakland.  
**Leasure, Miss Jessie A.** (6B, 6A), Kenwood Apts., 24th and Telegraph Ave., Oakland.  
**Houghton, Miss Leora** (5B, 5A), 1050 Elbert St., Oakland.  
**Roberts, Miss Carrie E.** (4B, 4A), Hotel Royal, 20th and San Pablo Ave., Oakland.  
**Mosher, Miss Gertrude L.** (4A, 3B), 4064 Agua Vista St., Oakland.  
**Glendenning, Miss Clara** (3A, 2B), 160 Lake St., Oakland.  
**Collier, Miss Marguerite** (2A, 1B), 178 10th St., Oakland.  
**Brunner, Miss Elsie F.** (1A), 823 53d St., Oakland.  
**Murphy, Miss Margaret** (Kgn.), 1231 Brush St., Oakland.  
**Cunningham, Miss Olivia** (H. E.), 6/25 time, 1109 Oak Street, Oakland.  
**Hunt, Mr. George J.** (Sub.), (M. T.), 8/25 time, 384 35th Street, Oakland.

**Putnam, Mr. William** (Custodian), 3715 Suter St., Oakland.

## BAY SCHOOL.

Sixty-second St. and San Pablo Ave. (San Pablo Ave. car at 14th St. and San Pablo Ave. to 62nd St.)

- Sackett, Mr. George L.**, Principal, 90 Montell St., Oakland.  
Departmental teaching in 6B, 7th, and 8th grades:  
**Heydorn, Mrs. Alice M.** (Music, English), 2201 Harrison St., Oakland.  
**Clarke, Miss Katharine B.** (Drawing), 3/5 time, 6538 Dana St., Oakland.  
**Bowers, Miss Blanche** (English), 1702 13th Ave., Oakland.  
**Shaw, Miss M. J.** (Arithmetic, Physical Training), 2221 Dwight Way, Berkeley.  
**Grubb, Miss Olive M.** (Geography, History, Civics), 2214 Ashby Ave., Berkeley.  
**Rufener, Miss Mary** (Home Economics), 2/5 time, Hotel Sutter, Oakland.  
**Cahill, Miss Clara** (Manual Training), 12/25 time, Madison Park Apts., Oakland.

- 
- Mulligan, Miss Kathleen** (6A), 1832 Vine St., Berkeley.  
**Carroll, Miss Anna M.** (5B), 801 Sutter St., San Francisco.  
**Reidy, Miss Florence M.** (5A), 332 Lenox Ave., Oakland.  
**Kottinger, Miss Rosalind** (4B), 1526 Webster St., Oakland.  
**Carroll, Miss Mary J.** (4A), 540 28th St., Oakland.  
**Dunne, Miss Isabel G.** (3B), 1259 14th Ave., San Francisco.  
**Eubank, Mrs. Grace E.** (3A), 1027 59th St., Oakland.  
**Chapman, Miss Bess** (2B), 185 15th St., Oakland.  
**Fitzmaurice, Miss Daisy** (2A), 713 15th St., Oakland.  
**Morrell, Miss Mabel L.** (1B), 729 Jones St., San Francisco.

Andrews, Miss Rossa M. (1A), 2427 Washington St., San Francisco.

Schell, Miss Pearl (Kgtn.), 2936 Linden Ave., Berkeley.

Sturgeon, Mr. A. J. (Custodian), 1066 56th St., Oakland.

### BEULAH SCHOOL.

Tompkins and Orchard Sts. (Mills College car at 13th and Broadway to Beulah Station. West about four blocks.)

Warburton, Mrs. A. B. (Sub.), (4A-1A), Route 1, Box 244, Oakland.

Morgan, Mrs. Julia (Custodian), Route 1, Box 266, Oakland.

### CAMPBELL SCHOOL.

Fourth and Grove Sts. (Water St. car south at 14th and Broadway to 4th St. West about four blocks.)

Campbell, Miss Mary M., Principal (3A), 540 28th St., Oakland.

Cooper, Miss Bessy (4B-Ungraded), 1805 8th Ave., Oakland.

Knight, Miss Mary (4A, 3B), 3800 Market St., Oakland.

Scanlan, Mrs. Ida C. (2B, 2A), 2111 Webster St., Oakland.

Storrie, Miss Sallie H. (1B), 1032 East 19th St., Oakland.

Hunt, Miss Agnes C. (1A), 1222 10th Ave., Oakland.

Reedy, Mrs. Addine (Kgtn.), 528 30th St., Oakland.

Shea, Miss Marie (Sub.), (H. E.), 3/25 time, 2217 Fulton St., Berkeley.

Coughlin, Mrs. M. F. (Custodian), Campbell School, Oakland.

### CLAREMONT SCHOOL.

College Ave. and Birch Court. (College Ave. car north at 14th and Broadway to Birch Court.)

Vergon, Mr. J. A., Principal, Hotel Bancroft, Berkeley.

Departmental teaching in 6B, 7th, and 8th Grades:

Darby, Miss Mary A. (Grammar, Music), 648 57th St., Oakland.

Howard, Miss Margaret (Arithmetic, Physical Training), 5586 Lawton Ave., Oakland.

Robison, Miss May E. (Reading, Composition), 397 Adams St., Oakland.

Morin, Miss Grace (Composition, Drawing), 3/5 time, 2422 Durant Ave., Berkeley.

Treadwell, Miss M. Albertina (History, Geography, Civics), 411 Perkins St., Oakland.

Waterman, Miss Edith (Home Economics), 2/5 time, 2441 Haste St., Berkeley.

Bernhard, Mr. H. H. (Manual Training), 2/5 time, 1818 Prince St., Berkeley.

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Gordon, Miss Olive H. (6A), 5602 Taft Ave., Oakland.

Archibald, Miss Edith M. (6A, 5B), 604 56th St., Oakland.

Van Hagen, Miss Sayler (5A), 246 41st St., Oakland.

Bartlett, Miss Ethel (4B, 4A), 2820 Derby St., Berkeley.

Cooper, Miss Alice B. (4B, 4A), 2247 Stuart St., Berkeley.

Dixon, Miss Florence (4A), 3020 College Ave., Berkeley.

Thomas, Miss C. E. (3B), Berkeley Apts., Berkeley.

Megahan, Miss Mabel (3B, 3A), 5830 Birch Court, Oakland.



## CLAREMONT SCHOOL—Cont'd

Brittan, Mrs. Alice K. (3A), 5661 Keith Ave., Oakland.  
Reeve, Miss E. (2B), 2431 College Ave., Berkeley.  
Taylor, Miss Eva M. (2A), 2313 Warring St., Berkeley.  
Wagner, Miss Carrie D. (2A), 5464 College Ave., Oakland.  
McClellan, Miss Ruth (2A, 1B), 2834 Grove St., Berkeley.  
Venus, Miss Norma Lois (1A), 1904 Franklin St., Oakland.  
Poole, Miss Myrtle (1A), 5216 Desmond St., Oakland.  
Ruch, Miss Isabel (Kgtn.), 4820 Clark St., Oakland.  
Mottram, Mr. Ernest (M. T.), 1/5 time, 355 Fair Oaks St., San Francisco.  
McGary, Mr. H. H. (Custodian), 5345 Locksley Ave., Oakland.

## CLAWSON SCHOOL.

Thirty-second and Magnolia Streets. (Hollis St. car going west on 14th St. to Magnolia St.)

Colton, Mr. Albert S., Principal, 4314 Gilbert St., Oakland.  
Egger, Miss J. B. (8B, 8A), 440 Geary St., San Francisco.  
McCarty, Mrs. Alice (H. E. 7B, 7A), 680 14th St., Oakland.  
Nash, Miss Katharine F. (6B, 6A), 835 O'Farrell St., San Francisco.  
Reed, Miss Carolyn E. (5B), 842 19th St., Oakland.  
McGraw, Miss R. Geraldine (5A), 929 Chestnut St., Oakland.  
Feibush, Miss Bertha (4B), 557 33d St., Oakland.  
Keilbar, Miss Ida M. (4A), 964 Broadway, San Francisco.  
Wales, Miss H. Margaret (3B), 2093 Harrison St., Oakland.  
Montgomery, Miss Elizabeth S. (3A), 540 28th St., Oakland.  
Marcus, Miss Elizabeth (2B), 482 40th St., Oakland.  
Robins, Miss H. A. (2A), 2031 Bancroft Way, Berkeley.  
Burgess, Miss Marie L. (2A), 366 Jayne Ave., Oakland.  
Cook, Miss De Esta (1B), 5631 Shafter Ave., Oakland.  
Chambers, Miss Martha (1B, 1A), 1200 Taylor St., San Francisco.  
Smyth, Miss Flora R. (1A), 607 Apgar St., Oakland.  
Hamilton, Miss Ruth (Kgtn.), 2420 Ellsworth St., Berkeley.  
Horridge, Mr. F. (M. T.), 8/25 time, 1821 Berkeley Way, Berkeley.  
Eakin, Mr. L. E. (Custodian), 2026 E. 16th St., Oakland.

## CLEVELAND SCHOOL.

Cleveland and Athol Aves. (Park Blvd. car at 13th and Broadway to Cleveland Ave. West about three blocks.)

Morris, Miss K. C., Principal (2A, 1B, 1A), 544 28th St., Oakland.  
Ferrell, Miss Sarah (6B, 6A, 5B), 1515 Webster St., Oakland.  
Dunn, Miss Grace (5A, 4B, 4A), 1515 Webster St., Oakland.  
Rawson, Mrs. C. F. (3B, 3A, 2B), 693 35th St., Oakland.  
Mack, Miss Lucy (Kgtn.), 3/7 time, 525 E. 21st St., Oakland.  
Cahill, Miss Clara (M. T.), 2/25 time, Madison Park Apts., Oakland.

Manual Training is given in the McChesney School.

Thompson, Miss Jessie (Orchestra), 2/25 time, 2140 27th Ave., Oakland.  
Hallowell, Mr. R. J. (Custodian), 6609 Whitney St., Oakland.



## COLE SCHOOL

Tenth and Union Sts. (12th St. car west at 12th and Broadway to Union St. South about one block.)

**Meads, Mr. S. P.**, Principal, 2510 College Ave., Berkeley.

Departmental teaching in 7th and 8th grades:

**Stewart, Miss Alice** (History, Geography, Civics), 148 10th St., Oakland.

**Rector, Miss Mary E.** (English), 3021 Telegraph Ave., Berkeley.

**Donnelly, Miss Mary G.** (Arithmetic), 219 Highland Ave., Piedmont.

**Thompson, Miss Ettie L.** (English), 463 28th St., Oakland.

**Bradley, Miss Beth** (Sub.), (Music), 3/5 time, 2958 Telegraph Ave., Oakland.

**McCarty, Miss Maude** (Home Economics), 2/5 time, 112 11th St., Oakland.

**Wood, Mr. Beverly W.** (Manual Training), 3/5 time, 3019 Peralta Ave., Oakland.

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**Boyle, Miss Jennie H. G.** (6B), 314 Hobart St., Oakland.

**Givens, Miss Helen M.** (6A), 476 29th St., Oakland.

**Kelsey, Mrs. Eula L.** (5B), 1030 Market St., Oakland.

**McDonald, Miss Margaret** (5A), 1450 Alice St., Oakland.

**Wildes, Miss Maude** (4B, 4A), 4002 Ardley Ave., Oakland.

**Crawford, Miss May C.** (4A), 2234 Seminary Ave., Oakland.

**Fernald, Miss Gay** (3B), 650 Post St., San Francisco.

**Baker, Miss Martha D.** (3A), 331 34th St., Oakland.

**Morison, Miss Isabella F.** (2B), 261 Lester Ave., Oakland.

**McClure, Miss Martha R.** (2A), 2230 Fulton St., Berkeley.

**Pullman, Miss M. S.** (2A), 2520 9th Ave., Oakland.

**Trask, Miss Alice M.** (1B, 1A), 308 Hobart St., Oakland.

**Russell, Miss Ada** (1A), 1747 Walnut St., Berkeley.

**Staehle, Mr. Walter** (Custodian), 5339 Locksley Ave., Oakland.

## DEWEY SCHOOL.

Thirty-seventh Ave. and E. 12th St. (E. 14th St. car at 13th and Broadway to 37th Ave. One block south.)

**Dyer, Mr. E. F.**, Principal, 2119 Kittredge St., Berkeley.

**Nelson, Miss Lena M.** (8B, 8A), 1421 Market St., Oakland.

**McGrath, Miss Sarah C.** (7B, 7A), 4110 Agua Vista St., Oakland.

**Farrell, Miss Elizabeth** (6B, 6A), 24th and Valdez Sts., Oakland.

**Millzner, Mrs. Marie** (5B, 5A), 3002 E. 17th St., Oakland.

**Goehringer, Miss Olga** (4B), 429 Orange St., Oakland.

**Bromley, Miss Marion** (4A, 3B), 435 28th St., Oakland.

**Smith, Mrs. Verna T.** (Sub.), (3A, 2B), 549 35th St., Oakland.

**Cornell, Mrs. Elizabeth** (Sub.), (2A, 1B), 2015 13th Ave., Oakland.

**Clark, Miss Augustina M.** (1A), 1817 Alice St., Oakland.

**Work, Miss Gertrude** (Kgtn.), 4617 17th St., San Francisco.

**Shea, Miss Marie** (Sub.), (H. E.), 1/5 time, 2217 Fulton St., Berkeley.

**Nevison, Mr. Beverly** (M. T.), 8/25 time, 656 60th St., Oakland.

**Eckler, Mr. A. C.** (Custodian), 2515 E. 27th St., Oakland.

## DURANT SCHOOL.

Twenty-eighth and West Sts. (Grove St. car north at 14th and Washington Sts. to 28th St. About one block west.)

**Dunbar, Mr. S. G. S.,** Principal, 395 Hawthorne Ave., Oakland.

### Intermediate Department

Cooke, Miss A. E. H. (History, Civics, Geography), 532 25th St., Oakland.

Poore, Miss Shirley (Drawing, Arithmetic, Spelling), 1911 Vine St., Berkeley.

Greenman, Mrs. E. E. (Literature, Arithmetic), 1431 6th Ave., Oakland.

Parker, Mrs. E. McF. (English), 1202 Wellington Ave., Oakland.

Sutherland, Miss M. C. (English, Arithmetic), 2605 Ashby Ave., Berkeley.

Sorrenson, Miss H. B. (History, Geography), 464 29th St., Oakland.

Gregg, Miss G. D. (Arithmetic), 3505 Telegraph Ave., Oakland.

Marshall, Miss Pauline (Composition, Grammar), 3505 Telegraph Ave., Oakland.

Gibbs, Miss Ethel L. (Music), 2417 Telegraph Ave., Oakland.

Watt, Miss J. C. (Home Economics), 2927 Florence St., Berkeley.

Nason, Mr. Byron G. (Manual Training), 1815 Pleasant Valley Ave., Oakland.

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Struckman, Mrs. F. I. (Ungraded), 1521 Castro St., Oakland.

Rich, Mrs. K. C. (4B), 435 Staten Ave., Oakland.

Melquiond, Mrs. Rellie (4B, 4A French), 1807 Russell St., Berkeley.

Metzger, Miss E. E. (4A), 3505 Telegraph Ave., Oakland.

Floyd, Miss S. G. (3B), 1556 Broadway, Oakland.

Mills, Miss B. (3A), 1835 8th Ave., Oakland.

Elftman, Miss J. (Sub.), (3A), 1615 83d Ave., Oakland.

O'Rourke, Miss R. A. (2B), 116 Lake St., Oakland.

Foster Miss K. B. (2A) 2717 Hillegass Ave., Berkeley.

Story, Miss Mary (2A), 1504 Chestnut St., Oakland.

Maddocks, Mrs. C. E. (1B), 642 36th St., Oakland.

O'Neill, Miss F. (1A), 2106 38th Ave., Oakland.

Maggard, Miss Madge (1A), 540 28th St., Oakland.

McFarland, Miss Winnie (Kgtn.), 1202 Wellington Ave., Oakland.

Campbell, Mr. Ed. M. A. (Custodian), 688 28th St., Oakland.

## ELMHURST SCHOOL.

Cherry St. and 98th Ave. (E. 14th St. car marked "Elmhurst" east at 13th and Broadway to 98th Ave. Three blocks north.)

**Crane, Mr. Clarence B.,** Principal, 763 Estudillo Ave., San Leandro.

Departmental teaching in 6B, 7th, and 8th grades:

Watkins, Miss Ethelinda S. (Music, English), 2102 E. 17th St., Oakland.

Gilfillan, Miss M. Jessie (Arithmetic), Hotel Harrison, Oakland.

Bertola, Miss Annie (English), 1728 9th St., Alameda.

Morin, Miss Grace (Drawing), 2/5 time, 2422 Durant Ave., Berkeley.  
Hensley, Mr. George L. (History, Geography), Y. M. C. A., Oakland.  
Buckley, Miss Elizabeth (Home Economics), 3/5 time, 563 E. 14th St., San Leandro.  
Gillies, Mr. James (Manual Training), 17/25 time, 1448 Benton St., Alameda.

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Dewing, Miss Sarah J. (6A), 1741 10th Ave., Oakland.  
Bowman, Miss Frances (5B), 1557 Webster St., Oakland.  
Sutton, Miss Helen (5A), Hotel Sutter, Oakland.  
Fratris, Mrs. Sue L. (5A), 204 Wayne Ave., Oakland.  
Stansbury, Mrs. Ethel D. (4B), 1525 Oak St., Oakland.  
Curtess, Miss Mary J. (3B), Hotel Sutter, Oakland.  
Ardley, Miss Marcia (4A), 950 Pine St., San Francisco.  
Weymouth, Miss Myrta W. (3B, 3A), 1360 Broadway, Alameda.  
Evans, Miss Audrey (3B, 3A), 7830 Alder St., Oakland.  
Brown, Miss Isabel L. (2B, 2A), 2621 E. 16th St., Oakland.  
Loring, Miss Veronica (2B, 2A), Del Mar Inn, Oakland.  
Drewry, Miss Ida (2B, 1B), 448 Joaquin St., San Leandro.  
Drury, Miss Louise (1A); 1515 Webster St., Oakland.  
Mark, Miss Salome (1A), 931 E. 24th St., Oakland.  
Cockerton, Miss Emily (Kgtn.), 1061 Walker Ave., Oakland.  
Maxwell, Mr. E. G. (Custodian), 9532 Plymouth St., Oakland.

### EMERSON SCHOOL.

Forty-ninth St. and Shafter Ave. (College Ave. car north at 14th and Broadway to 49th St. West about two blocks.)

**Wheeler, Mr. R. S.**, Principal, 599 Scenic Ave., Piedmont.

Departmental teaching in 6B, 7th, and 8th grades:

Carden, Miss Georgiana (Arithmetic), Berkeley Inn, Berkeley.

King, Miss Anna V. (Geography, History), Berkshire Apts., Berkeley.

Stedman, Miss Blanche (Music, Drawing), 480 Hawthorne Ave., Oakland.

Wilson, Miss Maud E. (English), 1022 Filbert St., Oakland.

Bruce, Miss Barbara (English), 116 Divisadero St., San Francisco.

Garrett, Mr. J. H. (Manual Training), 3/5 time, 2232 E. 22d St., Oakland.

Kilgo, Miss Alice (Home Economics), 2/5 time, 128 Laguna St., San Francisco.

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Rider, Miss Irma (6A), 3710 Leighton St., Oakland.

Disbrow, Miss E. Mercedes (6A, 5B), 2328 Roosevelt Ave., Berkeley.

Hoag, Miss Attai (5B), 1076 10th St., Oakland.

Burton, Miss Helen (5A), 391 Adams St., Oakland.

Beeler, Mrs. Lulu G. (5A, 4B), 4294 Montgomery St., Oakland.

Ruhl, Miss Elsie C. (4B, 4A), 5470 Manila Ave., Oakland.

Pratt, Miss Hollis (4A, 3B), 5476 Kales Ave., Oakland.



### EMERSON SCHOOL—Cont'd

- Riley, Miss Mary E. (4A, 3B), 4130 San Pablo Ave., Oakland.  
Johnson, Miss Selma L. (3B), 144 Grand Ave., Oakland.  
Hilling, Miss Adelaide G. (3A), 1530 Harrison St., Oakland.  
Cassiday, Miss M. B. (3A), 1515 Webster St., Oakland.  
McConnell, Miss Ethel (2B), 2719 Woolsey St., Berkeley.  
De La Mater, Miss Lou (2A), 466 Santa Clara Ave., Oakland.  
Craig, Miss Elsie E. (2A, 1B), 2323 Ward St., Berkeley.  
Sullivan, Miss M. A. (1B), 609 36th St., Oakland.  
Barnes, Miss May (1A), 5362 Miles Ave., Oakland.  
Harrington, Miss Theresa F. (1A), 922 Adeline St., Oakland.  
Mason, Miss Mary I. (Kgtn.), Hotel Carlton, Berkeley.  
Humphrey, Mr. Albert M. (Band, Orchestra), 2/5 time, 681 17th St., Oakland.  
Sohler, Mr. Paul (Custodian), 526 44th St., Oakland.

### FRANKLIN SCHOOL.

Ninth Ave. and E. 16th St. (55th Ave. car east at 12th and Broadway to 9th Ave.)

- Edgar, Mr. George A., Principal, 234 Broadmoor St., San Leandro.  
Gallagher, Miss Eunice (6B), 1131 Oak St., Oakland.  
Findley, Miss Nell (6B), 429 Bellevue Ave., Oakland.  
Burrows, Miss C. B. (6A), Peralta Apts., Oakland.  
Cromwell, Mrs. Bertha (6A, 4B), 1117 E. 28th St., Oakland.  
Graham, Mrs. Agnes (5B), 1433 34th Ave., Oakland.  
Maxwell, Miss Lucy (5A), 634 E. 17th St., Oakland.  
Kane, Miss M. A. (4B), 1150 E. 16th St., Oakland.  
Larkin, Mrs. May E. (4B), Peralta Apts., Oakland.  
Flaherty, Miss Julia G. (4A), 1125 Center St., Oakland.  
Gardner, Miss Edna L. (4A, 3B), 1314 8th St., Oakland.  
Smith, Mrs. Mabel (3B), La Grande Apts., Oakland.  
Atterbury, Mrs. Ida (3A), 452 Newton Ave., Oakland.  
Lisbon, Miss Louise (3A), 616 25th St., Oakland.  
Hayes, Miss Annie (2B), 1629 Grove St., Oakland.  
Hankenson, Miss Irene (2A), 817 E. 16th St., Oakland.  
Ayer, Miss Charlotte (2A, 1B), 579 Mira Vista Ave., Oakland.  
Davis, Miss Alice (1B, 1A), 239 E. 16th St., Oakland.  
Ney, Miss Clara (1A), 704 13th St., Oakland.  
Breese, Miss Julia (1A), 129 Sunnyside Ave., Piedmont.  
Marshall, Miss M. E. (Kgtn.), 937 Bay View Ave., Oakland.  
Hornberger, Mr. R. C. (Sub.), (M. T.), 1/5 time, 2120 41st Ave., Oakland.  
Thompson, Miss Jessie (Band, Orchestra), 3/25 time, 2140 27th Ave., Oakland.  
Hagerman, Mr. Samuel J. (Custodian), 1024 39th Ave., Oakland.

### FRICK SCHOOL.

Foothill Blvd. and 62nd Ave. (55th Ave. car east at 12th and Broadway to end of line. Four blocks to 62nd ave.)

- Poore, Miss Margaret I., Principal (6B, 6A, 5B), 5320 Trask Ave., Oakland.  
Hubbard, Miss M. Ellen (5A, 4B, 4A, 3B), 2275 E. 15th St., Oakland.



McCullough, Mrs. Marjorie D. (Sub.), 2411 Oregon St., Berkeley.  
Hall, Miss Myrtle G. (3A, 2B, 2A), 933 Kingston Ave., Oakland.  
Myers, Miss Jane E. (1B, 1A), Peralta Apts., Oakland.  
Hartung, Miss Mary (H. E.), 2/25 time, 1482 Alice St., Oakland.  
Hunt, Mr. George (Sub.), (M. T.), 2/25 time, 384 35th St., Oakland.

Manual Training is given in the Lockwood School.  
Alonzo, Mr. Jose (Custodian), 62nd Ave. and Foothill Blvd., Oakland.

### FRUITVALE SCHOOL.

Boston Ave. and School St. (Dimond car at 13th and Broadway to Boston Ave. South about three blocks.)

Swasey, Miss Alice J., Principal, 2534 10th Ave., Oakland.  
Friedrich, Miss Mary (8B, 8A), 107 13th St., Oakland.  
Sult, Mrs. Jessie (7B H. E.), 3400 Dimond Ave., Oakland.  
Coutolenc, Miss Ida (7A, 6B), 1109 Oak St., Oakland.  
Griffes, Miss Mabel (6A, 5B), 2607 12th Ave., Oakland.  
Huck, Miss Ida (5A, 4B), 2425 Orange Ave., Oakland.  
Mathews, Miss Josephine (3B, 3A), 300 Baker St., San Francisco.  
Rahn, Mrs. Elsie (4B, 4A), 4113 Lyon Ave., Oakland.  
Duhem, Mrs. Augusta (3A, 2B), 1231 High St., Oakland.  
Bridges, Mrs. Harriett (2A, 1B), 3003 Nicol Ave., Oakland.  
Borgeson, Miss Signeld (1A), 905 Willow St., Oakland.  
Kenagy, Miss Nina (Kgtn.), 736 Lakeshore Blvd., Oakland.  
Horridge, Mr. Frederick (M. T.), 9/25 time, 1821 Berkeley Way, Berkeley.  
Hunt, Mr. George J. (Sub.), (M. T.), 3/50 time, 384 35th St., Oakland.

Bowker, Mr. W. C. (Custodian), 1030 Cotton St., Oakland.

### GARFIELD SCHOOL.

Twenty-third Ave. and E. 16th St. (55th Ave. car east at 12th and Broadway to 23rd Ave.)

Hammel, Mr. J. C., Principal, 842 E. 19th St., Oakland.

#### Intermediate Department

Jones, Miss Bessie E. (History, Geography), Marboyd Apts., Oakland.  
Bagot, Miss Vera I. (Arithmetic, Physical Training), 1205 Oxford St., Berkeley.  
McRoy, Mrs. Lois Y. (English), 3031 Lee St., Berkeley.  
Lanyon, Mrs. Beulah E. (Music, English), 1310 Chestnut St., Oakland.  
McCarty, Miss Maude (Home Economics), 3/5 time, 112 11th St., Oakland.  
Bassett, Miss Dorothy (Sub.), (Drawing), 2/5 time, 2031 Berryman St., Berkeley.  
Hornberger, Mr. R. C. (Sub.), (Manual Training), 4/5 time, 2120 41st Ave., Oakland.

Flaherty, Mrs. Belle (6A), 2834 35th Ave., Oakland.  
Collister, Miss Margery (6A, 5B), 3616 Kingsley St., Oakland.  
Hinkson, Miss Hattie (5B), 1144 E. 16th St., Oakland.

## GARFIELD SCHOOL—Cont'd

- Gill, Miss A. W. (5A), 558 Joaquin Ave., San Leandro.  
Eby, Miss S. A. (5A, 4B), 221 Cambridge Ave., San Leandro.  
Wilson, Miss Susie B. (4A), Garfield Apts., Oakland.  
Symons, Miss Augusta K. (4B), 654 13th Ave., Oakland.  
Garrison, Miss Virginia (4A, 3B, Spanish), 4342 Evans Ave.,  
Oakland.  
Phillips, Miss L. U. (3B), 365 Breed Ave., San Leandro.  
Edwards, Miss Carlisle Anne (3A), Hotel Sutter, Oakland.  
Lawless, Mrs. Margaret (3A, 2B), 3945 Greenwood Ave., Oakland.  
Price, Miss Frances C. (2B, 2A), 185 15th St., Oakland.  
Bradley, Miss Margaret (2A), 1616 4th Ave., Oakland.  
Storrie, Miss J. K. (1B), 1032 E. 19th St., Oakland.  
Sorgenfrey, Miss Grace E. (1B), 1327 Leavenworth St., San  
Francisco.  
Campbell, Miss Helen G. (1A), 2488 Peralta Ave., Oakland.  
Schenkofsky, Mrs. May (1A), 1925 23d Ave., Oakland.  
Best, Miss Miriam (Kgtn.), 1944 Franklin St., Oakland.  
Brunjes, Mr. H. P. (Custodian), 2251 E. 17th St., Oakland.

## GRANT SCHOOL.

Twenty-ninth and Broadway. (College Ave. car north at 14th and Broad-  
way to 29th St.)

**Petray, Mr. H. C.**, Principal, 452 Walsworth Ave., Oakland.

### Intermediate Department

- Stewart, Miss Hannah C. (History, Geography), 148 10th St.,  
Oakland.  
Devine, Miss Josephine (English), Hotel St. Mark, Oakland.  
Cromwell, Miss Myrtle G. (English, History, Geography), 1117  
E. 28th St., Oakland.  
Danielwitz, Miss Emma (Arithmetic, Physical Training), 2201  
Harrison St., Oakland.  
Davis, Miss Harriet E. (Drawing), 1131 Oak St., Oakland.  
Worley, Miss Elizabeth (History, English, Geography, Spanish),  
462 36th St., Oakland.  
Wackler, Miss Giralda E. (Home Economics), 59 Montell St.,  
Oakland.  
Smith, Miss Jean E. (Arithmetic, Physical Training), 61 Santa  
Clara Ave., Oakland.  
Miller, Miss Mary (English, History, Geography, Spanish), 1621  
Hearst Ave., Berkeley.  
Strawbridge, Miss Jessica (Music), 936 12th St., Oakland.  
Lyle, Mr. John (Manual Training), 1815 Pleasant Valley Ave.,  
Oakland.  
Bangham, Miss Adalyn O. (5B), 5673 Keith Ave., Oakland.  
Swain, Miss Elma (5A), 429 Bellevue Ave., Oakland.  
Menihan, Miss M. J. (5A), 160 Lake St., Oakland.  
Bennetts, Miss A. O. (4B), 464 34th St., Oakland.  
Garrison, Miss Georgia L. (4A, Spanish), 4342 Evans Ave., Oak-  
land.  
Lamson, Miss Angenette (3B), 166 Santa Clara Ave., Oakland.  
O'Neill, Miss Florence M. (3A), Key Route Inn, Oakland.

Anderson, Miss Mildred (3A, 2B), 1515 Webster St., Oakland.  
Simms, Mrs. Mae H. (2B, 2A), 300 E. 19th St., Oakland.  
Salisbury, Miss Nel (2A, 1B), Hotel Claremont, Berkeley.  
Spreckels, Miss Agnes (1B, 1A), 1807 Lincoln Ave., Alameda.  
Ellis, Miss Mary C. (1A), 3301 Telegraph Ave., Oakland.  
Dade, Mr. Walter E. (Custodian), 537 34th St., Oakland.

### HARRISON SCHOOL.

Fourth and Harrison Sts. (Water St. car south at 14th and Broadway to 4th St. About three blocks east.)

Vorheis, Mr. C. R., Principal (6B, 6A, 5A), 620 29th St., Oakland.  
Rhodes, Miss Mary L. (4B, 4A, 3B), 1629 Grove St., Oakland.  
Smith, Miss Constance (3A, 2B, 2A), 1918 Rosedale Ave., Oakland.  
Herd, Miss Gertrude C. (1B, 1A), 417 36th St., Oakland.  
Scupham, Miss Isabelle (Kgtn.), 303 Perry St., Oakland.  
Hartung, Miss Mary (H. E.), 2/25 time, 1482 Alice St., Oakland.  
Daly, Mrs. J (Custodian), 414 Harrison St., Oakland.

### HAWTHORNE SCHOOL.

Fruitvale Ave. and Tallant St. (E. 14th St. car east at 13th and Broadway, transfer to Fruitvale Ave., north.)

Spencer, Mr. W. D., Principal, 238 Castro St., Hayward.  
Departmental teaching in 6B, 7th, and 8th grades:  
Marchant, Miss Maud (English), 449 59th St., Oakland.  
Rosseter, Mrs. F. S. (Music, English), 1619 28th Ave., Oakland.  
Miller, Miss Jessie W. (Arithmetic, Physical Training), 4316 Everett Ave., Oakland.  
Peterson, Miss Laura A. (Geography, History), 1830 7th Ave., Oakland.  
Cunningham, Miss Olivia (Home Economics), 3/5 time, 1109 Oak St., Oakland.  
Mottram, Mr. E. W. (Manual Training), 18/25 time, 355 Fair Oaks St., San Francisco.  
Clarke, Miss Katharine B. (Drawing), 2/5 time, 6538 Dana St., Oakland.

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Morgan, Miss Edith T. (6A, 5B), 1600 California St., San Francisco.  
Madden, Miss Harriet A. (5A), 4609 Dolores Ave., Oakland.  
Wagner, Miss Nettie E. (4B, 4A), Hotel Harrison, Oakland.  
Newman, Miss Agnes E. (3B), 1276 6th Ave., San Francisco.  
Burckhalter, Mrs. Frances J. (3A), 1421 Market St., Oakland.  
Rahm, Miss Marion (2B, 2A), 753 8th St., Oakland.  
Crowley, Miss Nell E. (1B), 1224 30th Ave., Oakland.  
Werner, Mrs. Mary Eckles (1A), 185 15th St., Oakland.  
Williams, Miss Zona (Open Air), 1564 Le Roy Ave., Berkeley.  
Gill, Miss Charlotte (Sub.), (Kgtn.), 2436 Channing Way, Berkeley.

Rhodes, Mr. H. H. (Custodian), 2038 34th Ave., Oakland.

### HIGHLAND SCHOOL.

Eighty-fifth Ave. and A St. (E. 14th St. car marked "Elmhurst" at 13th and Broadway to 85th Ave. About one block south.)



## HIGHLAND SCHOOL—Cont'd

- Wilson, Mrs. E. A., Principal, 831 Oakland Ave., Oakland.  
Polley, Mr. E. M. (8B, 8A, 7B), 185 15th St., Oakland.  
Gunn, Miss Ann (7A, 6B), 916 E. 21st St., Oakland.  
Noll, Miss Lela (6B, 6A), 525 Oakland Ave., Oakland.  
Rowe, Miss Irene (6A, 5B), 5716 Genoa St., Oakland.  
Vasche, Miss Gertrude (5A), 4025 West St., Oakland.  
McCahill, Mrs. Mary (4B), 663 11th St., Oakland.  
Jones, Miss Vera (4A, 3B), 464 34th St., Oakland.  
Gallagher, Miss Evelyn (3B, 3A), 1233 Chestnut St., Oakland.  
Kinsey, Mrs. Alice E. (Sub.), (3A, 2B), 69 7th St., Oakland.  
Whipple, Miss Izobel (2B), 340 E. 16th St., Oakland.  
Gartner, Miss Marion G. (2A), 2817 Filbert St., Oakland.  
Comerford, Miss Alice (1B), 1200 Taylor St., San Francisco.  
Tredway, Mrs. Gertrude (1A), 5112 Genoa St., Oakland.  
McCorkle, Mrs. Lulu B. (1A), 680 14th St., Oakland.  
Woodbridge, Miss Carolyn (Kgtn.), 116 Lake St., Oakland.  
Kilgo, Miss Alice (H. E.), 1/5 time, 128 Laguna St., San Francisco.  
Wood, Mr. Beverly W. (M. T.), 8/25 time, 3019 Peralta Ave., Oakland.  
Hansen, Mr. T S. (Custodian), 1473 74th Ave., Oakland.

## INTERMEDIATE SCHOOL.

- Twelfth Ave. and E. 19th St. (Dimond car at 13th and Broadway to 19th.)  
Martin, Mr. Irvin D., Principal, 53 Fairmount Ave., Oakland.  
Clark, Mr. G. Fred (Arithmetic, Civics, Hygiene, History), 664 Brooklyn Ave., Oakland.  
Eby, Miss Frances (Drawing), 221 Cambridge Ave., San Leandro.  
Graham, Miss Alice (Arithmetic, History, English), 542 Jones St., Oakland.  
Houston, Miss E. L. (Civics, Hygiene, History, English), 1117 Lakeshore Ave., Oakland.  
Keeler, Miss M. N. (Arithmetic, English, Geography, History), 3131 Grove St., Oakland.  
Logan, Miss Anna (Home Economics), Concord.  
Maguire, Miss M. C. (English, Geography, History), Park View Apts., Oakland.  
Mitchell, Miss F. E. (Arithmetic, English, Latin), 1923 Harrison St., Oakland.  
Monroe, Miss M. E. (Arithmetic, English, History, Hygiene), Madison Park Apts., Oakland.  
Ogden, Miss E. L. (Arithmetic, Geography), 529 29th St., Oakland.  
Ogier, Miss Frances (Home Economics), 252 Wayne Ave., Oakland.  
Parker, Mrs. Ida G. (English, German), 829 E. 19th St., Oakland.  
Potter, Miss Z. W. (Music), 1543 Harrison St., Oakland.  
Roy, Mr. A. B. (Manual Training, Mechanical Drawing), 5424 Wadean Place, Oakland.  
Ruch, Miss L. A. (English, Latin), 4820 Clark St., Oakland.



- Sellander, Miss A. (English, German, Geography, History), 918 E. 20th St., Oakland.
- Spangler, Miss Lulu (Arithmetic, Geography, Typing), 332 Lenox Ave., Oakland.
- Thompson, Miss Jessie R. (Orchestra), 12/25 time, 2140 27th Ave., Oakland.
- Vanderbilt, Mr. A. (Manual Training, Mechanical Drawing), 2439 11th Ave., Oakland.
- Mock, Mr. G. W., (Custodian), 2410 14th Ave., Oakland.

### JEFFERSON SCHOOL.

Thirty-ninth Ave. and Carrington St. (E. 14th St. car marked "38th Ave." at 12th and Broadway to Carrington St. One block east.)

- Sherman, Miss Elisabeth M.**, Principal, 957 Linden St., Oakland.  
Departmental teaching in 6B, 7th, and 8th grades:
- Lages, Miss Dora (English, Drawing), 1109 Oak St., Oakland.
- Orr, Mrs. H. K. (History, Geography, Civics, Hygiene), 4115 Santa Rita Ave., Oakland.
- Clough, Miss Cora I. (English), 1445 23d Ave., Oakland.
- Yarrow, Mr. Sidney (Sub.), (Arithmetic, Physical Training), University Y. M. C. A., Berkeley.
- Calder, Miss Jessie (Manual Training), 17/25 time, 5304 Bryant Ave., Oakland.
- Waterman, Miss Edith (Home Economics), 3/5 time, Sequoia Apts., Berkeley.
- Bradley, Miss Beth (Sub.), (Music), 2/5 time, 2958 Telegraph Ave., Oakland.

- Gallagher, Miss S. E. (6A), 2425 Grove St., Oakland.
- Bleuel, Miss Davida (5B), 322 Athol Ave., Oakland.
- Murtha, Miss Winifred (5A), 240 Grand Ave., Oakland.
- Messinger, Miss Belle (4B, 4A), 445 48th St., Oakland.
- Johnson, Miss Hattie (4A, 3B), 2115 38th Ave., Oakland.
- Perdue, Miss Elizabeth (3B, 3A), 258 Cambridge Ave., San Leandro.
- Dickson, Miss Florence (3A), 1461 Alice St., Oakland.
- Krause, Miss Florence (2B), 3736 Randolph Ave., Oakland.
- Powell, Miss Emma (2A), 1926 11th Ave., Oakland.
- Horn, Miss Ruby (1B, 1A), 4110 Agua Vista Ave., Oakland.
- Sykes, Miss Josephine (1A), 1732 Franklin St., Oakland.
- Jobe, Miss Viola (1A), 2122 Vicksburg Ave., Oakland.
- Teich, Miss C. Esse (Kgtn.), 2930 Harrison St., Oakland.
- Borden, Mr. Ralph (Custodian), 713 15th St., Oakland.

### LAFAYETTE SCHOOL

Seventeenth and West Sts. (W. 16th St. car at 14th St. and San Pablo Ave. to West St. One block north.)

- Gulick, Mr. C. F.**, Principal, 589 Sycamore St., Oakland.
- McGuire, Miss Margaret (7A, 6B), 1556 Broadway, Oakland.
- Driscoll, Miss Katherine (6B), 1461 Alice St., Oakland.
- Madden, Miss Maud (6A), 4609 Dolores Ave., Oakland.
- Gelinas, Miss Emma J. (6A, 5B), 395 Adams St., Oakland.
- Hennings, Miss A. C. (5B), 255 Euclid Ave., Oakland.

### LAFAYETTE SCHOOL—Cont'd

- Jones, Miss H. M. (5B, 5A), 563 Mira Vista Ave., Oakland.  
Hoagland, Miss Clara (5A), 1812 Filbert St., Oakland.  
Gates, Miss Myra A (5A, 4B), 2440 Van Ness Ave., San Francisco.  
Riddle, Miss M. M. (4B), 480 34th St., Oakland.  
Morris, Miss M. E. (4A), 756 13th St., Oakland.  
Hall, Miss Estelle V. (4A), 1125 Post St., San Francisco.  
Moore, Miss F. Leonore (Ungraded), 540 28th St., Oakland.  
Caig, Miss S. E. (3B), 505 Santa Ray Ave., Oakland.  
Miller, Miss Sallie C. (3B, 3A), 606 Vernon St., Oakland.  
Fulton, Miss E. A. (3B, 3A), 856 18th St., Oakland.  
Stoddard, Miss M. (3A), 1214 Leavenworth St., San Francisco.  
Lewek, Miss Lucille (Sub.), (2B), 2133 Webster St., Oakland.  
Wright, Miss Nellie H. (2B, 2A), 3005 West St., Oakland.  
Crosby, Miss E. S. (2A), 1331 Castro St., Oakland.  
Blythe, Miss M. R. (2A), 1426 West St., Oakland.  
Muscio, Miss Lillian (1B), 1011 Bush St., San Francisco.  
Rogers, Miss A. B. (1A), 1738 10th St., Oakland.  
Gross, Miss E. V. (1A), 262 Grand Ave., Oakland.  
Elmore, Miss Lillian (Kgtn.), 1530 Harrison St., Oakland.  
Gompertz, Miss A. (Deaf Class), 2405 Bowditch St., Berkeley.  
MacIntosh, Mr. Richard (M. T.), 3/25 time, 4977 Desmond St.,  
Oakland.  
Hartung, Miss Mary (H. E.), 3/25 time, 1482 Alice St., Oakland.  
Yocum, Mr. J. E. (Sub.), (M. T.), 7/25 time, 2232 E. 22d St., Oak-  
land.  
Humphrey, Mr. Albert (Band and Orchestra), 1/5 time, 681 17th  
St., Oakland.  
Edwards, Mr. E. J. (Custodian), 873 18th St., Oakland.

### LAKEVIEW SCHOOL.

Perry and Van Buren Sts. (Grand Ave. car east at 14th and Broadway  
to Perry St.)

**Ricciardi, Mr. Nicholas, Principal**, 2054 38th Ave., Oakland.

#### Intermediate Department

- Lamb, Miss Esther (Arithmetic, History, Geography, Hygiene),  
245 Moss Ave., Oakland.  
Cotter, Miss M. Elsie (Drawing, English), 290 Park View Terrace,  
Oakland.  
Wendell, Miss Matilda (History, Geography, Civics, English,  
French), 540 28th St., Oakland.  
Alexander, Miss Anne (English, Literature), 515 Bellevue Ave.,  
Oakland.  
McGrath, Mrs. Mary R. (English, Literature, Arithmetic), 2133  
Webster St., Oakland.  
Brady, Miss Mattie (English, Hygiene, Nature Study), 28 Monte  
Vista Ave., Oakland.  
Nugent, Miss Effie D. (History, Geography), 1109 Oak St., Oak-  
land.  
Allen, Miss Marie F. (Music, Literature, Spelling, Nature Study,  
Hygiene, Physical Training), 542 Jones St., Oakland.  
Farno, Miss Alice J. (Arithmetic, Drawing), 420 Oakland Ave.,  
Oakland.

Wackler, Miss Katharine (Home Economics), 59 Montell St., Oakland.

Kershner, Mr. L. M. (Manual Training), 417 63rd St., Oakland.

Taylor, Miss Mildred M. (4B), 2313 Warring St., Berkeley.

Fluker, Miss Grace W. (4A), 1109 Oak St., Oakland.

Branch, Miss Edna (3B, 3A), 2478 Prince St., Berkeley.

Neylan, Miss Ellen (3A), 492 Wickson Ave., Oakland.

Van Vleet, Miss Gladys (2B), 181 Vernon Terrace, Oakland.

McGillivray, Miss Jennie Dee (2B, 2A), Peralta Apts., Oakland.

Naylor, Miss Ella G. (1B, 1A), 53 Domingo Ave., Berkeley.

Ayer, Miss Ethel C. (1A), Peralta Apts., Oakland.

Humphrey, Mr. Albert (Band and Orchestra), 1/5 time, 681 17th St., Oakland.

Rowe, Mr. D. H. (Custodian), 1214 E. 23d St., Oakland.

### LAUREL SCHOOL.

Brown Ave. and Congress St. (E. 14th St. car marked "38th Ave." east at 12th and Broadway to end of line. Two blocks north.)

Arlett, Miss Elizabeth, Principal (6B, 6A, 5B), 24 Linda Ave., Oakland.

Coulter, Miss Hilda (5A, 4B, 4A), 2103 88th Ave., Oakland.

Williams, Miss Frances (3B, 3A, 2B, 2A), 515 Wesley Ave., Oakland.

Johnson, Miss Henrietta (1B, 1A), 731 Henry St., Oakland.

Schell, Miss Josephine (Kgtn.), 2936 Linden St., Berkeley.

Cunningham, Miss Olivia (H. E.), 2/25 time, 1109 Oak St., Oakland.

Hunt, Mr. George (Sub.), (M. T.), 2/25 time, 384 35th St., Oakland.

Manual Training is given in the Allendale School.

Cougley, Mr. William (Custodian), 3811 Brown Ave., Oakland.

### LAZEAR SCHOOL.

Twenty-ninth Ave. and Elmwood St. (E. 14th St. car at 13th and Broadway to 29th Ave. South about four blocks.)

Kane, Miss Emma G., Principal, 1150 E. 16th St., Oakland.

Sinnott, Miss Annie E. (6B, 6A), 3824 19th St., San Francisco.

Strachan, Miss Louise (5B, 5A), 2701 Santa Clara Ave., Alameda.

Freeman, Mrs. G. E. (5A, 4B), 2884 Chapman St., Oakland.

Perdue, Miss Eva (4A), 258 Cambridge Ave., San Leandro.

McNary, Miss Miriam (3B), 990 Geary St., San Francisco.

MacKenna, Miss Mida L. (3A), 1515 Alice St., Oakland.

Campbell, Miss Gladys (3A, 2B), 466 37th St., Oakland.

Moon, Miss Pruda W. (2B, 2A), 3880 Brighton Ave., Oakland.

McDermott, Miss Lucy (2A), 3880 Brighton Ave., Oakland.

Willson, Miss Irene (1B), 1515 Webster St., Oakland.

Rinkel, Miss Amanda (1A), 4820 Webster St., Oakland.

Madden, Miss Helen (Kgtn.), 4609 Dolores Ave., Oakland.

Hartung, Miss Mary (H. E.), 2/25 time, 1482 Alice St., Oakland.

Shea, Miss Marie (Sub.), (H. E.), 2/25 time, 2217 Fulton St., Berkeley.



## LAZEAR SCHOOL—Cont'd

Mottram, Mr. E. W. (M. T.), 2/25 time, 355 Fair Oaks St., San Francisco.

Manual Training is given in the Hawthorne School.  
Golobic, Mr. Antone (Custodian), 2523 E. 10th St., Oakland.

## LINCOLN SCHOOL.

Eleventh and Alice Sts. (12th St. car east at 12th and Broadway to Alice St. One block south.)

Greenwell, Mr. W. M., Principal, Townsend Apts., Oakland.

### Intermediate Department

O'Meara, Miss J. (English), 387 Fair Oaks St., San Francisco.

Frank, Miss Esther (Arithmetic), 81 Pearl St., Oakland.

Christensen, Miss Susie (Home Economics), 2349 26th Ave., Oakland.

Prosser, Mr. J. R. (Manual Training), 2435 E. 23d St., Oakland.

McKay, Mrs. Cora P. (English), 9232 Hillside Ave., Oakland.

McFeely, Miss Agnes (History), 2915 Market St., Oakland.

Snee, Miss Sara (Geography, Drawing), 2831 Regent St., Berkeley.  
Gillespie, Miss Jeanne (Geography, Arithmetic, History, English),  
2914 Jackson St., San Francisco.

Stockton, Miss Emma (Geography, Arithmetic, History, English),  
87 Hamilton Place, Oakland.

Smith, Mrs. E. L. (Geography, Arithmetic, History, English), 1829  
Market St., Oakland.

Hallack, Mrs. E. A. (Sub.), (Music), 3/5 time, 839 36th St.,  
Oakland.

Payne, Miss Nellie W. (Music), 2/5 time, 1502 Alice St., Oakland.

Lane, Miss Violet (5A), 2019 Webster St., Oakland.

Garoutte, Miss Clare (5A), 540 28th St., Oakland.

Fortier, Miss Margaret (4B), 1456 Jones St., San Francisco.

Willett, Mrs. M. E. (4B, 4A), 2939 Pine Ave., Berkeley.

Davis, Mrs. E. O. (4A), 438 E. 15th St., Oakland.

Booker, Miss Winifred C. (4A), 1514 Alice St., Oakland.

Russell, Miss Grace G. (3B), 2518 Dana St., Berkeley.

Mathews, Miss M. J. (3A), 1911 Webster St., Oakland.

Rinehart, Miss A. H. (2B), 1432 5th Ave., Oakland.

Carter, Miss Bertha (2A), 1112 Myrtle St., Oakland.

Dole, Miss Julia (1B), 1508 Madison St., Oakland.

Rainey, Mrs. Marion (1B), 278 Ridgeway Ave., Oakland.

Jacque, Miss Helen (1A), 92 8th St., Oakland.

DuBois, Miss Perle (Special Class), 5813 Lawton Ave., Oakland.

Şaulpaugh, Mr. J. A. (Custodian), 1482 12th St., Oakland.

## LOCKWOOD SCHOOL.

E. 14th St. and 68th Ave. (E. 14th St. car marked "Elmhurst" at 13th and  
Broadway to 68th Ave.)

Greenman, Mr. C. H., Principal, 1049 44th Ave., Oakland.

### Intermediate Department

Nelson, Miss Elizabeth (Grammar, Literature, Latin), 2223 Union  
St., Berkeley.

Baxley, Miss Alice V. (Arithmetic, Spelling, Writing, Spanish),  
2036 Rosedale Ave., Oakland.



Buckley, Miss Elizabeth (Home Economics), 2/5 time, 563 E. 14th St., San Leandro.  
Hanford, Mr. Forrest S. (Drawing), 3/5 time, 3825 Division St., Oakland.  
McCandlish, Miss Anna (History, Geography), 2831 Regent St., Berkeley.  
Hirsch, Miss Edith (Music, Composition, Physical Training), 3138 Market St., Oakland.  
Gillies, Mr. James (Manual Training), 8/25 time, 1448 Benton St., Alameda.

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Richardson, Miss Claribel (6A), 39 Randwick Ave., Oakland.  
Young, Miss Sarah L. (5B), 826 20th St., Oakland.  
Peterson, Miss Mildred (5A), 2017 Delaware St., Berkeley.  
Firth, Miss Emma (4B), 1505 Castro St., Oakland.  
Seaman, Mrs. Carrie B. (Sub.), (4A), 2275 E. 15th St., Oakland.  
Tottenham, Miss Muriel (3B), 336 Lenox Ave., Oakland.  
Hendershott, Miss Shirley (3A), 1405 9th Ave., Oakland.  
Mackenzie, Mrs. Eva E. (2B), 1742 11th Ave., Oakland.  
Coggins, Miss Anna (German, 2A), 1708 55th Ave., Oakland.  
Hitchcock, Miss Ruth A. (1B), 2222 89th Ave., Oakland.  
Webb, Mrs. Esther B. (1A), 1736 12th Ave., Oakland.  
Ingbritsen, Miss Evelyn (Kgtn.), 829 E. 19th St., Oakland.  
Hunt, Mr. George J. (Sub.), (M. T.), 6/25 time, 384 35th St., Oakland.  
Brown, Mr. J. R. (Custodian), 441 44th St., Oakland.

### LONGFELLOW SCHOOL.

Thirty-ninth and Market Sts. (Grove St. car north at 14th and Washington Sts. to Apgar St. West about two blocks.)

Gilson, Mr. J. C., Principal, 1085 Bella Vista Ave., Oakland.  
Departmental teaching in 6B, 7th and 8th grades:  
Stanton, Miss Florence R. (History, Civics, English, Geography), 1844 8th Ave., Oakland.  
Kell, Mr. J. A. (Arithmetic, Spelling), 3319 West St., Oakland.  
Harris, Miss Grace D. (Music, Grammar, Composition), 566 33d St., Oakland.  
Benner, Mr. W. A. (Physical Training, Hygiene, Literature, Spelling), 663 61st St., Oakland.  
Jacobson, Miss Nellie (Drawing), 2/5 time, 829 E. 19th St., Oakland.  
Beadles, Mrs. M. B. (Home Economics), 3/5 time, 1420 LeRoy Ave., Berkeley.  
Yocum, Mr. J. E. (Sub.), (Manual Training), 33/50 time, 2232 E. 22d St., Oakland.

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Lewis, Miss G. H. (6A), 1515 Webster St., Oakland.  
Holman, Miss Luella S. (5B), 4516 Walnut Ave., Oakland.  
Beaudette, Miss Alice I. (5A), Sutter Hotel, Oakland.  
Caldwell, Miss Louise M. (4B), 540 28th St., Oakland.  
Maestretti, Miss Ethel (4A), 2250 Eunice St., Berkeley.  
Fitzgerald, Miss Margaret (3B), 1120 Hyde St., San Francisco.

### LONGFELLOW SCHOOL—Cont'd

O'Connor, Miss Mary (3A), 930 Poplar St., Oakland.  
Stuck, Miss Eva H. (2B, 2A), 1109 Oak St., Oakland.  
Benjamin, Miss Gertrude A. (2A), 440 Hill Lane, Oakland.  
Gordon, Miss Jennie M. (1B), 4532 San Carlos St., Oakland.  
Freyschlag, Miss Bertha (1A), 581 27th St., Oakland.  
Anderson, Miss Viola R. (1A), 686 38th St., Oakland.  
Merrill, Mrs. Harriet V. (Kgtn.), 4324 Montgomery St., Oakland.  
Higgins, Mr. J. H. (Custodian), 1202 Peralta St., Oakland.

### MANZANITA SCHOOL.

Twenty-fourth Ave. and E. 26th St. (Fruitvale car at 12th and Broadway to E. 24th St. North about two blocks.)

Campbell, Mr. H. W., Principal (5B, 5A), 3877 Greenwood Ave., Oakland.  
Harden, Miss Rena (Sub.) (5B, 5A), 1/2 time, 3432 Champion St., Oakland.  
Barber, Miss Mabel (6B, 6A), 2312B Prince St., Berkeley.  
Brauer, Miss Nelda (4B), 2334 E. 19th St., Oakland.  
Gallagher, Miss Margaret (4A, 3B), 6459 Hillegass Ave., Oakland.  
Garoutte, Miss Daisy M. (3A, 2B), Peralta Apts., Oakland.  
Connor, Miss Alma F. (2B, 2A), 3026 Logan St., Oakland.  
Kilgore, Mrs. Minnette H. (1B, 1A), 817 E. 16th St., Oakland.  
Grubb, Miss Georgiana (1A), 1715 11th Ave., Oakland.  
Mack, Miss Lucy E. (Kgtn.), 4/7 time, 525 E. 21st St., Oakland.  
Thompson, Miss Jessie R. (Orchestra), 3/25 time, 2140 27th Ave., Oakland.  
Hunt, Mr. George (Sub.), (Manual Training), 2/25 time, 384 35th St., Oakland.  
Manual Training is given in the Fruitvale School.  
Rogers, Mrs. F. H. (Custodian), 2672 24th Ave., Oakland.

### McCHESNEY SCHOOL.

E. 38th St. and 13th Ave. (Park Blvd. car east at 13th and Broadway to E. 38th St.)

Forbes, Mr. W. D., Principal, Bauer Apts., Oakland.  
Hartman, Miss Genevieve F. (6B, 6A), 1908 E. 38th St., Oakland.  
Lernhart, Miss Edith A. (6A, 5B), 3954 14th Ave., Oakland.  
Graham Mrs. Helen B. (5B, 5A), 2447 Hopkins St., Oakland.  
Hanley, Miss Marguerite E. (4B), 3707 Fruitvale Ave., Oakland.  
Votaw, Miss Della A. (4A), 3912 14th Ave., Oakland.  
Jackson, Miss Lottie C. (4A, 3B), 909 Chestnut St., Oakland.  
Hunt, Miss Isabel L. (3B, 3A), 529 Hobart St., Oakland.  
Garner, Miss C. E. (2B), Landon Court Apts., Oakland.  
Cullen, Miss Lila (2A), 2803 11th Ave., Oakland.  
Marcum, Miss Bertha (1B, 1A), 1331 San Luis Ave., Oakland.  
O'Connell, Miss Alice J. (1A), 325 E. 19th St., Oakland.  
Schlotzhauer, Miss Margarete (Kgtn.), Hotel Claremont, Berkeley.  
Cahill, Miss Clara C. (M. T.), 3/25 time, Madison Park Apts., Oakland.  
Thompson, Miss Jessie R. (Orchestra), 1/5 time, 2140 27th Ave., Oakland.  
Ricker, Mr. G. H. (Custodian), 3803 Randolph Ave., Oakland.

## McCHESNEY ANNEX SCHOOL.

Tenth Ave. and E. 24th St. (8th Ave. car east at 13th and Broadway to 10th Ave.)

Hill, Mrs. E. I., Principal (1B, 1A), 1547 20th Ave., Oakland.

Ward, Miss Rose (2B, 2A), 1331 Castro St., Oakland.

Eilers, Mrs. M. (Custodian), 1357 25th St., Oakland.

## MELROSE SCHOOL.

Fifty-second Ave. and E. 14th St. (E. 14th St. car marked "Elmhurst" at 13th and Broadway to 52nd Ave.)

Martin, Mr. Paul, Principal, 2119 Rosedale Ave., Oakland.

Wayland, Mrs. Jessica S. (8A, 7B), 49 Randwick Ave., Oakland.

Milledge, Miss Vincenza (7A, 6A), 1144 Clay St., San Francisco.

Cunningham, Miss Grace (5B, 5A), 1438 Madison St., Oakland.

Biedenweg, Mrs. Eva (5A, 4B), 2310 Seminary Ave., Oakland.

Mullen, Miss M. A. (4A, 3B), 861 Fell St., San Francisco.

Adriance, Miss Marion W. (3A, 2B), 1744 12th Ave., Oakland.

Foley, Miss Margaret F. (2B, 2A), 1132 Leavenworth St., San Francisco.

Turner, Miss A. S. (2A, 1B), 1830 7th Ave., Oakland.

Anderson, Miss B. Estelle (1A), 5008 Manila Ave., Oakland.

Shambaugh, Mrs. Korah S. (Kgtn.), 2247 42d Ave., Oakland.

Smith, Miss Jessie S. (Special), 1420 Le Roy Ave., Berkeley.

Cahill, Miss Clara C (M. T.), 4/25 time, Madison Park Apts., Oakland.

Calder, Miss Jessie (M. T.), 4/25 time, 5304 Bryant Ave., Oakland.

Roehling, Miss Agnes A. (H. E.), 1/5 time, 829 E. 19th St., Oakland.

Shea, Miss Marie (Sub.), (H. E.), 1/5 time, 2217 Fulton St., Berkeley.

Peterson, Mr. C. (Custodian), 1360 52nd Ave., Oakland.

## MELROSE HEIGHTS SCHOOL.

Congress and Ignacio Sts. (55th Ave. car east at 12th and Broadway to Congress St.)

Inskeep, Mr. Lorenzo D., Principal, 6449 Colby St., Oakland.

### Intermediate Department

Pohl, Miss Wilhelmina H. (Arithmetic, History), 1848 7th Ave., Oakland.

Yates, Miss Edna L. (English), 1023 Magnolia St., Oakland.

Duden, Miss Alice (Drawing, Geography), 829 E. 19th St., Oakland.

Loban, Miss Elsie (Music, Arithmetic), 1438 88th Ave., Oakland.

Roehling, Miss Agnes A. (Home Economics), 1/5 time, 829 E. 19th St., Oakland.

Calder, Miss Jessie (Manual Training), 4/25 time, 5304 Bryant Ave., Oakland.

Cahill, Miss Clara C. (Manual Training), 4/25 time, Madison Park Apts., Oakland.

Atterbury, Miss Ophelia A. (5B), 1523 36th Ave., Oakland.

Hearsey, Mrs. Josie C. (5A, 4B), 451 Alcatraz Ave., Oakland.

Hunsaker, Miss Manelle (4B, 4A), 1126 E. 24th St., Oakland.

Curley, Miss Laura (3B and Spanish), 1825 Adeline St., Oakland.



## MELROSE HEIGHTS SCHOOL—Cont'd

- Knox, Miss Lucy R. (3B, 3A), 2709 Forest Ave., Berkeley.  
Brown, Mrs. Emily (2B), 254 Athol Ave., Oakland.  
Teague, Miss Annie E. (2A), 5005 Congress Ave., Oakland.  
Otero, Miss Anita (1B), 2661 Valdez St., Oakland.  
Buckley, Miss Hannah (1A), 2527 Van Ness Ave., San Francisco.  
Miller, Miss Flora O. (Kgtm.), 2122 Vicksburg Ave., Oakland.  
Manual Training and Home Economics are given in the Melrose School.  
Bloodsworth, Mr. Jesse (Custodian), 5005 Congress Ave., Oakland.

## PERALTA SCHOOL.

Alcatraz and Telegraph Aves. (Telegraph Ave. car north at 14th and Broadway to Alcatraz Ave. East about one block.)

- Bradley, Miss Anne M., Principal (3A, 2A), 858 Lydia St., Oakland.  
Harry, Miss Lena M. (4B, 4A, 3B), 484 Alcatraz Ave., Oakland.  
Taylor, Mrs. Frances (1B, 1A), 498 Alcatraz Ave., Oakland.  
Richardson, Mrs. Eva (Special), 2406 Dana St., Berkeley.  
Such, Mr. Harold (Custodian), 6220 Telegraph Ave., Oakland.

## PIEDMONT SCHOOL.

Piedmont and Echo Aves. (Piedmont Ave. car north at 14th and Broadway to Echo Ave.)

- Kottinger, Mr. E. W., Principal, 1526 Webster St., Oakland.  
**Intermediate Department**  
DuBois, Mrs. Irene (English, Literature), 3608 West St., Oakland.  
Comstock, Miss Katherine (Drawing, Arithmetic), 2341 Valley St., Oakland.  
Webster, Mrs. Angie H. (History, Civics, Geography), 1520 Wellington Ave., Oakland.  
Tillman, Miss Florence (Music, Literature, Arithmetic), 2039 Alameda Ave., Alameda.  
McKee, Miss Mabel (Manual Training, Drawing, Physical Training), 589 28th St., Oakland.  
Rufener, Miss Mary (Home Economics), 3/5 time, Hotel Sutter, Oakland.

- White, Miss Edna A. (6A, 5B), 750 Grand Ave., Oakland.  
Clarkson, Mrs. Caroline F. (5A, 4B), 2418 Channing Way, Berkeley.  
Hammerly, Miss M. Lena (4B, 4A), 473 27th St., Oakland.  
Olin, Miss May C. (3B, 3A), 625 Mariposa Ave., Oakland.  
Shearer, Miss E. L. (3A, 2B), 438 Athol Ave., Oakland.  
Leach, Miss Helen M. (2A), 51 Hamilton Place, Oakland.  
Comstock, Miss C. P. (1B, 1A), 100 Manor Drive, Piedmont.  
Amerman, Miss L. J. (1A), 258 Ridgeway Ave., Oakland.  
Butler, Miss Mary B. (Special, French), 281 41st St., Oakland.  
Jennings, Mr. C. B. (Custodian), 4315 Piedmont Ave., Oakland.

## PRESCOTT SCHOOL.

Ninth and Campbell Sts. (West 8th St. car south at 14th and Washington Sts. to Campbell St. North one block.)

- Mortensen, Mr. G. E., Principal, San Leandro.  
Boardman, Mrs. M. V. (English, Arithmetic, 6-8), 663 35th St., Oakland.  
Wieland, Mr. W. A. (Literature, Hygiene, 5-8), 519 Pacific Ave., Alameda.



- Roney, Miss Nelle (English, Geography, History, 6-8), 1515 Webster St., Oakland.
- Jones, Miss Ella K. (Music, 3-8), 5631 Shafter Ave., Oakland.
- Wheeler, Miss Marie (English, Arithmetic, Geography, History, 5-8), 1726 Blake St., Berkeley.
- Barnett, Miss Maude L. (Sub.), (Drawing), 2/5 time, 2130 Ashby Ave., Berkeley.
- Roehling, Miss Agnes A. (Home Economics), 3/5 time, 829 E. 19th St., Oakland.
- Smith, Miss Gertrude (English, Arithmetic, History, 5B, 5A), 1515 Webster St., Oakland.
- Peters, Miss Jessie S. (Literature, 4B), 701 Sutter St., San Francisco.
- Leigh, Mrs. Julia S. (English, Arithmetic, History, Geography, 4A), 486 27th St., Oakland.
- Cerf, Miss Rebecca (Sub.), (Physical Training, 3-8), 2821 Steiner St., San Francisco.
- Batchelor, Miss Hazel (English, Arithmetic, History, Geography, 3B, 3A), 449 37th St., Oakland.
- Ross, Miss Irma (Nature Study, Hygiene, Drawing, 3-5), 1474 Sacramento St., San Francisco.
- Beckwith, Miss Ruth (English, 2-3), 438 65th St., Oakland.
- Corcoran, Miss Aleta (Manual Training, Drawing, Arithmetic, 2B, 2A), Hotel Menlo, Oakland
- Penny, Miss Mary (Sub.), (English, 2-3), 1521 Castro St., Oakland.
- Jacobs, Miss L. R. (Physical Training, Hygiene, Nature Study, Music, 2-3), 663 35th St., Oakland.
- Cockefair, Miss Ellen A. (English, 1-2), 2209 Telegraph Ave., Oakland.
- McNutt, Mrs. E. O. (Manual Training, Drawing, Music, Physical Training, Hygiene, Nature Study, Arithmetic, 1B), 5237 Trask Ave., Oakland.
- Cullie, Miss Isabel (English, 1A), 3115 Grove St., Oakland.
- Whitton, Miss Elizabeth (Manual Training, 1B), 383 Hawthorne Ave., Oakland.
- Albee, Mrs. Candyce R. (Sub.), (1A), 2900 California St., Oakland.
- Gates, Miss Olita A. (1A), 2440 Van Ness Ave., San Francisco.
- Gamble, Miss Mary E. (Special), 1419 Caroline St., Alameda.
- Rust, Miss Mary E. (Kgtn.), 669 16th St., Oakland.
- Humphrey, Mr. Albert (Band and Orchestra), 1/5 time, 681 17th St., Oakland.
- Bernhard, Mr. H. H. (Manual Training), 3/5 time, 1818 Prince St., Berkeley.
- Penick, Miss C. D. (Secretary), 5205 Cole St., Oakland.
- Ratcliffe, Mr. R. J. (Custodian), 1398 9th St., Oakland.

### SANTA FE SCHOOL.

Fifty-fourth and Market Sts. (Grove St. car north at 14th and Washington Sts. to 54th St. About two blocks west.)

**Richardson, Miss Anna, Principal, 545 25th St., Oakland.**

## SANTA FE SCHOOL—Cont'd

Milliken, Miss Marian (6B, 6A), 4009 Howe St., Oakland.  
Monroe, Miss Ella (5B), 1617 Woolsey St., Berkeley.  
Linville, Mrs. Grace (5A, 4B), 764 53d St., Oakland.  
Grove, Miss Louise (4B, 4A), 4283 Howe St., Oakland.  
Lane, Miss Gertrude (3B), 449 Mont Clair Ave., Oakland.  
Rotermund, Miss Georgia (3A), 6035 Harwood Ave., Oakland.  
Roane, Miss Louise (2B), 1508 Oxford St., Berkeley.  
Harvie, Miss Hazel (2B, 2A), 135 15th St., Oakland.  
Perdue, Miss A. C. (2A, 1B), 3153 College Ave., Berkeley.  
Phillips Miss Elva (1B, 1A), 845 Bush St., San Francisco.  
Ledyard, Miss Maritza (1A), 540 28th St., Oakland.  
Underwood, Miss Lillian (Kgtn.), 2520 Etna St., Berkeley.  
Yocum, Mr. J. E. (Sub.), (M. T.), 3/50 time, 2232 E. 22d St., Oakland.

Manual Training is given in the Longfellow School.  
McNally, Mr. J. W. (Custodian), 938 53rd St., Oakland.

## SEQUOIA SCHOOL.

Lincoln Avenue and Scenic St. (Dimond car east at 13th and Broadway to Lincoln Ave. North about three blocks.)

**Hammond, Miss I. M.,** Principal (7B, 7A), 3004 Champion St., Oakland.

Paterson, Miss Margaret (6B, 6A, 5B), 829 E. 19th St., Oakland.

Anthony, Miss Fern (5A, 4B, 4A), 2304 Telegraph Ave., Berkeley.

Applegarth, Miss Maud N. (3B, 3A, 2B), 5848 Ocean View Drive, Oakland.

Collier, Miss Gertrude (2A, 1B, 1A), 178 10th St., Oakland.

Hunt, Mr. George J. (Sub.), (M. T.), 7/50 time, 384 35th St., Oakland.

Hartung, Miss Mary (H. E.), 2/25 time, 1482 Alice St., Oakland.

Manual Training and Home Economics are given in the Fruitvale School.  
Hutchinson, Mr. George, (Custodian), 3540 Fruitvale Ave., Oakland.

## SOUTH ELMHURST SCHOOL.

Edes Ave. near Douglas Ave. (San Leandro or Hayward car at 13th and Broadway to Jones Ave. South about a mile and a quarter.)

Valley, Mrs. Abbie (Sub.), (3A, 2A, 1B, 1A), 1725 Castro St., Oakland.

Rego, Mrs. Virginia (Custodian), 721 Douglas Ave., Oakland.

## TOMPKINS SCHOOL.

Fifth and Linden Sts. (West 8th St. car south at 14th and Washington Sts. to Linden St. About three blocks south.)

**McFeely, Miss Susan M.,** Principal, 2915 Market St., Oakland.

Swan, Mrs. N. D. L. (6B, 6A), Hotel Claremont, Berkeley.

Carter, Miss N. A. (5B, 5A), 1112 Myrtle St., Oakland.

Whitney, Miss Elizabeth (5A, 4B), 1250 California St., San Francisco.

Keegan, Miss Irene (4B, 4A), Hotel Sutter, Oakland.

Hartmann, Miss Amelia (3B, 3A), 727 Alcatraz Ave., Oakland.

Coady, Mrs. I. A. (Ungraded, 2-3), 901 Chestnut St., Oakland.

Earle, Miss Edna L. (2B, 2A), 727 20th St., Oakland.

Rutherford, Miss M. (1B, 1A), 1830 Harrison Boulevard, Oakland.

Gibson, Miss G. N. (1A), 296 Park View Terrace, Oakland.

Gillette, Miss Alta (Special), 229 Cambridge Ave., San Leandro.  
Carlton, Miss Gertrude H. (Kgtn.), 730 19th St., Oakland.  
Hartung, Miss Mary (H. E.), 2/25 time, 1482 Alice St., Oakland.  
Cunningham, Miss Olivia (H. E.), 2/25 time, 1109 Oak St.,  
Oakland.

Wood, Mr. Beverly (M. T.), 2/25 time, 3019 Peralta Ave., Oakland.

Manual Training is given in the Cole School.

Liston, Mr. J. (Custodian), 382 Jayne Ave., Oakland.

## WASHINGTON SCHOOL.

Sixtieth St. and Shattuck Ave. (Shattuck Ave. car north at 14th and  
Broadway to 60th St.)

**Hudspeth, Mr. Charles E.**, Principal, 759 59th St., Oakland.

### Intermediate Department

Gillett, Miss Effie M. (English), 2323 College Ave., Berkeley.

Dreiske, Mrs. Helen D. (Music, English), 578 61st St., Oakland.

Shelton, Miss Lulu A. (History, Arithmetic, Civics, Hygiene), 526  
66th St., Oakland.

Clark, Mrs. Addie M. (Geography, Arithmetic), 2170 Coronado  
Ave., Oakland.

Jacobson, Miss Nellie (Drawing), 3/5 time, 829 E. 19th St.,  
Oakland.

Beadles, Mrs. Marion (Home Economics), 2/5 time, 1420 Le Roy  
Ave., Berkeley.

Nevison, Mr. Beverly M. (Manual Training), 17/25 time, 656 60th  
St., Oakland.

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McMurray, Miss Margaret C. (6B), 1131 Oak St., Oakland.

Jewett, Miss Edith M. (6B), 2904 Webster St., Oakland.

De Large, Miss Mary Pearl (6A), 2153 Oregon St., Berkeley.

Beaty, Miss Rose E. (5B), 390 Alcatraz Ave., Oakland.

Pedigo, Miss Floy (5A), 1103 Adeline St., Oakland.

Trask, Miss Stella G. (4B), 308 Hobart St., Oakland.

Reidy, Miss Eileen (4A), 627 Taylor St., San Francisco.

Morris, Miss Anna (3B), 2143 Blake St., Berkeley.

Dolman, Miss Caroline (3A), 2828 Richmond Ave., Oakland.

Smith, Miss Myrtle S. (2B), 1600 Scenic Ave., Berkeley.

Gates, Mrs. Franklyn (2A), 1203 Shattuck Ave., Berkeley.

Woods, Miss M. Erle (2A), Mariposa Apts., Oakland.

Villinger, Miss Louise (1B), Hotel Claremont, Berkeley.

Clarcken, Miss Alice (1A), 2407 Woolsey St., Berkeley.

Roane, Miss Elsie (1A), 1508 Oxford St., Berkeley.

Morrison, Miss Florence (Kgtn.), 1704 Filbert St., Oakland.

Sharrer, Mr. David E. (Custodian), 907 59th St., Oakland.

## WEST OAKLAND KINDERGARTEN.

401 Peralta St. (West 8th St. car south at 14th and Washington Sts to  
Peralta St. South to 4th St.)

Farley, Miss Bess Lou (Kgtn.), 1515 Webster St., Oakland.

Vargas, Miss Mary (Custodian), 419 Campbell St., Oakland.



## HIGH SCHOOLS

### FREMONT HIGH SCHOOL.

Forty-seventh Ave. and Foothill Blvd. (55th Ave. car east at 12th and Broadway to 47th Ave.)

Cox, Mr. E. Morris, Acting Principal, 3059 Capp St., Oakland.

#### ENGLISH.

McMillan, Miss E. D. (Head of Department), 614 25th St., Oakland.

Craig, Miss Emily Z., Hotel Sutter, Oakland.

Gunn, Miss Elsie H., 916 E. 21st St., Oakland.

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- Livingston, Miss Gertrude (Sub.), (Commercial Arithmetic and Commercial English), 2/5 time, 52 Hamilton Place, Oakland.
- Lynam, Miss Helen (Sub.), (Millinery), 2/5 time, 1704 Fulton St., San Francisco.
- McGillivray, Miss Cornelia (Sub.), (Dressmaking), 3/5 time, Bauer Apts., Oakland.
- Morrill, Mr. George (Sub.), (Penmanship, Commercial Arithmetic), 2/5 time, 450 37th St., Oakland.
- Nason, Mrs. R. D. (Sub.), (Typewriting, Stenography), 1815 Pleasant Valley Ave., Oakland.
- Nash, Miss Katherine (Sub.), (Sewing, Dressmaking), 3/5 time, 835 O'Farrell St., San Francisco.
- Otto, Miss Francesca L. (Sub.), (Stenography, Typewriting), 3/5 time, 3300 Adeline St., Berkeley.
- Petty, Mr. Joseph (Sub.), (Forge), 2/5 time, 6449 Colby St., Oakland.
- Robison, Mr. J. A. (Sub.), (Carpentry, Joinery), 2/5 time, 397 Adams St., Oakland.
- Shea, Miss Marie (Sub.), (Millinery), 2/5 time, 2217 Fulton St., Berkeley.
- Vaught, Mr. E. J. (Sub.), (Bookkeeping), 3/5 time, 2696 Havenscourt Blvd., Oakland.
- Walker, Mr. Wilbur, Jr. (Sub.), (Machine Shop), 2/5 time, 1035 E. 12th St., Oakland.
- Williamson, Mr. A. S. (Sub.), (Shop Mathematics), 2/5 time, 1807 Prince St., Berkeley.

### VOCATIONAL EVENING HIGH SCHOOL.

Twelfth and Market Sts. (12th St. car west at 12th and Broadway to Market St.)

- Alder, Mr. F. W. (Sub.), (Electricity), 2/5 time, 2123 26th Ave., Oakland.
- Bullock, Mr. Paul R. (Sub.), (Electrical Theory, Laboratory Work in Electricity), 2/5 time, 942 Bay View Avenue.
- Haight, Mr. H. H. (Sub.), (Machine Shop), 2/5 time, 2224 E. 23rd St., Oakland.

Trutner, Mr. Herman (Sub.), (Orchestra), 1/5 time, 5429 Lawton Ave., Oakland.

White, Mr. S. T. (Sub.), (Printing), 2/5 time, 47 Fairview Ave., Oakland.

### CHABOT OBSERVATORY.

Leona Heights. (Mills College car at 13th and Broadway to end of line. About one-quarter of a mile by trail to Observatory.) Telephone Fruitvale 1686-W.

Burckhalter, Mr. Charles, Astronomer, 1440 Linden St., Oakland.

Deruchie, Mr. Fred (Custodian), 1968 35th Ave., Oakland.

### CHABOT HALL.

Eleventh and Grove Streets.

Supervisors' Offices.

Common School Assembly Hall.



# ELEMENTARY SCHOOL LEAVES OF ABSENCE.

## Kindergarten.

January, 1917.

McMurray, Miss Esther

July, 1917.

Armstrong, Miss Sue  
Risatti, Miss Anne

## First and Second Grades.

January, 1917

Blythe, Miss Ethel S.  
Cain, Miss Mary  
Carroll, Miss Mary P.  
Paddock, Miss Annabel  
Perry, Miss Florence T.  
Reid, Miss Myrtle

July, 1917.

Glover, Miss Anne  
Hayward, Miss May  
Jamison, Miss Marion  
McAllister, Miss Alice  
Osborn, Miss Ada E.  
Power, Miss Frances  
Wright, Miss Edna

## Third and Fourth Grades.

January, 1917.

Cary, Miss Ida  
Lichens, Miss Katherine  
Russell, Miss Alice M.

July, 1917.

Burns, Miss Monica  
Frey, Miss Estella F.  
Reinhold, Miss Louise  
Swim, Miss Madeline

## Fifth and Sixth Grades.

January, 1917.

Conmy, Miss Caroline L.  
Miles, Miss Carita  
Preble, Mrs. Fannie C.  
Tobin, Miss Grace A.  
Van Heusen, Miss Ruth  
Winchester, Miss Helen

January, or July, 1917, at option  
of Board.

Gay, Miss Martha  
Slusser, Miss Grace

## Seventh and Eighth Grades.

January, 1917.

Hamlin, Miss Adelaide  
Hillyard, Mr. Sidney  
Morgan, Mrs. Isabel M.  
Ryst, Miss Ina

July, 1917.

Alderson, Miss Fern  
Alltucker, Miss Margaret  
Baumgartner, Miss Sera  
Blauer, Miss Emma E.  
Denike, Miss Mabel I.  
Donovan, Miss Laura B.  
Dudley, Mr. W. W.  
Fenwick, Miss Georgina  
Galbreath, Miss Neva L.  
Goodrich, Miss Lois  
Jamison, Miss Carrie L.  
Johnson, Miss Winifred  
Keyes, Miss Mary C.  
de Laguna, Miss Augusta  
Scott, Miss Faye T.

## Evening School.

January, 1917.

Grimes, Mr. Lyman  
Van Sickle, Mr. True

## Special Teachers.

July, 1917.

Fowler, Mrs. Matilda (Home  
Economics)  
Hunter, Miss Kathryn (Home  
Economics)  
Roll, Miss Ella (Special)

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## HIGH SCHOOL LEAVES OF ABSENCE.

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January, 1917.

Clark, Miss Gladys  
Douglas, Miss Katherine M.  
Gamble, Miss Hester  
Tanquary, Miss Ruberta

July, 1917.

Altmeyer, Mr. A. J.  
Anthony, Miss Edith A.  
Horton, Miss Marion L.  
Palmer, Miss Margaret  
Simpson, Miss E. Myrtle

## STATISTICAL TABLES

Table 1. Growth of Oakland and Its Schools—By Decades

Fiscal Year Ending	Population By U. S. Census	City Assessed Valuation	Total School Enrollment All Schools	Average Daily Attendance All Schools	Total Class Teachers
1853	100 <sup>2</sup>	No record	No record	16	1
1860	1,549	" "	130	58	2
1870	10,500	" "	1,410	735	19
1880	34,555	\$ 28,348,778	6,125	4,983	127
1890	48,682	35,843,979	9,565	6,372	155
1900	66,960	43,275,381	11,976	8,512	230
1910 <sup>1</sup>	150,174	107,793,550	17,621	12,919	353
1916	198,602 <sup>3</sup>	142,914,775	34,673	24,757	771

<sup>1</sup>—For the year 1910, only the Total Population includes the annexation of 1909.

<sup>2</sup>—Estimated.

<sup>3</sup>—Based on U. S. Census Bureau estimates.



Table 2. Growth of the City and School Department Since Annexation of 1909

Year	City Assessed Valuation <sup>1</sup>	TOTAL SCHOOL ENROLLMENT						CLASS TEACHERS EMPLOYED <sup>2</sup>					
		Kgtn.	Elementary Schools		High Schools		Kgtn.	Elementary Schools		High Schools			
			Day	Eve.	Day	Eve.		Day	Eve.	Day	Eve.		
1910-11	\$126,920,650	209	18,297	977	2,480	None	3	384	15	87	None		
1911-12	116,881,725	203	20,274	1,260	2,690	"	3	397	15	93	"		
1912-13	129,467,400	458	21,247	1,185	3,140	"	7	430	15	100	"		
1913-14	137,727,750	871	22,912	1,884	3,354	"	12	478	19	117	"		
1914-15	141,691,600	1,934	24,351	2,367	4,045	"	20	519	21	146	"		
1915-16	142,914,775	2,446	24,811	1,390	4,727	1,290	30	549	11.4	170.7	9.4		

<sup>1</sup>—Figures furnished by City Auditor.

<sup>2</sup>—Owing to varying methods of counting "class teachers," this part of the table is only approximately correct. During the last two years the number represents the average of the number employed during the ten months of the year. Manual training, instrumental music, and other non-class teachers are not counted in the elementary schools. In the high schools, all teachers including librarians and pianists are counted. In no case does the number include supervising principals, clerks or vice-principals not teaching. Domestic Science teachers were considered non-class teachers prior to 1915-16.

Table 3. The Amounts and Sources of Oakland's School Revenues 1915-16

SOURCE OF REVENUE	Kindergarten Fund		Elementary School Funds			High School Funds			All School Funds	
	Amount	Tax Rate	Amount	Per Pupil Per Day	Tax Rate	Amount	Per Pupil Per Day	Tax Rate	Amount	Percent of Total Receipts
State Apportionments.....	.....	....	\$314,052.50	8.8c	....	\$ 36,188.07	6.3c	....	\$350,240.57	22.6%
County Apportionments.....	.....	....	375,626.05	10.5c	.27	185,656.36	32.2c	.14	561,282.41	36.2%
School District Taxation.....	\$40,093.57	.03	421,922.33	.....	.30	173,496.49	.....	.12	635,512.39	41.0%
Miscellaneous Non-Revenue Receipts.....	.....	....	1,451.78	.....	....	766.10	.....	....	2,217.88	0.2%
Total Receipts.....	\$40,093.57	.03	1,113,052.66	.....	.57	\$396,107.02	.....	.26	\$1,549,253.25	100.0%

NOTES—1. This table does not include money received by the City Treasurer or that received by the County Treasurer for school district bonds. The amounts expended from these sources are shown in the footnotes to Table 4.

2. Tax rates shown above are the rates on each \$100 of assessed valuation (50% of true value).
3. Moneys received from the State come chiefly from corporation taxes.
4. State and county apportionments are based almost wholly on the average daily attendance of the preceding school year. From the foregoing table it will be seen that a single day's absence in the elementary schools means a loss of 19.3c to the district irrespective of the taxes paid. Similarly, a single day's attendance in high school is worth 38.5c.
5. The School District and County tax rates for school purposes for 1916-17 are as follows: Kindergartens \$.04, county tax for elementary schools, \$.27, district tax for elementary schools \$.30, county tax for high schools \$.16, district tax for high schools \$.19, tax for school district bonds \$.05.

Table 4. Principal School Expenditures 1915-16. (See notes below)

ITEMS	Kinder- gartens	Day Ele- mentary Schools	Evening Elementary Schools	Day High Schools	Evening High Schools	Total Expenditures	Per Cent of Total
<b>I. CURRENT EXPENSES</b>							
General Control.....	\$1,081.00	\$27,195.71	.....	\$5,002.97	.....	\$33,279.68	2.35%
Special Supervision.....	.....	24,992.43	.....	4,116.70	.....	29,109.13	2.06%
Principals and Clerks..	.....	76,381.18	\$611.00	14,111.06	.....	91,103.24	6.44%
Teachers' Salaries.....	32,939.65	685,689.99	5,918.90	259,305.55	\$5,689.50	989,543.59	69.98%
Text Books, Supplies, and other Instruction Expenses.....	726.75	37,755.80	148.35	14,521.70	.....	53,152.60	3.76%
Janitors, etc.....	1,000.00	55,539.74	.....	16,631.85	.....	73,171.59	5.17%
Fuel, Water, Light, Power, Janitors' Supplies, etc.....	1,016.00	27,341.45	93.94	11,933.65	.....	40,385.04	2.86%
Repairs, Replacements, etc.....	.....	46,063.48	1.78	12,615.91	.....	58,681.17	4.15%
Insurance.....	.....	1,182.25	.....	.....	.....	1,182.25	.08%
Libraries, Salaries, Books, etc.....	.....	2,876.64	.....	9,355.25	.....	12,231.89	.87%
School Health Depart- ment.....	682.00	13,112.54	.....	1,778.89	.....	15,573.43	1.10%
School Playgrounds.....	.....	8,311.30	.....	727.81	.....	9,039.11	.64%
Pupils' Carfare.....	.....	213.58	.....	.....	.....	213.58	.02%
Miscellaneous, includ- ing Interest on Reg- istered Warrants.....	91.73	5,130.95	.30	2,081.21	.....	7,304.19	.52%
<b>Total Current Expenses.....</b>	<b>\$37,537.13</b>	<b>\$1,011,787.04</b>	<b>\$6,774.27</b>	<b>\$352,182.55</b>	<b>\$5,689.50</b>	<b>\$1,413,970.49</b>	
<b>Per Cent of Total.....</b>	<b>2.65%</b>	<b>71.56%</b>	<b>.48%</b>	<b>24.90%</b>	<b>.41%</b>		<b>100%</b>
<b>II. PERMANENT IM- PROVEMENTS</b>							
Land.....	.....	\$32,655.00	.....	\$364.97	.....	\$33,019.97	
Buildings.....	.....	30,465.26	.....	807.00	.....	31,272.26	
Equipment.....	210.93	15,377.07	75.11	13,265.96	.....	28,929.07	
<b>Total Permanent Improve- ments.....</b>	<b>\$210.93</b>	<b>\$78,497.33</b>	<b>\$75.11</b>	<b>\$14,437.93</b>	<b>.....</b>	<b>\$93,221.30</b>	
<b>Grand Total—All Expend- itures.....</b>	<b>\$37,748.06</b>	<b>\$1,090,284.37</b>	<b>\$6,849.38</b>	<b>\$366,620.48</b>	<b>\$5,689.50</b>	<b>\$1,507,191.79</b>	

Notes. The following school expenditures for 1915-16 are not included in the foregoing table:

1. From State, County, District and Trust Funds:

(a) Salaries and maintenance of Chabot Observatory.....	\$ 3,739.23
(b) Equipment of new Observatory in East Oakland.....	10,327.91
(c) From Chabot Trust Fund.....	5,674.93
(d) Interest on school district bonds— Elementary \$44,200; High \$3,487.50.....	47,687.50
(e) Redemption of school district bonds— Elementary \$42,000; High \$6,500.....	48,500.00

Total from State, County and District Funds.....\$115,929.57

2. From City Funds:

(a) School Directors \$2,840; N. E. A. entertainment \$114.85; Inspection of Telescope \$20.....	\$ 2,974.85
(b) Clawson School.....	103,666.74
(c) Special Tax for Buildings, Elementary \$28,455.56; High \$12,252.81.....	40,708.37
(d) Chabot Observatory.....	9,775.72
(e) Interest on City School Bonds, Elementary \$84,426.78; High \$32,199.23.....	116,626.01
(f) Redemption of City School Bonds, Elementary \$68,365.08; High \$23,405.30.....	91,770.38

Total from City Funds.....\$365,522.07

3. Grand Total of Expenditures not included in Table.....\$481,451.64

Note that the grand total of all expenditures for schools for the year was \$1,988,643.43. Of this amount \$164,313.51 was for interest on school bonds. The new Emerson School, one of the finest elementary school buildings in the city, cost only about \$163,250 to complete.

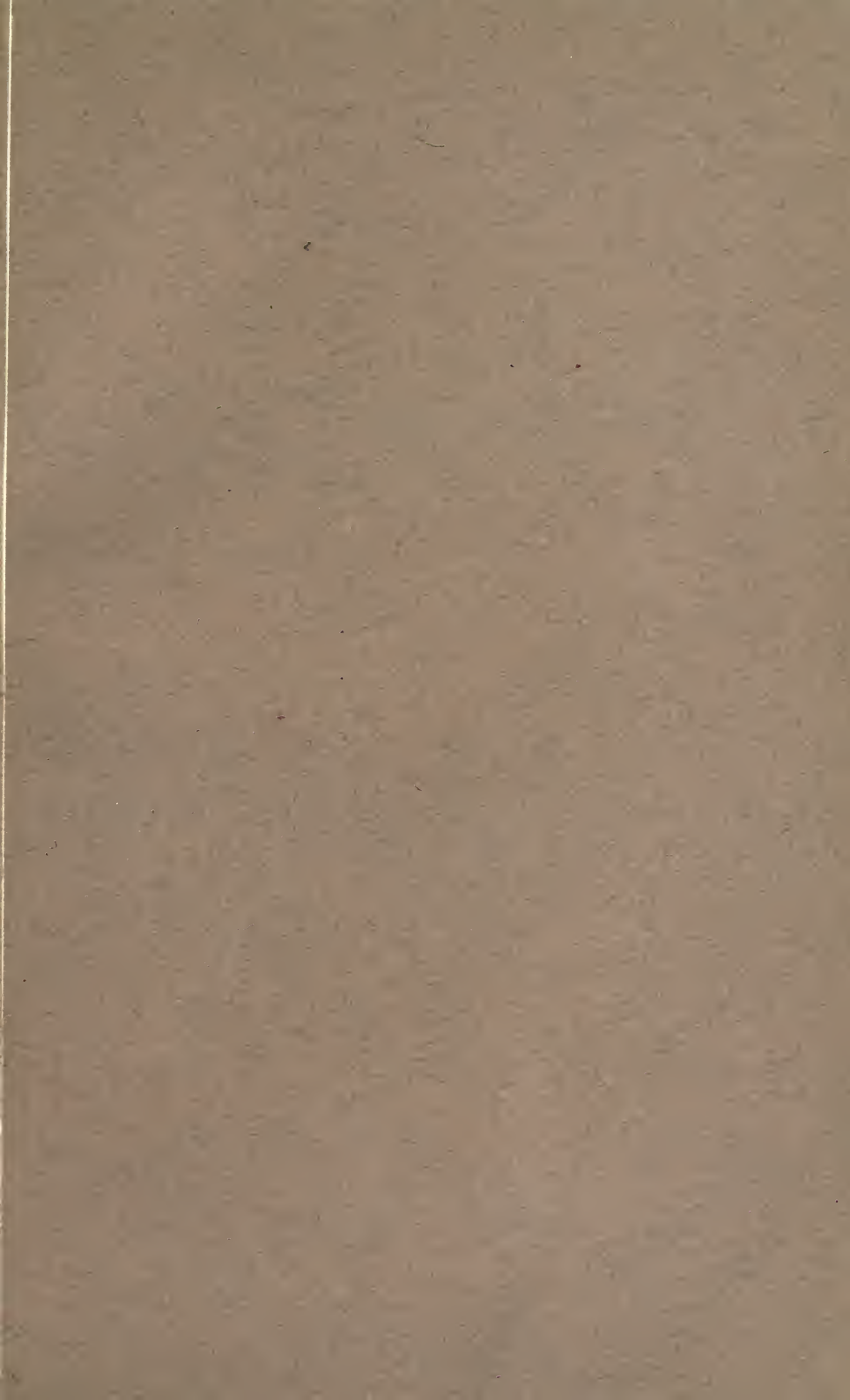
The school expenditures from municipal funds (See note 2, above) other than the Clawson Construction Fund (which represents proceeds of bonds) involved a tax of \$.1832 in addition to the school taxes shown in Table 3.



Table 5. Estimated School Expenditures 1916-17  
(Exclusive of Chabot Observatory, School Bonds,  
and Municipal Appropriations)

ITEMS	Kindergarten	Day and Evening Elementary	Day and Evening High	Total	Per Cent of Total
<b>I. CURRENT EXPENSES</b>					
General Control.....	\$1,419.70	\$29,325.50	\$6,673.80	\$37,419.00	2.27%
Special Supervision.....	368.00	21,043.00	4,961.00	26,372.00	1.60%
Principals and Clerks.....	3,850.21	74,007.79	21,932.00	99,790.00	6.05%
Teachers' Salaries.....	33,720.00	726,614.00	299,692.00	1,060,026.00	64.24%
Text Books, Supplies, and Other Instruction Expenses.....	1,180.00	44,477.00	18,524.35	64,181.35	3.89%
Janitors, etc.....	2,953.00	55,162.00	19,243.00	77,358.00	4.69%
Fuel, Water, Light, Power Janitors' Supplies, etc.....	1,791.00	33,913.29	15,198.72	50,903.01	3.08%
Repairs, Replacements, etc.....	5,001.10	81,119.91	58,079.49	144,200.50	8.74%
Insurance.....	-----	16,871.61	5,356.61	22,228.22	1.35%
Libraries: Salaries, Books, etc.....	150.00	4,298.44	12,297.00	16,745.44	1.01%
School Health Dept.....	712.00	13,529.00	1,857.00	16,098.00	.98%
School Playgrounds.....	-----	11,869.00	1,600.00	13,469.00	.81%
Pupils' Carfare.....	-----	250.00	-----	250.00	.01%
Miscellaneous, including Interest on Registered Warrants, Judgments, and Awards.....	931.00	15,388.35	4,756.00	21,075.35	1.28%
<b>Total Current Expenses.....</b>	<b>\$52,076.01</b>	<b>\$1,127,868.89</b>	<b>\$470,170.97</b>	<b>\$1,650,115.87</b>	
Per Cent of Total.....	3.16%	68.35%	28.49%		100%
<b>II. PERMANENT IMPROVEMENTS</b>					
Land.....	-----	\$1,139.49	\$5,393.00	\$6,532.49	
Buildings.....	-----	25,170.58	7,705.00	32,875.58	
Equipment.....	\$5,581.54	13,390.59	50,810.11	69,782.24	
<b>Total Permanent Improvements.....</b>	<b>\$5,581.54</b>	<b>\$39,700.66</b>	<b>\$63,908.11</b>	<b>\$109,190.31</b>	
<b>Grand Total of Budget.....</b>	<b>\$57,657.55</b>	<b>\$1,167,569.55</b>	<b>\$534,079.08</b>	<b>\$1,759,306.18</b>	









FROM THE PRESS OF THE

**Oakland Tribune**



T23904

DEPARTMENT OF  
PUBLIC INSTRUCTION  
OAKLAND CALIFORNIA

COURSE *of* STUDY

HIGH SCHOOLS

BOARD *of* EDUCATION BULLETIN

NUMBER 3

DECEMBER, 1916





# The Oakland High Schools

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OAKLAND HIGH SCHOOL  
OAKLAND EVENING HIGH SCHOOL

TWELFTH AND JEFFERSON STREETS

---

TECHNICAL HIGH SCHOOL  
TECHNICAL EVENING HIGH SCHOOL

FORTY-THIRD STREET AND BROADWAY

---

JOHN C. FREMONT HIGH SCHOOL  
JOHN C. FREMONT EVENING HIGH SCHOOL

FORTY-SEVENTH AVENUE AND FOOTHILL BOULEVARD

---

UNIVERSITY HIGH SCHOOL

FORTY-EIGHTH AND WEBSTER STREETS

---

VOCATIONAL HIGH SCHOOL  
VOCATIONAL EVENING HIGH SCHOOL

TWELFTH AND MARKET STREETS

COURSES OFFERED IN THE OAKLAND HIGH SCHOOLS.

(For details see pages 8 and 9)

Course I	Course II	Course III	Course IV	Course V
<b>College Preparatory</b>	<b>College Preparatory</b>	<b>Elective Course</b>	<b>Stenographer's Course</b>	<b>Industrial or Trade Course</b>
For College of Letters and Science	For Scientific and Engineering Colleges	Not Preparatory to University		
Fremont Oakland Technical University*	Fremont Oakland Technical University	Fremont Oakland Technical University  Oakland Evening Technical Evening	Fremont Oakland Technical  Oakland Evening Technical Evening Fremont Evening	Technical Vocational†  Technical Evening Vocational Evening

\*The University High School is a six-year high school beginning with the seventh grade, and is under the supervision of the Department of Education of the University of California. Its students are permitted, by special arrangement, to take courses in manual arts, home economics, or commercial subjects at the Technical High School which is located nearby.

†The Vocational High School, also a six-year high school beginning with the seventh grade, offers technical instruction in industrial subjects and home economics. The purpose of the school is to afford industrial training and related academic instruction for boys and girls who have the ability and the desire to engage in practical wage-earning occupations and to continue at the same time a general education. It does not assume to turn out journeymen or take from industry the entire responsibility of training for apprenticeship, but the instruction given should materially shorten the period of apprenticeship and give, at the same time, a technical and a general education. The following subjects are taught: English, economics, history and civics, hygiene, applied science and mathematics, joinery and patternmaking, machine shop practice, forging, automobile mechanics, electrical construction, printing, instrumental drawing, millinery, and dressmaking.

The evening high schools offer an elastic course designed to fit the needs of the students. The subjects of instruction include English, Spanish, history, chemistry, mathematics, drawing, penmanship, commercial arithmetic, bookkeeping, accounting, stenography, typewriting, office appliances and practice, music, millinery, dressmaking, printing, forge, cabinet making, machine shop, electricity, and physical training. English for immigrants and citizenship as a preparation for naturalization are special features of the evening schools.

## SOME SUGGESTIONS TO STUDENTS CONCERNING THE CHOICE OF SUBJECTS.

Each student is expected to pursue four subjects. By consent of the faculty he may elect a fifth subject, providing he has maintained a sufficiently high standard of scholarship during the preceding term.

It is well for students to plan their courses with some definite end in view. Where they are unable to do this they are advised to enroll in Course I which is sufficiently elastic to permit wide election and at the same time to provide for college entrance; otherwise, they may find themselves after graduation unable to meet the matriculation requirements in any university.

Those who have definitely decided to enter the University of California should carefully consult the entrance requirements and the prerequisites for the junior certificate, all of which are clearly stated in this circular, pages 10-15, and should plan their course of study accordingly.

A choice of languages will depend upon the future plans of the student. Those preparing to enter college will find suggestions regarding this subject under Recommendations for the Various Curricula on pages 16-19. It is unwise, however, to begin the study of a foreign language and to abandon it after a year or two to begin a second. Having once been commenced, the study of a language should be continued for at least three or four years.

The primary purpose of the Stenographer's Course is to prepare pupils for clerical positions. The supply of stenographers, however, is now greater than the demand and the remuneration mediocre except for such as have exceptional training and ability. There is, nevertheless, a distinct advantage in a certain amount of such training, even for those preparing for college, and inasmuch as university entrance



credit is allowed for a limited amount of such work, a year course in commercial subjects, taken preferably in the third or fourth years, is worthy of consideration. One year of concentrated commercial work will equip a well trained and mature high school pupil for a clerical position. The extension of commercial relations with Mexico and South America indicates that special business opportunities will be afforded in the future to young people with a knowledge of the Spanish language.

Students who are preparing to make a profession of music are advised to enroll in the Elective Course and to choose one or two subjects in music each term. In addition to music, French or German, or both languages, history, and English may be pursued with profit.

The Industrial Course is arranged with a view to shortening the period of apprenticeship for those preparing to enter the field of industry. Those who wish to include more than one year's shop work as a part of college admission requirements are advised to enroll in Course I.

Girls who are not desirous of pursuing college preparatory or commercial work are recommended to register in the Elective Course and to take one or two subjects each term in the home economics department. This course offers a comprehensive and interesting field of study, especially when household chemistry, sanitation, and drawing are elected, and affords special preparation for household administration.

Those planning to enter a state normal school in preparation for teaching in the elementary schools should read carefully the Rules of the State Board of Education given on page 7.

The State Board of Health has established new requirements which will become effective after Sept. 1, 1918, to raise Nursing to a professional plane. The candidate for admission to courses of training must present a high school diploma and evidence of having had four years of English, one year of Chemistry, one year of Biology and two years of Hygiene, Sanitation, and Household Arts. In order to pass the examination given by the State Board, the candidate must also have Sociology, Psychology, and one Foreign Language.

MINIMUM REQUIREMENTS OF THE STATE BOARD OF  
EDUCATION FOR GRADUATION FROM THE REGULAR  
TEACHER'S COURSE IN A STATE NORMAL SCHOOL.

The following table shows the minimum number of units of each subject required of graduates of the state normal schools. Note that some of these courses *must* be taken at the high school; others *may* be taken at either the high school or the normal school:

General Requirements.	Units
*English Literature and Language, including grammar, composition and oral expression.....	2
*Physical Science—One year of general science, including the applied elements of physics, chemistry and physical geography, or one year of physics or chemistry or physical geography, provided that for students entering after June 30, 1918, the general science shall be prescribed.....	1
Biological Science, including physiology, hygiene and sanitation..	1
*History of the United States and Civics, including local and state government .....	1
*World History .....	2
Drawing and Painting, including applied design.....	1
Music, including sight reading, two-part singing, and elementary harmony .....	1
Manual Training or Household Arts, or both; provided, that for students entering after June 30, 1918, one unit shall be required .....	1/2
Elements of Agriculture, including practical work in gardening, floriculture and plant propagation; provided, that for students entering after June 30, 1918, one unit shall be required .....	1/2
*Mathematics, including general mathematics or the applied elements of algebra or plane geometry, or commercial arithmetic	1
<b>Professional Requirements.</b>	
**Elements of Applied Sociology, including the study of institutions and social organizations, rural life and rural school problems .....	1/2
**Education, including a study of the school as an institution and the curriculum, general psychology applied to education and general method .....	1
**Practice Teaching and Special Methods which shall familiarize the student with and give him a mastery of the state series of textbooks, and which shall in addition thereto include special methods in all of the required statutory subjects; provided, that at least one (1) unit shall be given to practice teaching and at least one-third of the total time given to practice teaching shall be in a classroom, by the classroom method and under direct supervision.....	2 3/4
**The California School System, School Law, and their development .....	1/4
**Physical Education, Athletics, Play, School Playground Equipment, and Indoor and Outdoor Recreation.....	1/2
Possible Electives .....	8
Possible Electives for those entering after June 30, 1918.....	7
<hr/>	
Minimum units required for graduation.....	24
*Must be taken in a high school	
**Must be taken in a normal school.	

# OUTLINE OF COURSES OF STUDY FOR THE HIGH SCHOOLS

	<p style="text-align: center;"><b>COURSE I</b></p> <p style="text-align: center;">College Preparatory Course</p> <p style="text-align: center;">Preparatory to the University of California in the College of Letters and Science (the college of general culture) and the College of Commerce.</p>	<p style="text-align: center;"><b>COURSE II</b></p> <p style="text-align: center;">College Preparatory Course</p> <p style="text-align: center;">Preparatory to the University of California in the Colleges of Mechanics, Mining, Civil Engineering, and Chemistry and the course in Architecture.</p>	<p style="text-align: center;"><b>COURSE III</b></p> <p style="text-align: center;">Elective Course</p> <p style="text-align: center;">The elective course is not preparatory to the University. At least three years' work in each of three of the following groups of subjects is required for graduation: English, History, Mathematics, Foreign Languages, Science, Home Economics, Commercial, Music, Drawing, and Mechanic Arts.</p>	<p style="text-align: center;"><b>COURSE IV</b></p> <p style="text-align: center;">Stenographer's Course.</p>
FIRST YEAR	English Algebra Foreign Language, Ancient or Modern Elective	English Algebra Foreign Language Freehand Drawing	English Elective Elective Elective	English Bookkeeping Spelling and Commercial Arithmetic Penmanship Elective
SECOND YEAR	English Plane Geometry Foreign Language, Ancient or Modern Elective	English Plane Geometry Foreign Language Geometrical Drawing	English Elective Elective Elective	English Typing I Stenography I Elective
THIRD YEAR	Elective Elective Elective Elective Of the third and fourth year electives, two units must be taken from the following: adv. mathematics, additional foreign language, laboratory science of third or fourth year.	English or Foreign Language Chemistry Mathematics Elective	English Elective Elective Elective	English Typing II Stenography II Elective
FOURTH YEAR	U. S. History and Government †Science Elective Elective	English or Foreign Language U. S. History and Government Physics Mathematics	U. S. History and Government *Science Elective Elective	U. S. History and Civics Commercial Law 1/2 *Science Stenography and Office Practice Elective 1/2

† May be taken in the third year.

\* May be taken in any year of the course.



OUTLINE OF COURSES OF STUDY FOR THE HIGH SCHOOLS—Con.

	COURSE V Industrial.	ELECTIVES
FIRST YEAR	English Drawing Mathematics Shop, 20 hours	<p>In choosing Electives, pupils preparing for College or higher schools should consult the admission requirements of the institutions which they propose to enter.</p>
SECOND YEAR	English Drawing Mathematics Shop, 20 hours	<p>Commercial: Typing I, Penmanship, Spelling and Commercial Arithmetic, Bookkeeping I. Drawing: Freehand and Mechanical. History: Ancient History, General History. Home Economics: Domestic Science, Domestic Art. Languages: French, German, Latin, Spanish. Mathematics: Algebra I, Shop Mathematics. Mechanic Arts: Shop, ten to twenty hours. Music: Choral I or II, Band, Orchestra. Science: Physical and Commercial Geography, General Science, Botany.</p>
THIRD YEAR	Economics Industrial Physics Shop, 20 hours	<p>Commercial: Bookkeeping I or II, Stenography I, Typing I. Drawing: Freehand, Mechanical, Design. History: Ancient History, General History, Mediaeval and Modern History. Home Economics: Domestic Science, Domestic Art. Languages: French, German, Latin, Spanish. Mathematics: Plane Geometry, Shop Mathematics, Algebra I. Mechanic Arts: Shop, ten to twenty hours. Music: Band, Orchestra, Choral I or II. Science: Botany, Biology.</p>
FOURTH YEAR	U. S. History and Civics Elective Shop, 20 hours	<p>Commercial: Stenography I or II, Typing I or II, Bookkeeping I or II, Salesmanship <math>\frac{1}{2}</math>, Advertising <math>\frac{1}{2}</math>. Drawing: Freehand, Mechanical, Design. English: English III, Argumentation, Public Speaking. History: English History, Mediaeval and Modern History, Economics. Home Economics: Domestic Science, Domestic Art. Languages: French, German, Latin, Spanish. Mathematics: Algebra I, Plane Geometry, Solid Geometry <math>\frac{1}{2}</math>, Trigonometry <math>\frac{1}{2}</math>, Advanced Algebra A <math>\frac{1}{2}</math>. Mechanic Arts: Shop, ten to twenty hours. Music: Harmony, Band, Orchestra, Choral I or II. Science: Chemistry, Physics, Biology, Physiology and Hygiene, Botany.</p>
FOURTH YEAR	U. S. History and Civics Elective Shop, 20 hours	<p>Commercial: Stenography I or II, Typing I or II, Bookkeeping I or II, Advertising <math>\frac{1}{2}</math>, Commercial Law <math>\frac{1}{2}</math>, Accounting <math>\frac{1}{2}</math>. Drawing: Freehand, Mechanical, Design. English: Argumentation, English III or IV, Public Speaking. History: Economics. Home Economics: Domestic Science, Domestic Art. Languages: French, German, Latin, Spanish. Mathematics: Plane Geometry, Advanced Algebra A <math>\frac{1}{2}</math>, Advanced Algebra B <math>\frac{1}{2}</math>, Solid Geometry <math>\frac{1}{2}</math>, Plane Trigonometry <math>\frac{1}{2}</math>, Shop Mathematics. Mechanic Arts: Shop, ten to twenty hours. Music: History of Music, Harmony, Composition, Band, Orchestra, Choral I or II. Science: Physiology and Hygiene, Physics, Chemistry, Botany, Biology.</p>

## REQUIREMENTS FOR ADMISSION TO THE UNIVERSITY OF CALIFORNIA.

The requirements for admission to the University of California, as given in the *Circular of Information*, August, 1916, pp. 55-66, follow:

### LIST OF PREPARATORY SUBJECTS.

*Units of Credit*—The amount of work represented both by preparatory or high school subjects and by the University courses is specified quantitatively. In the University a unit signifies one hour per week of recitation or lecture, with preparation therefor, during one half-year. A course of study taken in the preparatory school for one year at five periods per week is valued at 3 units. Laboratory hours not requiring preparation are estimated at a lower rate than recitations and lectures.

	Units		Units	
*A	English Expression.....	12f	Physiology.....	3
*B	Foreign Language.....	12g	General Science.....	3
1	English, elem.....	13a	History, Med., Mod. etc.	3
2	Plane Geometry.....	13b	History, English.....	3
3	Elementary Algebra.....	14a	English, adv.....	3
†4a <sup>1</sup>	Alg. Theory, I.....	14b	English, Adv.....	3
†4a <sup>2</sup>	Alg. Theory, II.....	15a <sup>1</sup>	1 yr. of 15a <sup>2</sup> .....	3
†4b <sup>1</sup>	Solid Geometry.....	†15a <sup>2</sup>	French, elem.....	6
5	History and Government of the U. S.....	†15a <sup>3</sup>	French, intermed.....	3
6a	Cæsar.....	†15a <sup>4</sup>	French, adv.....	3
6b	Latin Comp., elem.....	15b <sup>1</sup>	1 yr. of 15b <sup>2</sup> .....	3
6ab <sup>1</sup>	1 yr. of 6ab.....	†15b <sup>2</sup>	German, elem.....	6
†7a	Cicero.....	†15b <sup>3</sup>	German, intermed.....	3
†7b	Virgil.....	†15b <sup>4</sup>	German, adv.....	3
†7c <sup>1</sup>	Latin Comp., adv.....	15c <sup>1</sup>	1 yr. of 15c <sup>2</sup> .....	3
†7c <sup>2</sup>	Latin Comp., adv.....	†15c <sup>2</sup>	Spanish, elem.....	6
†8a	Elementary Greek.....	†15c <sup>3</sup>	Spanish, intermed.....	3
†8b	Attic Prose.....	†15c <sup>4</sup>	Spanish, adv.....	3
†9a	Attic Prose, adv.....	†16	Free-hand Drawing.....	3
†9b	Homer.....	†17	Geometrical Drawing.....	3
10	History, Anc., etc.....	18a	Mechanical Arts.....	1½_9
11	Physics.....	18b	Applied Art.....	1½_3
†12a <sup>1</sup>	Synthetic Projective Geometry.....	18cde	Domestic Science.....	1½_9
†12a <sup>2</sup>	Plane Trigonometry.....	19	Agriculture.....	1½_9
†12a <sup>3</sup>	Plane Analytic Geometry	20a	Economic Geography.....	1½
12b	Chemistry.....	20b	Commercial and Indus- trial History.....	3
12c	Botany.....	20c	Bookkeeping.....	3
12d	Zoology.....	20b	Stenography and Type- writing.....	3 or 6
12e	Physical Geography.....	21	Music.....	3_9

\*SUBJECT A, English expression, SUBJECT B, ability to read a foreign language, ancient or modern (French, German, Greek, Italian, Latin, Spanish). While these subjects are not matriculation requirements, they are mentioned here because of the fundamental importance of a proper high school training in meeting these requirements. A is a requirement for junior standing in all the colleges at Berkeley and B a requirement for the junior certificate in the College of Letters and Science and in the College of Commerce; it is required for the bachelor's degree in the College of Agriculture. Credit is given upon examination only, not upon certificate nor upon the formal completion of any course of study. These examinations are regularly held every half-year, Subject B immediately preceding the final examinations in December and May and Subject A during the first week of instruction in August and January.

†The dagger indicates subjects for which equivalent courses are offered in the University. For further description of these courses reference should be made to the annual Announcement of Courses.

Subjects 6ab<sup>1</sup>, 15a<sup>1</sup>, 15b<sup>1</sup>, and 15c<sup>1</sup> represent the minimum credit in Latin, French, German, and Spanish, respectively—one year of high school work. Such credit is ordinarily given only upon recommendation, not upon examination.

## ADMISSION REQUIREMENTS UNIVERSITY OF CALIFORNIA

Any person sixteen years of age or over may enter any of the academic colleges as a regular student, without deficiency, if he is able to meet the following requirements:

ENGLISH, two years..... (Subject 1)*.	6 units
MATHEMATICS, four years..... (Subjects 2, 3, 4a, 4b, 12a <sup>2</sup> ).	12
FOREIGN LANGUAGES, four years..... Latin (subjects 6a and 6b); † and German (15b <sup>2</sup> ) or French (15a <sup>2</sup> ) or Spanish (15c <sup>2</sup> ) or Greek (8) or advanced Latin (7). (See also subjects A and B under List of Preparatory Subjects).	12
HISTORY, one year..... (Subjects 5, 10, 13a or 13b).	3
SCIENCE, two years..... Physics (11) † and Chemistry (12b). †	6
DRAWING, two years..... Freehand (16) and Geometrical (17).	6
TOTAL .....	45 units

HOWEVER, NO COLLEGE REQUIRES ALL THE SUBJECTS LISTED ABOVE, but each permits certain modifications in the requirements, which enable students to gain time for elective subjects in the high school if they choose to do so. A student who desires to modify his high school course from the standard given above should carefully study the requirements listed below for all curricula which he might eventually choose at the University.

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\*The numbers in parentheses refer to the matriculation subjects listed on a preceding page; for example, 2 is plane geometry.

†The University does not offer courses equivalent to subject 6 (elementary Latin). This subject must be taken in the high school, if at all. Elementary physics and elementary chemistry are offered in the summer session of the University, but not in the fall or spring sessions.



ADMISSION REQUIREMENTS UNIVERSITY OF CALIFORNIA  
MATRICULATION GROUP I

The minimum requirements for complete matriculation in the COLLEGE OF LETTERS AND SCIENCE and the COLLEGE OF COMMERCE are as follows:

ENGLISH, two years..... (Subject 1).	6 units
MATHEMATICS, two years..... Plane Geometry (2)* and Elem. Algebra (3).	6
FOREIGN LANGUAGES, two years..... Any one of, or any combination, from the following: Latin (6)†, Greek (8), French (15a), German (15b), Spanish (15c). (See also subjects A and B under List of Preparatory Subjects).	6
HISTORY, one year..... U. S. (5), or Ancient (10), or Medieval and Modern (13a), or English (13b).	3
NATURAL SCIENCE (taken with laboratory work in classes of third- and fourth-year pupils), one year..... Physics (11)†, or Chemistry (12b)†, or Botany (12c), or Zoology (12d), or Physiology (12f).	3
ADDITIONAL ..... Any combination from the following: Advanced Mathematics (4a, 4b, 12a). Additional foreign language, ancient or modern (6, 7, 8, 9, 15). Additional Laboratory Science taken in classes of third- and fourth-year pupils (11, 12b, 12c, 12d, 12f).	6
ELECTIVE ..... (These may include not more than 9 units chosen from subjects 18 to 21 and high school subjects not listed by the University).	15
TOTAL .....	45 units

The candidate for admission must have chosen his preparatory subjects in such a way as to have a total of 12 units of "advanced" subjects. Advanced subjects are as follows: 4a<sup>1</sup>, 4a<sup>2</sup>, 4b, 5, 7, 9, 11, 12 (excluding sciences given in the first and second years of the high school), 13b, 14, 15a<sup>3</sup>, 15a<sup>4</sup>, 15b<sup>3</sup>, 15b<sup>4</sup>, 15c<sup>3</sup>, 15c<sup>4</sup>.

Any student who has fulfilled the requirements of Group 1 will be admitted to the College of Letters and Science. However, he will find his choice of studies much restricted unless he has chosen his optional and elective units with due regard to the curriculum he intends to pursue at the University. Requirements and recommendations for preparatory studies have been made by the University; these will be found on pages 16 to 19 of this circular.

\*The numbers in parentheses refer to the matriculation subjects listed on a preceding page; for example, 2 is plane geometry.

†The University does not offer courses equivalent to subject 6 (elementary Latin). This subject must be taken in the high school, if at all. Elementary physics and elementary chemistry are offered in the summer session of the University, but not in the fall or spring sessions.

# ADMISSION REQUIREMENTS UNIVERSITY OF CALIFORNIA

## MATRICULATION GROUP II

The requirements for complete matriculation in the colleges of MECHANICS, MINING, CIVIL ENGINEERING, and CHEMISTRY, the curriculum in ARCHITECTURE (College of Letters and Science) and the curriculum in FOREST UTILIZATION (College of Agriculture) are as follows:

ENGLISH, two years.....	6 units
(Subject 1).	
MATHEMATICS, four years.....	12
Plane Geometry (2)*, Elem. Algebra (3), Algebraic Theory (4a <sup>1</sup> ), Algebraic Theory (4a <sup>2</sup> ) or Plane Analytic Geometry (12a <sup>3</sup> ), Solid Geometry (4b), Plane Trigonometry (12a <sup>2</sup> ).	
FOREIGN LANGUAGES, two years.....	6
Any one of, or any combination from, the following:	
Latin (6)†, Greek (8), French (15a), German (15b), Spanish (15c).	
(See also Subjects A and B under List of Preparatory Subjects).	
HISTORY, one year.....	3
U. S. (5), or Ancient (10), or Medieval and Modern (13a), or English (13b).	
SCIENCE, two years.....	6
Physics (11)† and Chemistry (12b)†.	
DRAWING, two years .....	6
Freehand (16) and Geometrical (17).	
ADDITIONAL .....	6
Any one of, or any combination from the following:	
Additional foreign language (6, 7, 8, 9, 15).	
Advanced English (14).	
TOTAL .....	45 units

Group II, with any of the foreign languages listed will admit also to the College of Agriculture, or to the College of Letters and Science; but see also Group I (for Letters and Science) and III (for Agriculture). Group II with 6 units of Latin† will admit to any curriculum of the University.

*Caution:* The attention of students who are preparing to enter any of the engineering colleges is directed to the following facts:

\*The numbers in parentheses refer to the matriculation subjects listed on a preceding page; for example, 2 is plane geometry.

†The University does not offer courses equivalent to subject 6 (elementary Latin). This subject must be taken in the high school, if at all. Elementary physics and elementary chemistry are offered in the summer session of the University, but not in the fall or spring sessions.

## ADMISSION REQUIREMENTS UNIVERSITY OF CALIFORNIA

The regular curriculum of the first year in all the engineering colleges (the four-year courses) includes mathematics, physics, chemistry, and surveying. Admission to any one of these courses is conditioned upon the satisfaction of the following entrance requirements: For mathematics and surveying—plane and solid geometry (2 and 4*b*), a year and a half of algebra (3, 4*a*<sup>1</sup>), plane trigonometry (12*a*<sup>2</sup>) and either an additional half year of algebra (4*a*<sup>2</sup>) or plane analytic geometry (12*a*<sup>3</sup>); for physics—elementary physics (11); for chemistry—elementary chemistry (12*b*); for surveying, in addition to the mathematics—geometrical drawing (17). Deficiency in any one of these prerequisites will postpone the corresponding university course until the deficiency is removed and will inevitably prevent the completion of the course in engineering in four years. Moreover, courses in elementary physics and chemistry are not offered by the University, except during the summer session.

Students who prefer to devote five years to the completion of the courses in engineering are also advised to present all the subjects of matriculation group II as stated above. For students in the five-year courses the regular curriculum of the first year includes mathematics and chemistry, while physics and surveying may be deferred to the second year. Deficiency in one of these prerequisites will postpone the corresponding university course and will thus usually prevent graduation in five years.



# ADMISSION REQUIREMENTS UNIVERSITY OF CALIFORNIA

## MATRICULATION GROUP III

The minimum requirements for complete matriculation in the COLLEGE OF AGRICULTURE, except the curriculum in FOREST UTILIZATION, are as follows:

ENGLISH, two years..... (Subject 1.)	6 units
MATHEMATICS, two years..... Plane Geometry (2)* and Elementary Algebra (3).	6
FOREIGN LANGUAGES, two years..... Any one of, or combination from, the following: Latin (6)†, Greek (8), French (15a), German (15b), Spanish (15c). (See also subjects A and B under List of Preparatory Subjects).	6
HISTORY, one year..... U. S. (5), or Ancient (10), or Medieval and Modern (13a), or English (13b).	3
NATURAL SCIENCE, two years..... Physics (11)† and Chemistry (12b).†	6
OPTIONAL (from subjects 4-17 inclusive).....	9
ELECTIVE .....	9
TOTAL .....	45 units

The candidate for admission must have chosen his preparatory subjects in such a way as to have a total of 12 units of "advanced subjects." Advanced subjects are as follows: 4a<sup>1</sup>, 4a<sup>2</sup>, 4b, 5, 7, 9, 11, 12 (excluding sciences given in the first and second years of the high school), 13b, 14, 15a<sup>3</sup>, 15a<sup>4</sup>, 15b<sup>3</sup>, 15b<sup>4</sup>, 15c<sup>3</sup>, 15c<sup>4</sup>.

\*The numbers in parentheses refer to the matriculation subjects listed on a preceding page; for example, 2 is plane geometry.

†The University does not offer courses equivalent to subject 6 (elementary Latin). This subject must be taken in the high school, if at all. Elementary physics and elementary chemistry are offered in the summer session of the University, but not in the fall or spring sessions.

RECOMMENDATIONS FOR THE VARIOUS CURRICULA  
UNIVERSITY OF CALIFORNIA

The requirements and recommendations for the various curricula are stated below.

The terms "required" and recommended" are to be interpreted as follows:

*Required:* Subjects without which the students will not be able to enter the regular curriculum. The omission of required subjects at matriculation will usually result in delay in graduation.

*Recommended:* Subjects which will give more effective preparation and thus allow greater freedom of election at the University. The omission of these subjects at matriculation usually will not delay graduation if the student's work at the University is properly planned.

**Agriculture:** leading to the degree of Bachelor of Science in the COLLEGE OF AGRICULTURE.

*Required:* Group III.

*Recommended:* Drawing (16, 17), Trigonometry (12a<sup>2</sup>).

**Anthropology:** leading to the degree of Bachelor of Arts.

*Required:* Group I.

**Architecture:** leading to the degree of A. B. in the COLLEGE OF LETTERS AND SCIENCE, at the end of four years, and to the degree of Graduate in Architecture in the SCHOOL OF ARCHITECTURE, at the end of six years.

*Required:* Group II.

*Recommended:* Latin (6a and 6b) and French (15a<sup>2</sup>).

**Chemistry:** leading to the degree of Bachelor of Science in the COLLEGE OF CHEMISTRY.

*Required:* Group II.

*Recommended:* German (15b<sup>2</sup>) or French (15a<sup>2</sup>).

**Commerce:** leading to the degree of Bachelor of Science in the COLLEGE OF COMMERCE at the end of four years, and to an advanced degree in the SCHOOL OF COMMERCE at the end of five years.

*Required:* Group I.

*Recommended:* modern foreign language; additional mathematics.

RECOMMENDATIONS FOR THE VARIOUS CURRICULA  
UNIVERSITY OF CALIFORNIA

**Dentistry:** leading to the degree of D.D.S. in the COLLEGE OF DENTISTRY.

*Required:* 45 units, including physics (11) or chemistry (12*b*).  
Of the required 45 units at least 36 must be selected from subjects 1 to 17 inclusive; see list of preparatory subjects on page 10.

*Recommended:* Group I.

**Economics:** leading to the degree of Bachelor of Arts.

*Required:* Group I.

*Recommended:* additional foreign language.

**Engineering** (Chemical, Civil, Electrical, Gas, Irrigation, Mechanical, Mining [including Economic Geology and Petroleum Engineering], Railroad, Sanitary): leading to the degree of Bachelor of Science in one of the ENGINEERING COLLEGES.

*Required:* Group II.

**ENGLISH:** leading to the degree of Bachelor of Arts.

*Required:* Group I.

*Recommended:* Latin (6, 7) and Greek (8, 9).

**Forest Utilization:** leading to the degree of Bachelor of Science in the COLLEGE OF AGRICULTURE at the end of four years.

*Required:* Group II.

**German:** leading to the degree of Bachelor of Arts.

*Required:* Group I.

*Recommended:* French or German; Latin is desirable.

**History:** leading to the degree of Bachelor of Arts.

*Required:* Group I.

*Recommended:* Additional foreign language.

**Home Economics:** leading to the degree of Bachelor of Arts with a group elective or major subject in Household Art, or in Household Science.

*Required:* Group I, with Chemistry (12*b*).

*Recommended:* Physics (11), Freehand Drawing (16), Industrial Art (18*c*, 3 units; 18*d*, 6 units).

**Languages—Classics, Latin, Greek:** leading to the degree of Bachelor of Arts.

*Required:* Group I, with Latin (6).

*Recommended:* advanced Latin (7), Greek (8, 9), and Ancient History (10).

To delay advanced Latin until the University is reached will make it exceedingly difficult, though not impossible, to do any considerable amount of major work in Latin.



RECOMMENDATIONS FOR THE VARIOUS CURRICULA  
UNIVERSITY OF CALIFORNIA

**Other languages:** leading to the degree of Bachelor of Arts.

*Required:* Group I.

*Recommended:* Latin (subjects 6, 7), or Greek (8, 9), and French (15a<sup>2</sup>), or German (15b<sup>2</sup>).

**Law:** (A) leading to the degree of Bachelor of Arts in the COLLEGE OF LETTERS AND SCIENCE at the end of four years and to the degree of J.D. in the SCHOOL OF JURISPRUDENCE at the end of six years.

*Required:* Group I.

*Recommended:* physics (11) or Chemistry (12b), Latin (6), U. S. history (5) and English history (13b).

A full statement of the requirements for the professional courses in law will be found in the Announcement of the School of Jurisprudence.

(B) Leading to the junior certificate in the COLLEGE OF LETTERS AND SCIENCE, ordinarily at the end of two years and to the degree LL.B. in the Hastings College of the Law (San Francisco) at the end of three years following the junior certificate.

*Required:* Group I.

For further information see the Annual Announcement of the Hastings College of the Law.

**Mathematics:** leading to the degree of Bachelor of Arts.

*Required:* Group I.

*Recommended:* advanced mathematics (4a, 4b, 12a<sup>2</sup>).

**Medicine:** leading to the degree of M.D. in seven years, or to the degree of Bachelor of Arts in the COLLEGE OF LETTERS AND SCIENCE and M.D. in the MEDICAL SCHOOL in a combined course of eight years.

*Required:* Group I, with physics (11) and chemistry (12b).

*Recommended:* advanced mathematics (4a, 4b, 12a<sup>2</sup>), Physical Chemistry, German (15b<sup>2</sup>) or French (15a<sup>2</sup>), freehand drawing (16).

A full statement of the prerequisites for the Course in Medicine will be found in the Announcement of the MEDICAL SCHOOL.

**Pharmacy:** (A) leading to the degree Ph.G. (Graduate in Pharmacy) at the end of a course of two years in the CALIFORNIA COLLEGE OF PHARMACY.

*Required:* Two years of approved high school work or its equivalent.

(B) leading to the degree of Ph.C. (Pharmaceutical Chemist) at the end of a course of three years in the CALIFORNIA COLLEGE OF PHARMACY.

*Required:* Graduation from an approved high school course of four years or an equivalent preparation.

(c) leading to the degree of Phar.B. (Bachelor of Pharmacy) at the end of a course of four years in the CALIFORNIA COLLEGE OF PHARMACY.

*Required:* Graduation from an approved high school course of four years or an equivalent preparation.

RECOMMENDATIONS FOR THE VARIOUS CURRICULA  
UNIVERSITY OF CALIFORNIA

**Philosophy:** leading to the degree of Bachelor of Arts.

*Required:* Group I.

**Political Science:** leading to the degree of Bachelor of Arts.

*Required:* Group I.

**Public Health:** (A) leading to the degree of A.B. in the COLLEGE OF LETTERS AND SCIENCE at the end of four years and to the degree of Graduate in Public Health (Gr.P.H.) in the GRADUATE DIVISION at the end of six years.

*Required:* Group I with Physics (11) and Chemistry (12b).

*Recommended:* Advanced Mathematics (4a, 4b, 12a<sup>2</sup>), German (15b<sup>2</sup>), or French (15a<sup>2</sup>), Freehand Drawing (16).

(B) Leading to the degree of B.S. in the COLLEGE OF CIVIL ENGINEERING (curriculum in sanitary engineering) at the end of four years and to the degree of Gr.P.H. in the GRADUATE DIVISION at the end of six years.

*Required:* Group II.

(C) Leading to the degrees of M.D. and Gr.P.H. in seven years; or to the degrees of A.B. and Gr.P.H. in the COLLEGE OF LETTERS AND SCIENCE and M.D. in the MEDICAL SCHOOL in a combined course of eight years.

*Required:* Group I, with Physics (11) and Chemistry (12b).

*Recommended:* Advanced Mathematics (4a, 4b, 12a<sup>2</sup>), German (15b<sup>2</sup>), or French (15a<sup>2</sup>), Freehand Drawing (16).

**Romanic Languages:** leading to the degree of Bachelor of Arts.

*Required:* Group I.

*Recommended:* French (15a<sup>2</sup>) or Spanish (15c<sup>2</sup>, 15c<sup>3</sup>) or German (15b<sup>2</sup>); Latin is strongly advised.

**Sciences** (Anatomy, Astronomy, Botany, Biochemistry, Chemistry, Geography, Geology and Mineralogy, Hygiene, Palaeontology, Pathology, Physics, Physiology, Psychology, Zoology): leading to the degree of Bachelor of Arts.

*Required:* Group I, with chemistry (12b) and physics (11).

NOTE.—Physics is recommended but not required for students who intend to specialize in zoology.

*Recommended:* Advanced mathematics (4a, 4b, 12a<sup>2</sup>), German (15b<sup>2</sup>) or French (15a<sup>2</sup>).

**Slavic Languages:** leading to the degree of Bachelor of Arts.

*Required:* Group I.

*Recommended:* French (15a<sup>2</sup>) or German (15b<sup>2</sup>).

**TIME ALLOTMENT IN HOURS PER WEEK FOR THE  
ELEMENTARY SCHOOLS**

GRADE	1	2	3	4	5	6	7	8
English and Penmanship.....	10	10	10	10	10	9	8	8
Arithmetic.....	2	3	5	5	5	5	4	4
History and Geography				5	5	5	5	1st term 5
Civics and Hygiene.....								2nd term 5
Nature Study, Physical Training, and Hygiene.....	1	1	1	1	1	1	1	1
Music (Vocal) Band, or Orchestra).....	2	2	2	2	2	2	2	2
Drawing.....	1	1	1	1	1	1	2½	2½
Manual Training or Cooking and Sewing..	1	1	1	1	1	2	2½	2½
Foreign Language..... (Latin, French, German, Spanish) Optional.....							5	5
Unassigned.....	3	2						
<b>TOTAL.....</b>	20	20	20	25	25	25	25 or 30	25 or 30

[2M, 12, '16]



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OAKLAND CALIFORNIA

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DECEMBER, 1916

## OUTLINE OF COURSES OF STUDY FOR THE HIGH SCHOOLS

	COURSE I College Preparatory Course	COURSE II College Preparatory Course	COURSE III Elective Course	COURSE IV Stenographer's Course.
	Preparatory to the University of California in the College of Letters and Science (the college of general culture) and the College of Commerce.	Preparatory to the University of California in the Colleges of Mechanics, Mining, Civil Engineering, and Chemistry and the course in Architecture.	The elective course is not preparatory to the University. At least three years' work in each of three of the following groups of subjects is required for graduation: English, History, Mathematics, Foreign Languages, Science, Home Economics, Commercial, Music, Drawing, and Mechanic Arts.	
FIRST YEAR	English Algebra Foreign Language, Ancient or Modern Elective	English Algebra Foreign Language Freehand Drawing	English Elective Elective Elective	English Bookkeeping Spelling and Commercial Arithmetic Penmanship Elective
SECOND YEAR	English Plane Geometry Foreign Language, Ancient or Modern Elective	English Plane Geometry Foreign Language Geometrical Drawing	English Elective Elective Elective	English Typing I Stenography I Elective
THIRD YEAR	Elective Elective Elective Elective Of the third and fourth year electives, two units must be taken from the following: adv. mathematics, additional foreign language, laboratory science of third or fourth year.	English or Foreign Language Chemistry Mathematics Elective	English Elective Elective Elective	English Typing II Stenography II Elective
FOURTH YEAR	U. S. History and Government +Science Elective Elective	English or Foreign Language U. S. History and Government Physics Mathematics	U. S. History and Government *Science Elective Elective	U. S. History and Civics Commercial Law ½ *Science Stenography and Office Practice Elective ½

† May be taken in the third year.

\* May be taken in any year of the course.

OUTLINE OF COURSES OF STUDY FOR THE HIGH SCHOOLS—Con.

	COURSE V Industrial.	ELECTIVES
		In choosing Electives, pupils preparing for College or higher schools should consult the admission requirements of the institutions which they propose to enter.
FIRST YEAR	English Drawing Mathematics Shop, 20 hours	Commercial: Typing I, Penmanship, Spelling and Commercial Arithmetic, Bookkeeping I. Drawing: Freehand and Mechanical. History: Ancient History, General History. Home Economics: Domestic Science, Domestic Art. Languages: French, German, Latin, Spanish. Mathematics: Algebra I, Shop Mathematics. Mechanic Arts: Shop, ten to twenty hours. Music: Choral I or II, Band, Orchestra. Science: Physical and Commercial Geography, General Science, Botany.
SECOND YEAR	English Drawing Mathematics Shop, 20 hours	Commercial: Bookkeeping I or II, Stenography I, Typing I. Drawing: Freehand, Mechanical, Design. History: Ancient History, General History, Mediaeval and Modern History. Home Economics: Domestic Science, Domestic Art. Languages: French, German, Latin, Spanish. Mathematics: Plane Geometry, Shop Mathematics, Algebra I. Mechanic Arts: Shop, ten to twenty hours. Music: Band, Orchestra, Choral I or II. Science: Botany, Biology.
THIRD YEAR	Economics Industrial Physics Shop, 20 hours	Commercial: Stenography I or II, Typing I or II, Bookkeeping I or II, Salesmanship $\frac{1}{2}$ , Advertising $\frac{1}{2}$ . Drawing: Freehand, Mechanical, Design. English: English III, Argumentation, Public Speaking. History: English History, Mediaeval and Modern History, Economics. Home Economics: Domestic Science, Domestic Art. Languages: French, German, Latin, Spanish. Mathematics: Algebra I, Plane Geometry, Solid Geometry $\frac{1}{2}$ , Trigonometry $\frac{1}{2}$ , Advanced Algebra A $\frac{1}{2}$ . Mechanic Arts: Shop, ten to twenty hours. Music: Harmony, Band, Orchestra, Choral I or II. Science: Chemistry, Physics, Biology, Physiology and Hygiene, Botany.
FOURTH YEAR	U. S. History and Civics Elective Shop, 20 hours	Commercial: Stenography I or II, Typing I or II, Bookkeeping I or II, Advertising $\frac{1}{2}$ , Commercial Law $\frac{1}{2}$ , Accounting $\frac{1}{2}$ . Drawing: Freehand, Mechanical, Design. English: Argumentation, English III or IV, Public Speaking. History: Economics. Home Economics: Domestic Science, Domestic Art. Languages: French, German, Latin, Spanish. Mathematics: Plane Geometry, Advanced Algebra A $\frac{1}{2}$ , Advanced Algebra B $\frac{1}{2}$ , Solid Geometry $\frac{1}{2}$ , Plane Trigonometry $\frac{1}{2}$ , Shop Mathematics. Mechanic Arts: Shop, ten to twenty hours. Music: History of Music, Harmony, Composition, Band, Orchestra, Choral I or II. Science: Physiology and Hygiene, Physics, Chemistry, Botany, Biology.



MINIMUM REQUIREMENTS OF THE STATE BOARD OF  
EDUCATION FOR GRADUATION FROM THE REGULAR  
TEACHER'S COURSE IN A STATE NORMAL SCHOOL.

The following table shows the minimum number of units of each subject required of graduates of the state normal schools. Note that some of these courses *must* be taken at the high school; others *may* be taken at either the high school or the normal school:

General Requirements.	Units
*English Literature and Language, including grammar, composition and oral expression.....	2
*Physical Science—One year of general science, including the applied elements of physics, chemistry and physical geography, or one year of physics or chemistry or physical geography, provided that for students entering after June 30, 1918, the general science shall be prescribed.....	1
Biological Science, including physiology, hygiene and sanitation..	1
*History of the United States and Civics, including local and state government .....	1
*World History .....	2
Drawing and Painting, including applied design.....	1
Music, including sight reading, two-part singing, and elementary harmony .....	1
Manual Training or Household Arts, or both; provided, that for students entering after June 30, 1918, one unit shall be required .....	½
Elements of Agriculture, including practical work in gardening, floriculture and plant propagation; provided, that for students entering after June 30, 1918, one unit shall be required .....	½
*Mathematics, including general mathematics or the applied elements of algebra or plane geometry, or commercial arithmetic	1
<b>Professional Requirements.</b>	
**Elements of Applied Sociology, including the study of institutions and social organizations, rural life and rural school problems .....	½
**Education, including a study of the school as an institution and the curriculum, general psychology applied to education and general method .....	1
**Practice Teaching and Special Methods which shall familiarize the student with and give him a mastery of the state series of textbooks, and which shall in addition thereto include special methods in all of the required statutory subjects; provided, that at least one (1) unit shall be given to practice teaching and at least one-third of the total time given to practice teaching shall be in a classroom, by the classroom method and under direct supervision.....	2¾
**The California School System, School Law, and their development .....	¼
**Physical Education, Athletics, Play, School Playground Equipment, and Indoor and Outdoor Recreation.....	½
Possible Electives .....	8
Possible Electives for those entering after June 30, 1918.....	7
Minimum units required for graduation.....	24

\*Must be taken in a high school

\*\*Must be taken in a normal school.

GIFT  
MAY 10 1917

# DEPARTMENT OF PUBLIC INSTRUCTION OAKLAND CALIFORNIA

## A GENERAL REPORT

BY THE

CITY SUPERINTENDENT OF SCHOOLS

1913-1917

PART I.



BOARD OF EDUCATION BULLETIN

NUMBER 9

JUNE, 1917







A  
GENERAL REPORT

BY THE

CITY SUPERINTENDENT OF SCHOOLS

1913-1917

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PART I.



A. C. BARKER  
SUPERINTENDENT OF SCHOOLS

MISS ANNIE FLORENCE BROWN  
PRESIDENT BOARD OF EDUCATION

OAKLAND, CALIFORNIA  
JUNE, 1917



LAKE MERRITT, PUBLIC PARK AND PLAYGROUNDS, OAKLAND

## LETTER OF TRANSMITTAL.

To the Honorable Board of Education,  
Oakland, California.

Ladies and Gentlemen:

I have the honor herewith to transmit to you my general report on the schools of Oakland from 1913 to 1917. During the past three years there have been issued thirty bulletins dealing with the various phases of the schools. It has, however, seemed best at this time to make a brief report setting forth the general progress of the schools during the period of the last four years that it may be a matter of permanent record.

The report, of which this is Part I, has been divided, for convenience and economy of distribution, into five parts. The remaining are: Part II, "The Intermediate School Situation in Oakland;" Part III, "The Proposed Bond Issue;" Part IV, "General Statistics of the Oakland Schools;" Part V, "Information Service." I trust that the complete report as submitted may be of value to the Board of Education in dealing with its future problems and to the people of the city as well, as it should enable them more clearly to understand and to appreciate the importance of the problems the Board of Education is called upon to solve.

I desire here to express my appreciation to all those principals, teachers, and other officers of the department who by their support and co-operation have made possible the progress of the past few years.

Respectfully submitted,

A. C. BARKER,  
Superintendent of Schools.



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## PART I.

### ADMINISTRATION.

**Reorganization.** In 1913, on the recommendation of the present Superintendent of Schools, the business department was organized, in accordance with well known principles of management, under three bureaus, viz., clerical and accounting, buildings and grounds, and purchasing. The adoption of these recommendations by the Board of Education has been fully justified by the results. A modern budget system after the form authorized by the United States Commissioner of Education was added by the Superintendent to his recommendation for reorganization and was adopted by the Board of Education in 1914. Under the operation of this system, a monthly statement of the appropriations, expenditures, and balances has been rendered monthly for the past three years. By reporting the expenditures and balances of each account of the appropriation of the budget, the Board has been constantly kept informed of the financial situation and no excuse has existed for a deficit at the end of the fiscal year, a thing that had often before happened for want of proper accounting. The budget system adopted in 1914 has received the commendation of three experts employed by the Board of Education, and was retained in the revised accounting system installed in 1916 by Klink, Bean and Company.

**Purchasing Department.** This department was organized in 1912 by the present Superintendent who was then Business Manager. On his recommendation the purchasing and the buildings and grounds departments, in July, 1913, were divided into two separate bureaus, and the former has since been continued as a separate bureau under the general management of Mr. H. W. Bridgman. Dr. Ellwood P. Cubberley in his "Report on the Organization and Finances of the Oakland School System" in June, 1915, estimated that the organization of the purchasing and the buildings and grounds departments had "by reason of close buying, increased efficiency in service obtained, and the elimination of the need for the employment of experts, saved enough each year for the school department to pay the entire cost of all overhead control, and, in addition leave a balance to be applied to the work of instruction."

**Buildings and Grounds Department.** Under the reorganization plan, Mr. C. L. Taylor was appointed in July, 1913, Superintendent of Buildings and Grounds. He brought order and system into the office management of the repair department which had been conducted for many years without adequate methods of accounting. It had been practically impossible before for want of proper records to determine whether or not the department was being economically conducted. No account was kept of the cost of the jobs, and the writer knows from experience that it was impossible to secure such information. On the recommendation of the Superintendent of Schools, the Board adopted a rule in 1914 which required the Superintendent of Buildings and Grounds to make an estimate of the cost of every repair job, and, on completion, the accounting department to render a statement of the actual cost of the work to the Board of Education. These changes have meant greater efficiency in the repair department and more careful attention to estimates and costs. At the same time the Board of Education is in possession of all the necessary information to determine whether or not those in charge of the department are rendering adequate and competent service.

**Reference and Research.** The Department of Reference and Research was organized on July 1, 1914, and its chief functions, while not clearly defined, were indicated by its first title, "The Bureau of Information, Statistics, and Educational Research."

The chief duty of the department, during the three years of its existence, has been to gather information, by investigation and by means of the regular reports, for the guidance of the Board of Education and the Superintendent. The Director, Mr. Wilford E. Talbert, was instrumental in organizing the Principals' Study Club and in conducting the Oakland Spelling Investigation in 1914, in making a statistical survey of the business and financial policies of the department in 1915, and in reorganizing the methods of collecting statistics from the schools during the past year.

As a means of promoting sound school administration, based on a knowledge of the facts involved, such a department is indispensable, and the local department is thus amply justified by its routine duties as well as by its special activities. A more de-



tailed description of the work of the department will be found in Bulletin Number 13, "Information Service," which has just been issued as Part V of this report.

**School Records and Reports.** It has been our object first, to simplify the records and reporting system so as to eliminate information which is not used sufficiently to warrant the labor of collecting it; second, to provide for the performance of clerical duties by expert clerks who do nothing but this, rather than leaving these duties to the highest paid officers in the system; third, to compile information in such form that it can be readily consulted for the answering of questionnaires or the giving out of information to the public. One or two changes in the system of collecting information are noteworthy. In the fall of 1916, the large statistical sheets filled out by the principals were replaced by neat booklets of sales check book type on which the teachers enter the original information only. These are collected and approved by the principals and sent to the main office where a clerk punches the information on cards. The forms in these sales check books consolidate all of the information desired from month to month as well as all term reports on one compact sheet, so that the teacher knows in advance what reports she will be supposed to make. After the cards for the entire system are punched they are run through electrical tabulating machines which compile the information in any desired form. By this means it is possible to get reliable and complete information within the shortest possible time after the close of each school month.

As soon as the report compiled by the tabulating machines is available, the clerk in the office by the aid of calculating machines reduces all significant figures to per capita costs, averages, etc. This information is all tabulated, and mimeographed and these reports are sent to the principals, the members of the Board of Education, and the public press, so that every one concerned has the advantage of the most important facts about the school department while they are still new. Among the items reported each month are enrollment classified according to kinds of schools and classes, average daily attendance, cost per pupil to date for each school, number of class teachers, number of pupils per teacher, percentage of attendance, and comparisons with preceding years. At the end of the term

mimeographed summaries of the term reports are similarly furnished to the schools. Another innovation which the Oakland School Department was the first in the United States to inaugurate was the Findex System, a mechanical device for combining as many as sixty different card files in one in such a way that by a simple operation any single item or any combination of items of information which have been previously arranged on the cards can be immediately obtained.

**Professional Library.** The beginning of this library in the Superintendent's office was made in 1914. It now contains the best of the new books, more than twenty of the leading educational periodicals, city school reports and surveys, and pamphlets issued by prominent educational societies, etc. During the past year the library was catalogued by a graduate student of the University of California, Mr. Leroy Doig, who devised an original system patterned after the Dewey decimal system, but comprising educational literature only. Several indexes were also worked out, chief among them being a subject index which classifies all important articles in reports or magazines as well as pamphlets given wholly to one subject. When this index is complete, it will be possible on short notice to bring together all of the available data on any given phase of school administration. The library is open to teachers and principals and it has been very widely used by them. It would, however, be a distinct advantage if one of the employees in the Superintendent's office were a trained librarian.

**Supervision.** During the past four years the efficiency of the Oakland Schools has been greatly enhanced by increasing the supervision in recreation, music, drawing, home economics, history, and modern languages. There is perhaps no business that makes such inadequate provision for supervision as public education. A few thousand dollars wisely expended for supervision bears fruit out of all proportion to the expense incurred. Superintendents, assistant superintendents, and principals are generally administrative officers and are seldom qualified to exercise the functions of expert supervision of subjects. The schools of the future must have more rather than less supervision, if the highest possible standards are to be attained.

Through the efforts of the Director of Music, results have

been obtained in sight singing and in instrumental music that have received the commendation of experts. Favorable mention has been made of the work in music publications throughout the country. Even foreign visitors have commented enthusiastically upon the character of the training given. The Director of Art has made it possible without any additional expense to have specially trained teachers of drawing for the seventh and eighth grades in twenty-one elementary schools. Results have been secured that were formerly only possible in high schools. The co-operation of the manual training and art departments has effected a great improvement in the designs of the output of the manual training shops. Annual expositions of the work of the departments of art, music, and home economics are given, and in the last one held in May of this year in the Municipal Auditorium the exhibits indicated a high order of excellence in the work done. The Director of History has revised and modernized the course in history and has made possible a better correlation of history and geography. The directors of modern languages have brought about uniformity of instruction in the elementary as well as in the high schools and advanced credit has been granted on admission to the high schools to pupils who have studied a foreign language in the elementary schools. The supervision of history, geography, foreign language, and penmanship has been carried on by high school teachers who devote part time to supervision, and so has been secured at a minimum expense. So successful has been the administration of the playgrounds that I earnestly recommend that in the future the municipal and school playgrounds and the physical training department be combined, with Mr. George E. Dickie as director. Such an arrangement would bring unity and increased efficiency to these departments. I would also urge the Board of Education to give careful consideration to the advisability of appointing a full-time director of penmanship, English, history and geography, and mathematics. These subjects are fundamentals and it is essential that they be taught as thoroughly as possible.

**Selection of Teachers.** A most important service that a superintendent of schools can render his community is the selection of capable teachers. No superintendent can make a good school system without such a corps of assistants. It has been the constant aim of the present Superintendent to eliminate per-



sonal and political influence (though much of it is still in evidence) and recommend for appointment the best trained and most successful teachers obtainable. Only by this procedure has it been possible to secure the results that have brought the commendation of expert educators. Previous to 1914, the eligible lists of the high school teachers were chosen by subjects and those of elementary schools by grades. The Superintendent was compelled by the rules to make the selections from the elementary eligible lists in the order of arrangement without reference to the special needs of the schools. During the past two years the elementary eligible lists have been reclassified as follows: First and Second Grades General, First and Second Grades with Music, Third and Fourth Grades General, Third and Fourth Grades with Music, Fifth and Sixth Grades General, Fifth and Sixth Grades with Music, Fifth and Sixth Grades with Drawing, Fifth and Sixth Grades with Sewing, Seventh and Eighth Grades English, Seventh and Eighth Grades English and Music, Seventh and Eighth Grades History and Geography, Seventh and Eighth Grades Mathematics, Seventh and Eighth Grades Drawing, Seventh and Eighth Grades Home Economics, Seventh and Eighth Grades Manual Training.

Whenever a vacancy occurs in a school, the principal decides from which list he desires a teacher and thus is enabled to select one that will be of the most assistance to the school. In this way every school will have a sufficient number of teachers prepared to teach every subject in the curriculum. I regard this change in the classification of the eligible or preferred lists as one of the most important and far-reaching improvements adopted by the Board of Education.

It is a matter for congratulation that the Board has recently decided that "the initiative in all matters relating to the appointment, assignment, transfer, promotion, suspension or dismissal of teachers, principals, or special supervisors shall rest absolutely with the Superintendent of Schools, and all applicants for such positions and all persons presenting individual cases for consideration are to be referred to him by members of the Board. The superintendent shall report his recommendations to the Board, which shall have power to approve or disapprove of the recommendations which he makes, but no power whatever of substituting other names or initiating new appointments."

**Overhead Expense.** The following table taken from Dr. E. P. Cubberley's Report in 1915 shows that the overhead expense of the schools of Oakland is not high compared with other western cities.

**Cost for Overhead Administrative Control in Western Cities.**

City.	Percent of total maintenance cost spent for administrative control.
Sacramento, Cal.....	1.8
Spokane, Wash.....	2.2
Pasadena, Cal.....	2.4
Seattle, Wash.....	2.6
<b>Oakland, Cal.....</b>	<b>2.7</b>
Denver, Colo.....	2.7
San Diego, Cal.....	2.7
Berkeley, Cal.....	2.8
Salt Lake City, Utah.....	3.0
San Jose, Cal.....	3.0
Los Angeles, Cal.....	3.6
Butte, Mont.....	3.8
Tacoma, Wash.....	3.9
San Francisco, Cal.....	4.3
Colorado Springs, Colo.....	4.6
Portland, Ore.....	4.9
Average for 16 cities.....	3.2
Median point for 16 cities.....	2.9

The present overhead, 2.9%, is approximately the same as the median of other cities of over one hundred thousand inhabitants that spend between one and two million a year for maintenance of the schools.

**PART II.****KINDERGARTENS.**

**Need.** Educators have generally believed that the kindergarten contributes to the social training of children and that even play has an important educative value. It is here that many children obtain their first appreciation of system and order. They acquire a knowledge of oral English and habits of courtesy and industry which save time and make for progress in the first year of the elementary school. The nursery rhymes, folk lore, and music of the kindergarten should be the birthright of every child, and without them childhood has lost something of inestimable value.

**Expansion.** One of the most recent developments of Oakland is the expansion of the kindergartens. In August, 1912, there were only seven kindergartens, but under the provisions of the new state law which became effective in 1913, twenty-three new kindergartens were established by petition. The average daily attendance has increased in the past five years from 203 to 1139. At the suggestion of the Superintendent, the Board recently authorized the opening, in July, 1917, of four more kindergartens, at the Peralta, Grant, Cole, and Piedmont schools, respectively. As soon as the third and final unit of the Lakeview Annex is completed, a kindergarten should be established in this school. The per capita cost of maintenance of approximately \$46.97 for the present fiscal year is below the average and median cost of kindergartens in the largest cities of California.



**PART III.****ELEMENTARY SCHOOLS.**

**Conditions in 1913.** At the beginning of my term as Superintendent of Schools in 1913, the size of classes in the elementary schools was among the largest to be found in the country. Departmental instruction, which has for many years been recognized as the standard form of instruction in the best private schools of Europe and America, had been introduced only into the Intermediate School. Furthermore, for many years it had been the policy to require every teacher to divide her class into two sections or grades, thus rendering it difficult to provide supervised study and give adequate assistance to slow pupils. Class promotions were possible only after oral or written examinations by the principal and superintendent, a system that had the advantage of securing uniformity of aims and methods, but one that tended to produce formal teaching and to place emphasis upon the acquisition of facts rather than the development of the reasoning faculties. It also undoubtedly contributed to the large percentage of retardation in the schools. Though many progressive school systems in the country had by establishing intermediate schools or departmental teaching made it possible to offer at an earlier than high school age additional subjects as electives, such as foreign languages, commercial, and industrial work, only the Intermediate School, established in 1912, provided for the elementary schools any such special advantages for the youth of Oakland.

**Changes to Be Effected.** In view of the foregoing facts, I considered the following the most important improvements to be effected in the elementary schools: reducing the size of the classes; having wherever possible only one grade in a class; facilitating progress by encouraging promotions on the judgment of the teacher and principal; securing departmental instruction with specially qualified teachers in the upper grades, thus permitting an enriched course of study and better teaching, and providing special opportunities or advantages, such as, free instruction in instrumental music, modern languages, and supervised recreation, formerly possible only for the well-to-do in the city's most exclusive private schools.

**Reduction in Size of Classes.** Dr. E. P. Cubberley in his survey of the Oakland schools in 1915 emphasized the fact that the size of the classes of the elementary schools was greater than the average of western cities. The extension of departmental teaching, the completion of new buildings, and the liberal provision for portables have made it possible, even with an increase in average daily attendance in four years from 16,425 to 20,514, to reduce the daily attendance per teacher to 34.6. Smaller classes have meant more efficient teaching, although the per capita cost of instruction has thereby been increased.

**Supervised Study Provided.** Not only has the much needed reform of smaller classes been effected, but over sixty per cent of all the classes in the elementary schools have only one grade to a class, thus making it possible to have effective supervised study by dividing each period into two parts, one for recitation and one for study. This is an indispensable requirement for effective teaching in California, as the State law forbids the assignment of home lessons to pupils of the elementary schools.

**Department Teaching.** This form of instruction was introduced into the Grant and Washington schools in 1914 and has been extended until there are at present twenty-one schools in which the instruction in the seventh and eighth, or the sixth, seventh, and eighth grades, is conducted on the departmental plan. The teachers have been chosen or assigned because of their special qualifications to teach one or two subjects. Formerly each teacher taught all of the subjects of a grade with the exception of manual training, cooking and sewing. But nearly all of them elected during the past three years in the departmental schools are college graduates with special preparation in the subjects they teach. The instruction in all departments has been greatly improved by the change, and the results in such subjects as music and drawing in many classes have been raised from a standard of mediocrity to that of excellence.

French has been offered as an elective subject in the University, Durant, Lakeview, and Piedmont schools; German, in the Washington, University, Intermediate, Lincoln, and Lockwood schools; Latin, in the University and Intermediate schools; and Spanish, in the University, Grant, Vocational, Garfield, Melrose

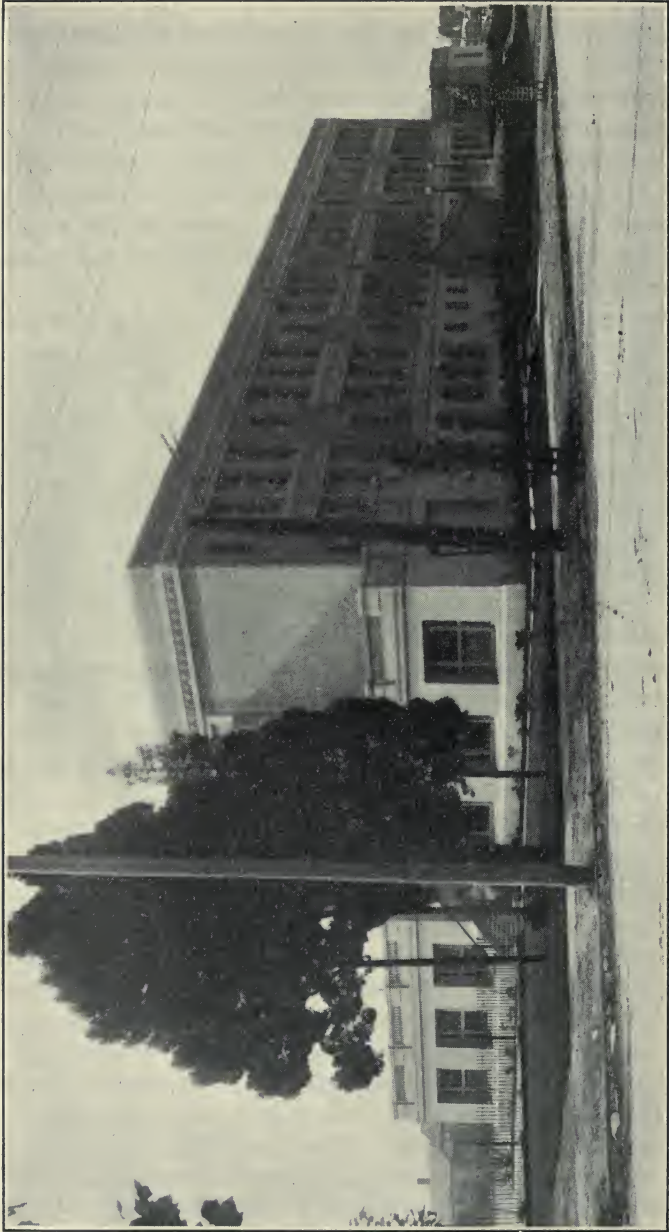
Heights, and Lockwood schools. The foregoing languages have been taught at a nominal cost, as it has been necessary only in the Lakeview and Intermediate schools to employ extra teachers, the courses being given as extras, or over-time subjects, from eight to nine in the morning at the slight cost of fifty cents per hour. Three classes in Spanish have been conducted in the Grant school during the past year at a cost of only one dollar and fifty cents per day, or less than one-fifth of the expense of giving the same courses in the high schools.

Not only have elective courses been given in foreign languages, but such subjects as instrumental music, mechanical drawing, science, printing, etc., have been offered. Two thousand seven hundred and twelve pupils in the higher grades of the elementary schools have pursued an extra elective course, and a very large proportion of these pupils have come an hour earlier in the morning to take this additional subject.

The departmental method of instruction has provided better trained teachers, more thorough instruction, and more opportunity for pupils to choose subjects in accordance with their interests, aptitudes, and abilities. It has been carried into effect without any increase in the number of teachers employed except as the size of classes has been reduced and with a very slight additional cost for salaries for over-time classes. For those interested in the further discussion of this subject, a more complete account may be found in Bulletin No. 10, "The Intermediate School Situation in Oakland," Part II of this report, published in June, 1917.

**Music.** In the elementary schools song singing and sight reading are the two phases of instruction emphasized. In order to accomplish the best results with these two aims in view, it has been found advisable to organize each class as a unit, testing all the voices and seating the class with the pupils having the truest sense of pitch in the rear and the monotones in the front seats. All pupils are required to sing individually from the first to the seventh grade, where four-part singing is first introduced. Demonstrations have been made before the teachers for the last two years comprising a series of eight lessons for each group (first and second, third and fourth, fifth and sixth, and seventh and eighth grades). A uniform system of teaching has been secured, the results from which have been most gratifying by requiring





THE CLAWSON SCHOOL

all teachers of each group to attend these model lessons given by a supervisor or by a teacher whose work has been satisfactory. Each grade completes from one to three books, acquiring not only a repertoire of songs, but rapidity in sight singing.

Formerly, the Board permitted the teachers of band and orchestral instruments to give instruction to any school desiring it at twenty-five cents a lesson, at the expense of the pupil. In 1915, two teachers were employed and paid by the Board of Education to teach instrumental music. The results were so encouraging and the enrollment so gratifying that it has been necessary to add five more teachers to meet the demand. Over eleven hundred pupils are enrolled now in the classes in instrumental music and the elementary schools have thirty-two bands and orchestras. The Board has recently extended this free instruction in instrumental music to nearly all the schools, and it will be necessary in the future to employ additional teachers. By this means, an opportunity for training is afforded talented pupils whose parents are unable to pay for private instruction. The justification of this policy is proved by the fact that the keenest interest is shown and the best results are attained by those pupils who otherwise would have had no opportunity of developing their talents. A democratic school system should not only provide what heretofore would have been regarded as the minimum essentials for earning a living, but it should afford training as well that leads to intelligent enjoyment of leisure.

**Manual Training.** My first recommendation to the Board of Education in 1913 has made it possible to improve the instruction in manual training by the employment of skilled mechanics as teachers in place of young women who were mainly normal school graduates. While it frequently takes more time for the mechanic to acquire the pedagogical point of view, the department has been fortunate in securing and retaining the services of a very superior body of manual training teachers. The mechanic's view is broader than that of any woman, whose training is necessarily academic rather than practical, and out of his experience he is able to teach the practical methods of the trades. The boys not only learn the use of such tools as the plane, try-square, gauge, and chisel, but they also are taught how to sharpen their own tools and to keep them in proper order. Formerly it was necessary in vacation to send the tools out to be repaired

and put in order. With the exception of the saws, the tools are all cared for in the shops by the students. Furthermore, the trade instructor's knowledge of mechanical construction is such that instead of following stereotyped models the boys are able to develop their own projects and to build boats and useful articles for the home, such as settees, chairs, and library tables.

**Growth.** The increase in attendance in the day elementary schools forms a reliable index of the city's growth and population. During the past four years the average daily attendance has increased from 16,425 to 20,208, or a gain of twenty-three per cent. On account of the conditions, it has been necessary to provide, in addition to the possible permanent improvements, over sixty portables to care for the increase. Bulletin No. 11, Part III, of this report, carries recommendations for a new building program.

**School Architecture.** The new buildings were designed by Mr. J. J. Donovan, architect of the Board of Education, who has spared no pains nor expense to make these schools the best of their kind in America. He has made a careful study of the special conditions under which each building was to be erected, and too high commendation cannot be given him for the integrity of the work and the sincerity with which he has solved each problem on its own merits. As a result the school buildings of Oakland have come to be known as among the best in the country. In recognition of his services in the Oakland schools, Mr. Donovan has been appointed by the President of the National Education Association a member of the Committee on Standardization of Schools. The new buildings compared with the old have better lighting, better sanitation, more modern and complete heating and ventilating systems, better provisions for safety from fire and panic, semi open-air class rooms, and the most modern arrangements and equipment for lavatories, permanent construction in most of the buildings, giving an almost indeterminate life to the building, and a low cost per pupil and per cubic foot. Nearly all of the buildings are provided with artistically designed kindergarten rooms, club rooms with adjoining kitchenettes for community purposes, and auditoriums. The new buildings are not only characterized by architectural excellence and convenience, but they all are provided with the most modern sanitation.



Four years ago not one school in Oakland had sanitary plumbing. The toilets in several buildings are little better than cess-pools and justly received the condemnation of the City Health Officer. In several of the older buildings the latrines have been replaced by modern and sanitary fixtures and, by the opening of next term, twenty-seven of the forty-two elementary schools and all of the high schools will have modern plumbing. As fast as possible, the latrines in the remaining schools should be replaced with sanitary fixtures. It is a matter of regret that the city should have been compelled to incur the expense of replacing fixtures that the authorities should never have permitted to be placed in the schools.

Such men as David Spence Hill of the University of Wisconsin, Superintendent William Davidson of Pittsburgh, Superintendent Frank E. Spaulding of Cleveland, and Dr. Frederick E. Farrington of the Bureau of Education of Washington have commended in highest terms the excellence of the new buildings. Oakland has reason to be proud of its school buildings. No city in the West in comparison with its population has spent so much time and money on its public school structures, and they are a monument to the progressive spirit of the community.

**Grounds.** Owing to the fact that all bond issues, with the exception of that for the Clawson School, made no provision for furniture and equipment and improvement of grounds, all these outlays for permanent improvements have had to be provided for in the annual tax levy. Twenty cents was levied for this purpose in 1914 which occasioned a great deal of unjust and unfair criticism of the Board of Education. During the last three years the playgrounds of nearly all of the schools have been graded, surfaced, and equipped with playground apparatus. In addition, lawns, shrubbery, and flowers have been provided for twenty schools. There are still several schools that need these improvements and they should be carried out under the direction of a competent landscape architect. The Board of Education should make provision annually in its budget for this purpose until all of the grounds are properly improved.

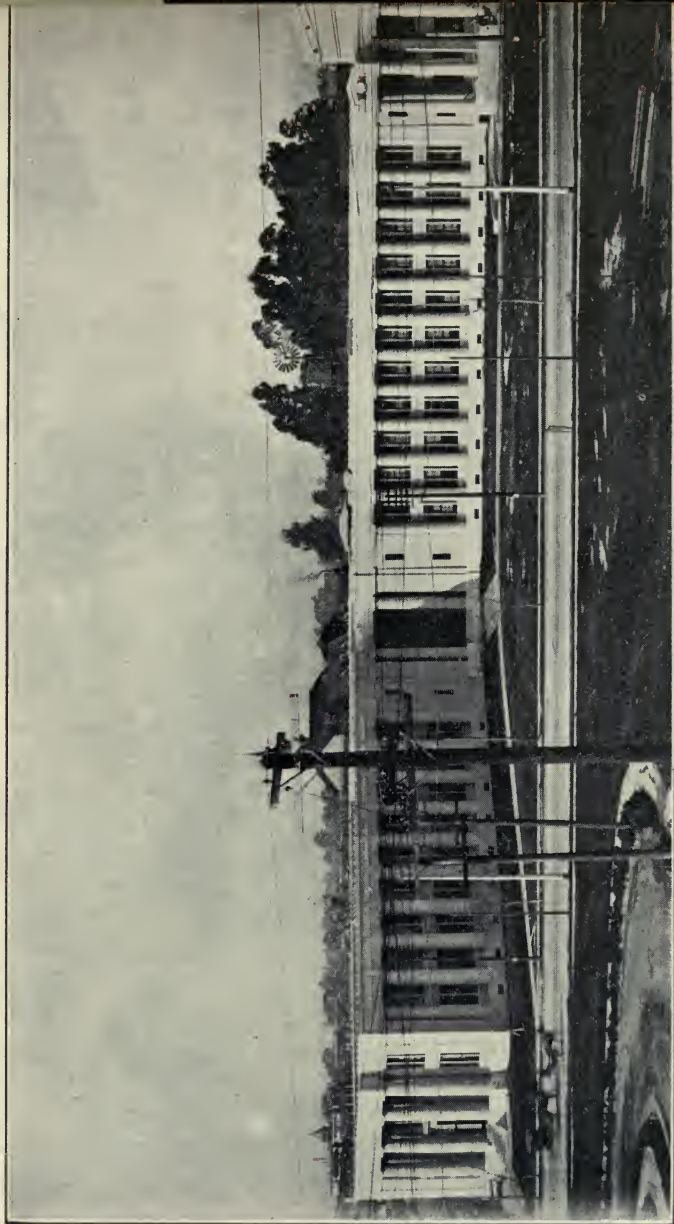
**Expense of Maintenance.** Although the elementary schools of Oakland offer advantages not usually provided by the best school systems of the country, by careful and economical management the per capita cost of instruction has been kept below the average and median of the largest cities of California. It is probable that the per capita cost for the present fiscal year, after all outstanding obligations have been liquidated, will be \$52.35 per capita, or an increase of fifteen cents over last year.

**Permanent Improvements.** The rapid growth of the city has imposed a severe tax upon the administration officials in order to provide the necessary accommodations for an additional thousand pupils each year. During the past four years, fourteen new buildings have been completed and important additions have been made to nine schools. The amount expended for sites, buildings, and additions is shown in the following table.\*

**Amount Expended for Sites, New Buildings, and Additions—Elementary Schools.**

School	New Buildings	Alterations or Additions	Sites	Total
Claremont .....	\$ 94,264.00	.....	.....	\$ 94,264.00
Clawson .....	172,866.00	.....	\$ 42,806.00	215,672.00
Cleveland .....	43,541.00	.....	13,150.00	56,691.00
Durant .....	179,868.00	.....	25,860.00	205,728.00
Emerson .....	163,244.00	.....	49,016.00	212,260.00
Jefferson .....	112,499.00	.....	32,000.00	144,499.00
Lakeview .....	76,624.00	.....	55,950.00	132,574.00
Lazear .....	76,041.00	.....	16,000.00	92,041.00
Lockwood .....	78,163.00	.....	53,111.00	131,274.00
McChesney .....	66,989.00	.....	.....	66,989.00
Santa Fe.....	54,006.00	.....	59,525.00	113,531.00
Tompkins .....	43,669.00	.....	34,040.00	77,709.00
Allendale .....	.....	\$ 13,909.00	10,000.00	23,909.00
Bay .....	.....	14,289.00	22,757.00	37,046.00
Lakeview Annex.....	29,549.00	.....	.....	29,549.00
Longfellow .....	.....	88,097.00	9,550.00	97,647.00
Melrose Heights.....	.....	15,903.00	.....	15,903.00
University .....	.....	19,585.00	.....	19,585.00
Washington .....	.....	102,187.00	.....	102,187.00
Cole .....	.....	15,353.00	24,950.00	40,303.00
Elmhurst .....	.....	.....	6,400.00	6,400.00
Vocational .....	.....	12,798.00	.....	12,798.00
Frick .....	.....	.....	8,696.00	8,696.00
Fruitvale .....	.....	.....	26,474.00	26,474.00
Garfield .....	.....	.....	16,450.00	16,450.00
Grant .....	.....	.....	17,860.00	17,860.00
Hawthorne .....	.....	.....	5,000.00	5,000.00
Highland .....	.....	.....	6,950.00	6,950.00
Lafayette .....	.....	.....	40,350.00	40,350.00
Laurel .....	.....	.....	8,620.00	8,620.00
Manzanita .....	.....	.....	22,350.00	22,350.00
Melrose .....	.....	.....	17,550.00	17,550.00
Piedmont .....	.....	.....	12,500.00	12,500.00
Prescott .....	.....	.....	43,025.00	43,025.00
Sequoia .....	.....	.....	8,900.00	8,900.00
Stonehurst .....	.....	.....	8,500.00	8,500.00
Totals.....	\$1,191,323.00	\$ 282,121.00	\$ 698,340.00	\$2,171,784.00

\*The table does not include \$248,832 expended for equipment.



THE TECHNIC





## PART IV.

## HIGH SCHOOLS.

**Growth.** One of the most important educational developments of this generation has been the growth of the high schools, so rapid that it has been out of all proportion to the increase in population and in attendance in the elementary schools. During the past year, as many pupils were enrolled in the public high schools of California as in the entire United States in 1876. The following table indicates that in Oakland the attendance in the day high schools has increased sixty-nine per cent during the past four years, while the increase in the day elementary schools has been one-third as much, or twenty-three per cent.

**Average Daily Attendance—Kindergartens, Elementary and High Schools.**

Year.	Kinder- garten.	Elementary Schools.		High Schools.		Totals.
		Day.	Evening.	Day.	Evening.	
1912-1913.....	203	16,425	248	2,297	None	19,173
1913-1914.....	360	17,874	370	2,597	"	21,201
1914-1915.....	718	18,998	411	3,089	"	23,216
1915-1916.....	1,136	19,595	226	3,562	238	24,757
1916-1917.....	1,130	20,208	304	3,894	808	36,353

The high school, which was formerly an academic or preparatory instruction or a school of general education, has in recent years broadened its scope by the inclusion in its curriculum of more practical studies preparatory to industrial, commercial, and household occupations, and this democratization of the high schools is undoubtedly responsible in part for the rapid increase in attendance because of its enlarged appeal to the youth of the community.

**New Buildings.** The remarkable growth of the high schools during the last few years has been provided for by constructing the new Technical High School, making two additions to the Fremont High School, and establishing two new high schools; namely, the University and the Vocational, in buildings formerly occupied by the Emerson School and the Technical High School. The following table gives approximately the amount expended for sites, alterations, new buildings, and equipment during the past four years:

Schools	Sites	Buildings	Equipmen	Total
Technical .....	\$ 80,000	\$539,963	\$118,686	\$738,649
Fremont .....	11,400	98,169	27,275	136,844
Vocational .....	.....	12,798	16,997	29,795
University .....	.....	19,585	10,207	29,792
Proposed High School, East Oakland.....	38,000	.....	.....	38,000
Totals.....	\$129,400	\$670,515	\$173,165	\$973,080

**New High School for East Oakland.** If the growth continues at the same rate, and there is no reasonable doubt but that it will, it will be necessary in a very short time to provide additional high school accommodations. Recommendations have already been presented to the Board of Education, advocating the erection of a new high school on a site in East Oakland acquired some years ago for this purpose. The complete report, in which these recommendations appear, has been printed and issued as Part III of this General Report.

**Course of Study.** The curriculum of the high schools is organized under the following departments: English, history, mathematics, science, commercial, home economics, industrial (trades and manual training), drawing, music, physical training, and foreign languages. While all departments have increased in numbers during the past four years, the percentage of growth has been greatest in the departments of music, drawing, commercial, industrial, home economics, and modern languages.

**Music.** All the high schools, including the Vocational, have unusually efficient instruction in both vocal and instrumental music, history of music, and harmony. It is universally conceded that Oakland is offering more advanced courses in music than any other city in the country. Besides the usual choral classes found in almost every high school, daily rehearsals with credit for both band and orchestra are given with a director specially qualified to teach and to play brass, string, and reed instruments. Free individual instruction is offered on all the instruments of the band and orchestra. Instruments such as the oboe, bassoon, string bass, 'cello, tuba, saxophone, and French horn are purchased by the Board of Education and loaned to the pupils free of charge, thus completing the balance and making it possible to have full instrumentation in both band and orches-



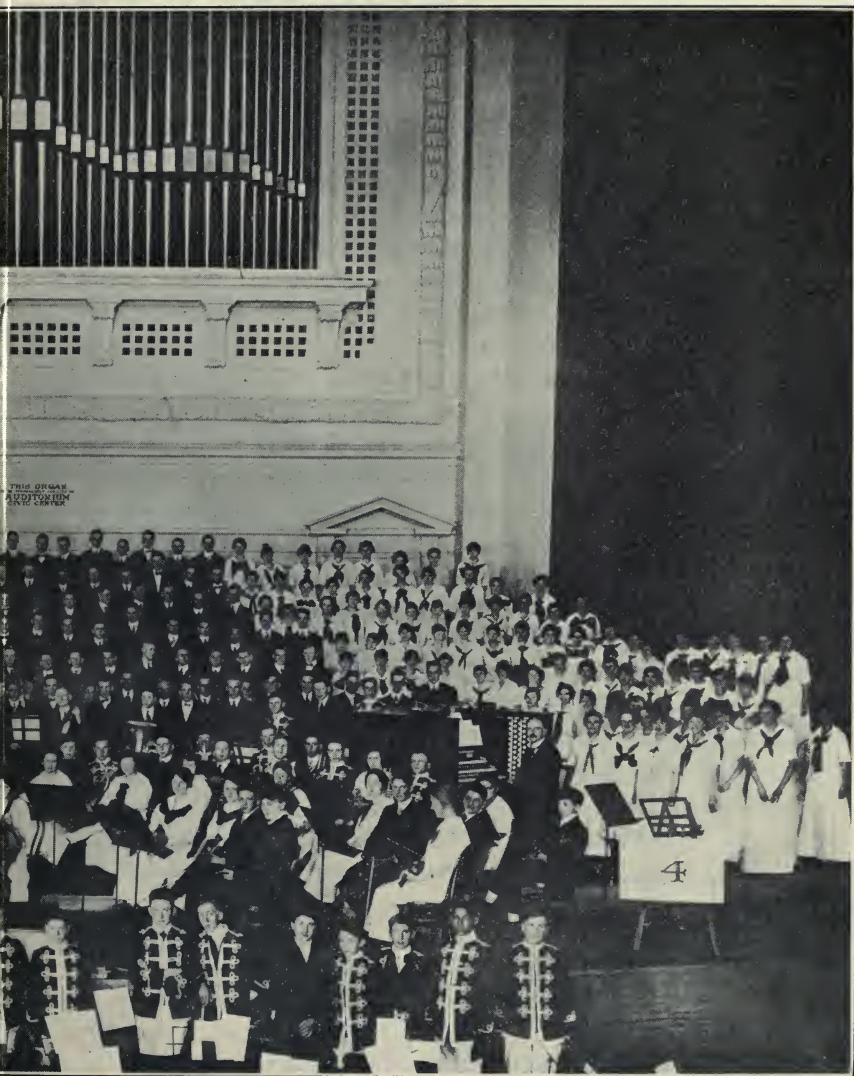
tra. The four bands and five orchestras of the high schools play nearly all the standard selections capable of being performed by amateurs and have access to a circulating library owned by the School Department of choice selections from all publishers, valued at about two thousand dollars. Pupils who have completed the two years' course in harmony are prepared to study instrumentation. This course enables a pupil to arrange for full orchestra any of the compositions sung by the choral classes. The department of music gave at the Palace of Education and Festival Hall, Panama-Pacific International Exposition, thirty-two concerts and was awarded the Grand Prize, one medal of honor, and six gold medals.

**Home Economics.** The usefulness of this department has been greatly extended during the past few years. Instruction has been provided in advanced cooking and dietetics, millinery, dressmaking, tailoring, and costume design. Progress in this department has been delayed by the difficulty in securing teachers who have a practical as well as a theoretical knowledge of the subject. No trade school would think for a moment of employing an instructor who is not a master workman, but, on account of the difficulties for a long time of certification, the public schools have employed teachers of millinery and dressmaking without practical experience who pursued in normal schools and universities courses more theoretical than practical and who could not possibly earn a standard salary in a first class shop. The result has been that the instruction has been elementary and superficial. However, the high schools of Oakland are fortunate in that they have been able to obtain teachers with practical as well as professional training for home economics with the result that the instruction is perhaps the most advanced offered in any high school of the country. It has been demonstrated in Oakland and elsewhere that high school training of proper sort does fit a young woman of the age of seventeen or eighteen to become a capable dressmaker.

**Commercial Department.** Three commercial departments have been established in the Oakland, Technical, and Fremont high schools. Instruction is provided not only in stenography, typewriting, bookkeeping, penmanship, and commercial arithmetic, but also in stenotypy, office practice, accounting, sales-



OAKLAND HIGH SCHOOLS BAND, ORCHESTR



ORUS. PANAMA-PACIFIC EXPOSITION, 1915



manship, advertising, commercial law, and economics. The schools have been equipped with such machines as the comptometer, dictaphone, mimeograph, multigraph, and adding machines of various types and the students have been trained in their use. Recent tests show that the instruction in the commercial department is unusually efficient. It is a matter of regret that high schools have devoted practically all of their energy in this department to turning out stenographers and clerks and have not had a broader view of commercial education and given a general training that would fit any young man to enter upon a business or commercial career. There is no reason why the high schools cannot offer the elementary essentials of a sound commercial education to include the study of accounting, contracts, insurance, and other subjects offered in colleges of commerce.

**Foreign Languages.** Greek has been discontinued for want of students and, although the number of pupils attending the high schools has nearly doubled during the past five years, there has been a very slight increase in the number of students pursuing the study of Latin; in fact, it is becoming increasingly difficult to obtain enough pupils to continue the employment of all the present teachers of this subject. The enrollment, however, has very greatly increased in the modern languages, the following being the number enrolled in French, German, and Spanish for the term ending December 11, 1916:

French .....	153
German .....	292
Spanish .....	1216

Realizing the importance of teaching these languages by the modern methods, all of the new teachers who have been employed have been required to possess an idiomatic and fluent speaking knowledge, as well as the ability to read and write the language. There is no doubt but that the efficiency of the modern language department of the schools of Oakland is equal to that of any school system in the country.

**Drawing.** The lack of co-ordination which formerly existed between the elementary and the high schools has been removed by creating the position of Director of Art who has charge of the supervision of this subject for both the elementary and the

high schools. Until recently, the high schools offered only such elementary courses in freehand and mechanical drawing as were necessary to meet the admission requirements of the universities. The scope of the drawing courses therefore has been greatly enlarged and vocational courses have been provided to meet the commercial and industrial demand for trained workers and to render the greatest amount of service to all students, not only to those who have the opportunity of attending college, but also to the greater majority who are compelled on the completion of the high school course to take up their life work. The freehand courses have been enlarged by adding wood and metal design for the boys and costume and millinery design and house planning for the girls. The courses give at least elementary preparation for commercial design and home furnishing. In the mechanical department advanced courses have been given in architectural and machine design, the purpose of which is to train draftsmen and better mechanics. A successful effort has been made to afford training for life, to improve the taste of the purchaser, and to give the fundamental principles of good design to the producer to meet the growing demand for more artistic products.

**Libraries.** Regularly organized libraries under the direction of trained librarians have been established in the high schools of Oakland during the past four years and have been enlarged to meet the needs of all the departments in each school. Each of the city's high schools—Oakland, Fremont, Technical, University, and Vocational—has a library in its own building. The first four have trained librarians in charge. The libraries are supported from the school funds, and the librarians are elected by the Board of Education, each librarian becoming a member of the faculty of the school to which appointment has been made, with a salary rating equal to that of a regular instructor. Only trained and experienced librarians who hold a college certificate in addition to their library credentials are employed. One of the schools has a book collection of ten thousand volumes, another has eight thousand, while others have smaller numbers; in all the high schools there is a total of twenty-seven thousand volumes.

**Vocational High School.** In 1914, upon recommendation of the Superintendent of Schools, it was decided by the Board of

Education to establish a vocational high school in the building made vacant by the removal of the Technical High School to its new site. Mr. W. A. Tenney was elected principal of the new school. He was then granted a leave of absence for the purpose of visiting some of the best schools of the vocational and trade types in the East. Upon his return, organization of the school began and in January, 1915, it was opened.

The establishment of the Vocational High School marked an effort to provide industrial training. This school offers an opportunity for boys and girls to get a sound practical education, and, at the same time to continue their general education and to obtain a thorough and technical training in some wage-earning occupation. For the student contemplating an industrial career, who can complete the high school course, the Vocational High School has proved of the greatest value. There is an increasing demand for graduates from this school. Employers find great difficulty in filling certain positions, above that of the ordinary mechanic, which require a combination of thorough trade training with related scientific and technical education. Such combination is realized in the graduate of this school. Of the class which was graduated in June, 1917, eighty-five per cent had obtained positions before graduation, and the remainder had positions in view, despite the fact that this class had not had the advantage of the full vocational course, since the first year and a half of their work was done in other high schools. The fact that the output of the Vocational High School shops amounts to more than ten thousand dollars of marketable product per year (which is either used by the school department or sold) is ample evidence of the practical value of the trade instruction given, and hence that the students are acquiring real industrial efficiency.

I concur with the recommendation of the principal that the school, or part of it, be organized on the alternate week plan, that is, the classes alternate between shop and academic work weekly, instead of each half day as at present. Then during the week devoted to industrial training the student might work either in the school or a commercial shop. In either case school credit would be given for shop training. In the latter event two students would engage with the employer to do the same work. While one is in the shop the other will be in the school getting his related academic instruction. At the end of the week they



change places, thus the employer's work goes on without interruption. By thus working half time for wages, the student will be able to support himself and continue in school. This plan has met with great success in the University of Cincinnati, Fitchburg High School, and schools of several other cities where it has been tried.

**Technical High School.** This school was organized in 1901 at Twelfth and Market Streets. In January, 1915, it moved to the new building provided at Forty-third street and Broadway. The new structure is one of the largest and most complete school buildings in the country, constructed at a cost, including equipment, of over six hundred thousand dollars and embodying the most modern ideas of school architecture. Dr. Frederic E. Farrington, of Columbia University, after a trip of inspection through it, said that he had seen many high school buildings in America and Europe, but none superior to the Technical. It has a faculty of eighty-eight and an attendance of nineteen hundred, the third largest enrollment in California.

In its curriculum, the Technical High School is one of the best examples of the cosmopolitan type of high schools. The aim of the school is the three-fold development of its students and equal emphasis is placed upon all of the courses offered, college preparatory, general, trade, commercial, household, and fine arts. The Superintendent of Schools has endeavored to select teachers of unusual fitness for its faculty with the result that a corps of experts and specialists, that would do credit to many a college or university, has been secured. The equipment for the shops was installed only after the head of the industrial department had made a trip through the East for the purpose of inspecting the equipment of the best trade schools there. It was selected with extreme care and is as complete and modern as similar equipment in the best technical high schools of the country. Although the shops have been in operation but two years, they have turned out products with a marketable value of five thousand dollars. Graduates with the training thus offered them have no difficulty in securing positions.

Under the skillful and intelligent guidance of the principal, Mr. Philip M. Fisher, the school has come to stand for that intangible but by no means unimportant ideal of education,

democracy, with its fundamental principle of equal opportunity for all. This spirit, evident in the classroom, the laboratory, the shop, and the extra curriculum activities of the students and teachers, animates the whole organization and makes it an institution not only of practical aims but of ideals as well.

**University High School.** The University High School opened in July, 1914, is a six year high school of academic type beginning with the seventh grade and combining in a single school the junior and senior high schools. It is jointly conducted by the Board of Education and the University of California and receives liberal financial support from the latter. In it graduate students, candidates for teachers' certificates enrolled in the Department of Education of the University of California, do their practice teaching under the skilled supervision of the specially selected staff of teachers. The chief advantage of the school is obtained from small classes and individual instruction. It is the only school in the city providing courses in science and four foreign languages in the seventh and eighth grades. The University School has an exceptionally able faculty and has been deservedly popular with its patrons. It has been necessary to construct several portables to accommodate the students. The school is conducted on a similar plan to that of the famous Horace Mann School of Columbia University and the high schools connected with the Chicago University and the University of Wisconsin.

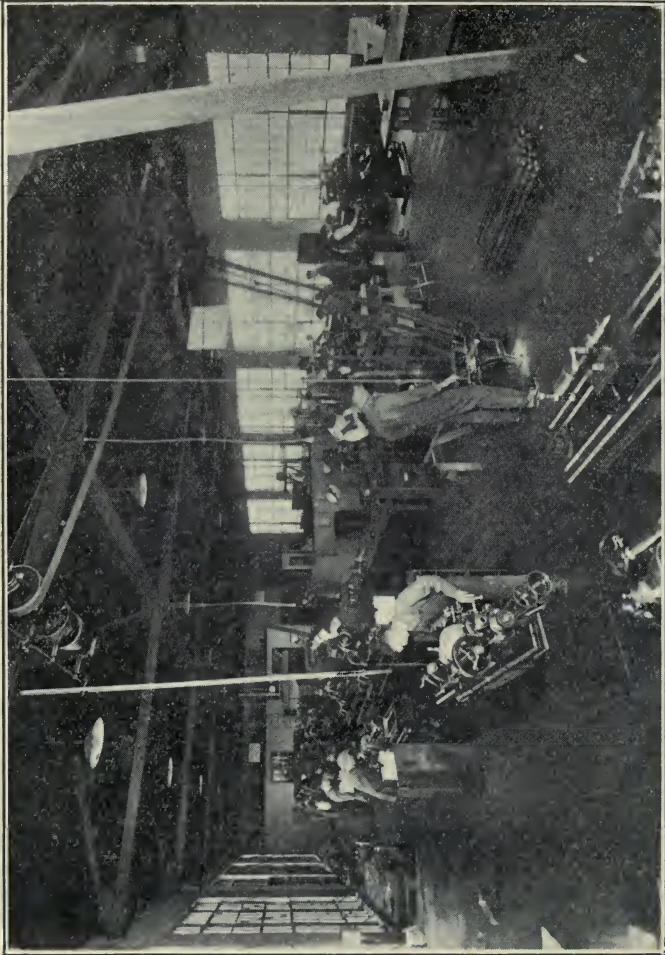
**Academic High Schools.** Besides the three special types of high schools already mentioned, the Oakland High School and the John C. Fremont High School supply the need of the city for college preparatory schools. The former is the oldest high school in Oakland and enjoys a reputation for excellence as a college preparatory school equal to that of any in California. It was the first high school to offer advanced instruction in music. The John C. Fremont High School as well has an unusually capable faculty and serves the needs of the annexed territory for a school of this character in an efficient way. Both of these high schools have added commercial, home economics, and music departments.

**Costs.** The estimated per capita cost of conducting the high schools for the present fiscal year is one hundred one dollars and

fifteen cents, or twenty-three cents increase over the past year. The reader may naturally wish to know what the cost has been to the taxpayer of a public school system providing so many opportunities to its youth. The answer is found in the following table for the fiscal year 1915-1916, which has been compiled from official records on file in the office of the State Superintendent of Public Instruction, Sacramento.

Cities.	Kindergarten	Elementary	High School.	All Schools.
Pasadena .....	125.24	67.20	131.67	85.55
Long Beach.....	59.32	58.08	117.19	71.29
Sacramento .....	53.98	66.55	92.44	70.15
San Diego.....	34.09	59.59	110.89	69.13
Berkeley .....	51.42	63.00	96.61	69.03
Los Angeles.....	50.38	52.09	145.08	67.72
Stockton .....	.....	52.93	117.59	61.91
Oakland .....	33.19	52.10	100.92	58.57
Fresno .....	.....	43.45	103.73	51.67
San Francisco.....	33.75	45.16	74.36	47.87





MACHINE SHOP, TECHNICAL HIGH SCHOOL

**PART V.****EVENING SCHOOLS.**

**Value.** A few years ago the public school system was concerned only with the training of youth, but educators are coming to understand that it is the function of the schools to provide opportunities for training all the members of the community who are willing or can be persuaded to secure more education. They are learning that those ideals and purposes which are significant in the lives of men and women are more likely to be developed after the period of compulsory than during the period of elementary training. There are many men and women who will profit, as well as the city, by additional education. Furthermore, the maximum of returns from the investment in school building can only be obtained by their use not only during the regular school day, but before and after school and in the evening.

**Expansion.** For a number of years, Oakland has conducted evening classes for boys and girls of elementary grade who have been required by law to complete their term of compulsory school attendance, while working during the day. Some classes for immigrants have also been conducted. For the fiscal year of 1916-1917 double the amount of the preceding year was set aside by the Board of Education for the support of evening school instructors. In spite of this increase of funds, the attendance has increased still more rapidly, and classes have had to be limited to keep within the appropriation.

Courses are offered in all phases of commercial preparation. To the ordinary study of bookkeeping, accounts, stenography, advertising, and salesmanship, classes are added in business and office practice, including instruction in the operation of such machines as the comptometer, dictaphone, mimeograph, steno-type, multigraph, and adding machines of various types. There are classes in mechanical drawing and machine design, dress-making, millinery, cooking, forge, electricity, machine shop, printing, carpentry, and orchestra.

There are also, in a limited degree, the usual high school classes in English, chemistry, Spanish, geometry, and algebra, but the aim of the evening schools is kept as practical as possible.

A new class is just being formed in hull and naval architecture, to aid young men already at work in the various ship yards to better understand the technical side of ship design. In the Technical High Evening School, classes will be conducted during the ensuing year in a wide variety of practical subjects from 2:30 p. m. to 9:15 p. m.

Elementary and foreign classes are maintained in several buildings—Prescott, Garfield, Elmhurst, Fremont High School, and Oakland High School. Other classes are taught in the Oakland High School, Technical High School, Fremont High School, and Vocational High School. The Oakland and Technical Evening High Schools have each an attendance of seven hundred to eight hundred pupils.

The following table shows the remarkable growth of the evening schools during the past three years:

Year.	Enrollment Evening Elementary Schools.	Enrollment Evening High Schools.
1913-1914 .....	1,884	None
1914-1915 .....	2,367	"
1915-1916 .....	1,390	1,299
1916-1917 .....	2,062	4,920

It seems probable that the evening schools of Oakland will soon be on as firm a basis and be as well known as the day schools. The young people will no longer have a monopoly in school education. Adults who wish to become more proficient in their chosen occupations and those who want to change their occupations are going to get their start in the evening schools. Those who want the culture they did not get in early school days, those who are interested to keep up with the times, those who believe that "age has its opportunity no less than youth" will go to the evening school.

**Naturalization Class.** In August, 1913, a naturalization class was opened in the Oakland Evening High School for the purpose of assisting aliens to pass the examinations for admission to citizenship. Since the class was first established it has been well attended and hundreds of aliens have, by means of the instruction received, been able to become citizens. Both the United States Department of Naturalization and the judges of the Superior Court have commended in highest term the character of the



work done in this class. The reports of the United States Bureau show that there is in Oakland an unusually large number of aliens who are illiterate. During the past year efforts have been made to bring as many aliens as possible into the evening schools, but only a fair degree of success has been obtained. I wish to commend the Americanization movement and to urge the Board of Education to make more liberal provisions in its budget to continue this work.

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## PART VI.

### SPECIAL FEATURES.

**School and Park Playgrounds.** In April, 1914, the Board of Education and the Board of Playground Directors adopted a joint report, submitted by the Superintendent of Schools and the Superintendent of the Recreation Department, recommending that the city playgrounds be maintained by the two boards and that, under the direction of the Superintendent of Schools, school playgrounds be supervised by the Recreation Department. By this plan, the playgrounds have been standardized in arrangement and equipment; they have been kept open to the public for longer hours; specially qualified teachers have been in charge at all times; and a saving has been effected in expenditures for improvements and the purchase of land for playgrounds. The plan of co-operation has been entirely satisfactory and commends itself to any city similarly situated.

The school playgrounds are classified in two divisions: School Playgrounds Number One and School Playgrounds Number Two. The latter are open only on school days of the regular school year for a period of two hours, from three to five o'clock. In most cases they are directed by women directors who are teachers in the schools. In the past year a number of men have been placed on the grounds which are most difficult to handle. These teachers are paid by the School Department. The playgrounds are all furnished with standard equipment and participate in all athletic league and organized playground activities conducted during the school year.

School playgrounds Number One are open on school days from 2:45 p. m. to 6:00 p. m. and on Saturdays, holidays, and



MAY DAY FETE, 1917  
RECREATION DEPARTMENT, OAKLAND PUBLIC SCHOOLS

vacations from 9:30 a. m. to 6:00 p. m. The majority of them are also open on Sundays from 9:30 a. m. to 5:30 p. m. The grounds are directed by a man who has charge of the boys' activities and a woman who has charge of the girls' activities.

A large variety of activities are carried on throughout the year, but in this brief report it is impossible to go into a detailed account of them. It does seem important to mention the activities of the women's outdoor clubs, which in the majority of cases meet once or twice a week on the grounds. The May Festival included over three thousand children participants; in the last annual track meet there were eighteen hundred boys representing every school in the city. Play days for girls are held in various parts of the city. In baseball, basketball, hand ball, swimming, and soccer, boys are classified according to weights, so that in all activities the small boy is given the same opportunity as the large boy.

**Comparative Statement of Attendance on School Grounds for the Following Fiscal Years:**

Year.	School Playgrounds No. 1.	School Playgrounds No. 2.	Total.
1913-1914 .....	179,744	Not open	179,744
1914-1915 .....	331,410	147,077	478,487
1915-1916 .....	570,387	230,457	800,844
1916-1917 (exclusive of month of June.....)	456,425	280,312	736,737

**Provisions for Atypical Pupils.** In 1910, the first class for mental defective or sub-normals was opened in the Lincoln School. The number of such classes has been increased to six and they are now located in the Lincoln, Prescott, Tompkins, Peralta, Melrose, and Piedmont schools. On the recommendation of Mrs. V. C. Hicks, who has the supervision of this department, the number of pupils in each of these classes has been limited to fifteen. The attendance has averaged approximately fourteen for each class during the past year. As thirty-four and six-tenths is the average attendance for all elementary classes, it is evident that the per capita cost for instruction in the special classes has been more than doubled.

The following table gives a summary of the examination of pupils and attendance in the special classes during the past six years.



### Summary of Atypical Children Examined from February, 1910, to December, 1916.

Total number of children examined.....	1,700
Number that have been enrolled since February, 1910, in special classes	250
Number in six special classes in December, 1916.....	89

Examiner's Estimate of Intelligence.	No. of Pupils.	Per Cent of Total.
Normal .....	170	10
Backward .....	238	14
Borderline .....	697	41
Moron .....	391	23
Imbecile and Idiot.....	153	9
Moral Imbecile .....	51	3
Total.....	1,700	100

From even a cursory study of this table it is evident that only a small proportion of the mentally defective children attending the schools are or have been enrolled in the special classes and if the past policy of caring for a few of the defectives is to be extended to all such children residing in the city, the expenditures will have to be increased several times the present amount spent. In my opinion the backward children, a large proportion of the borderline, and some of the morons can be more economically and efficiently trained in ungraded classes. There is ample expert opinion to justify increasing the size of the special classes, provided a better grading is effected. Proper grading of mental defectives will, however, be difficult or impossible unless transportation is provided, for it will not be safe for these children to travel long distances from home.

The solution of the training of the mental defectives is one of the most important problems that confront the Board of Education. It is not just to these nor to normal children to attempt to train them together in graded classes. I do not believe the present plan has produced the best results possible or has justified the expenditure. The problem will not be solved by neglecting the majority of mental defectives and caring for a few only of the worst cases in special classes until they reach the age of fifteen and then turning them loose on society to reproduce their kind. If, however, the city is going to attack the problem seriously, it should obtain the best advice possible before increasing the present expenditures. I wish to renew the recommendation I made a year ago that, if such arrangements can be made, this

department be placed under the general supervision of Dr. Lewis Terman of Stanford University, a recognized expert on the diagnosis and training of mental defectives.

**Speech Defects.** In January, 1917, Mrs. Mabel Farrington Gifford, expert in pediatrics, University of California, was employed to conduct special classes to remedy such speech defects as stammering, stuttering and cluttering. Four centers have been maintained; namely, Intermediate School, Technical High School, Melrose School, Oakland High School. Investigation indicates that there five hundred and twenty pupils with defective articulation enrolled in the schools and need the advantage of special instruction. Experience in other cities has demonstrated the fact that a very large proportion of pupils suffering from speech defects can be permanently cured in a short time if given an intelligent diagnosis and competent attention. I wish to endorse in unqualified terms the results that have been accomplished by Mrs. Gifford and to recommend that the Board make ample provision to continue this work.

**Educational Extension.** Among the special features of the School Department there are three that can be classified under extension work. They have been entirely successful and their obvious value together with the general interest shown in them should be sufficient reasons for their continuance.

The first of these, free public lectures provided by the Board of Education for the adult public, has just closed its fifth year. During the last year, thirty-two lectures were given, nearly all of which were illustrated with lantern slides. The lectures were given in the evening in the various schools of the city and more than eleven thousand adults took advantage of the opportunity thus afforded. The subjects of the lectures cover a wide range, including travel, ethnology, history, current events, and literature, and the lecturers are either authorities on the subjects they present or people of interesting personality who relate experiences sufficiently unusual to be of educative value. The selection of lectures and the arrangements of the course have been made by Mr. R. S. Wheeler, Director of Public Lectures, and to his nice discrimination in choosing subjects of especial interest and the publicity he has been able to give the work is due in most part its success.

The second division of educational extension has been that of the correlation of the Oakland Public Museum with the schools, and arrangement whereby the curator of the museum gives lectures in natural history, history, and ethnology to pupils of the various schools, illustrating the lectures with lantern slides and with exhibits from the museum, or lends to schools wishing it material for use in the class room. Through this co-operation the schools are supplied at a nominal cost with excellent natural history and other specimens together with a wealth of further material for visual instruction. Although the agreement establishing this relation between the museum and the school department has only recently been made, Mrs. D. W. De Veer, Museum Lecturer, has already given ninety-five talks before approximately twelve thousand pupils in the various schools and thirty talks at the museum. Specimens from the museum collection have gone into twenty-eight different schools, by request of the teachers, for illustrating regular lessons. So valuable to the school department is this co-operation with the museum that I wish to commend it unqualifiedly to the Board of Education and to suggest that adequate provision for continuing it be made.

By no means the least of these auxiliary agencies is the Chabot Observatory, the joint property of the City of Oakland and the Oakland School Department, the latter perhaps being the only school department in the United States owning such property. The observatory is equipped with a twenty-inch equatorial telescope, the fifth in size in the United States, and pronounced by expert astronomers as one of the best instruments ever mounted. The astronomer, Mr. Charles Burckhalter, United States Weather Bureau Observer, is in charge of the observatory and, in addition to his other duties, he offers a series of astronomical lectures annually in the various schools. In addition, trips for inspection and observation are made by high school and upper grade elementary school pupils to the observatory. The general public is admitted as well.



## PART VII.

## FINANCIAL SITUATION.

**Causes for Increased Costs in Past.** The tables compiled by the Director of Reference and Research show that the percentage of the local taxes (city, county, and school district), devoted to the maintenance of the public schools, increased from twenty-four and three-tenths per cent in 1912-1913 to thirty-five and four-tenths per cent for the present fiscal year. The main causes for this increase have been four; first, a reduction in the size of classes; second, higher salaries; third, failure of the assessed valuation to keep pace with the increase in school attendance; and fourth, the increase in expenditures from the current taxes for permanent improvements. The first two have been necessary changes and have more than justified the consequent increased expense attendant upon effecting them. The first has materially improved the character of the instruction in the elementary schools, and the second has been justifiable because under the operation of the law of supply and demand, it was necessary to raise the salaries of certain classes of teachers in order to meet the competition of neighboring cities in securing teachers of superior qualifications.

**Necessity for Higher Rate in Future.** However, by reason of the recent increase in salaries of all teachers for next fiscal year, the Board of Education faces a rather serious situation for financing the kindergartens and high schools, as the so-called tax limitation bill (chapter 729, Statutes of 1917) limits the amount of increase over the past year in the tax levy to five per cent. At the same time, there should be no difficulty in obtaining sufficient revenue for the elementary schools as the Legislature has recently enacted a new law that makes provision for a special school district tax levy for repairs and permanent improvements, in addition to the past provision for a district school tax for maintenance. The county assessment for the City of Oakland for the fiscal year 1912-1913 was \$127,156,828 and for 1916-1917 \$138,393,205, or an increase of less than nine per cent, while during the same period the average daily attendance in the schools increased from 19,173 to 26, 235, or an increase of over thirty-seven per cent. It is therefore evident that the attendance in the schools is increasing more than four times as rapidly as



THE TECHNICAL HIGH SCHOOL BAND

the assessed valuation. Under these conditions, obviously there must be an increase in the rate of taxation for school purposes. During the past year there has been a slight decrease in the assessment roll and at the same time an increase in the average daily attendance of 1,596. According to Dr. Cubberley's report of the Oakland school survey, the median and average percentage of total local taxes devoted to the maintenance of education in western cities is over thirty-seven per cent. While there has been in Oakland during the past four years an increase of eleven per cent (from 24.3% in 1913 to 35.4% in 1917) in the percentage of local taxes devoted to the schools, it is evident that Oakland is still below the average and median of western cities. As long as the attendance continues to increase more rapidly than the assessment roll it is manifest that higher rates will have to be levied for school purposes.





FORGE SHOP, TECHNICAL HIGH SCHOOL

## PART VIII.

## CONCLUSION

**Aims.** I have endeavored to set forth briefly in the preceding pages some of the most important details of the progress made during the past four years. The enumeration is far from complete, but is sufficient to indicate that progress has been made in a far greater degree than would have been possible had the members of the Board of Education been actuated by the desire to conduct the schools at a minimum expense instead of providing superior advantages to the youth of the city. The general aims have been an improvement in the business management of the system and an extension of educational opportunity not only to the youth of the city, but to the adults as well. The following paragraphs contain a summary of some of the most important improvements undertaken or completed during that time.

**Administration.** A reference and research department has been established; an effective information service, providing the Board and the public every month with accurate statistical data, has been organized; a scientific budget system has been adopted and has proved gratifyingly successful; an improved system of office records has been installed; building and purchasing bureaus have been instituted and a saving effected thereby; a general building program has been brought to completion without a deficit; and the supervision of teaching has been materially improved.

**Extension of educational opportunity.** For children, kindergartens have been extended to nearly all of the sections of the city; for the youth of the elementary and high schools the facilities of instruction in commercial and industrial work, modern languages, household and fine arts have been materially increased; valuable co-operation has been secured from the boards of playground and library directors with the result that the Oakland Museum is directly correlated with the schools and the advantages of municipal playgrounds have been secured for the school department.

**Cultural and vocational opportunities for adults.** Men and women from all over the city have taken advantage of the free public lectures maintained by the Board of Education and of the academic, technical, and vocational courses offered in the evening schools, and aliens have been materially aided in learning the English language and the duties of citizenship.

**APPENDIX A.**

On the opposite page is a diagram of one of the School Playgrounds Number Two, furnished with standard equipment. It seems an excellent arrangement for all school playgrounds of similar size. School playgrounds vary in size from one acre to seventeen acres, and of course the arrangement of the equipment will vary accordingly.

**Description of Apparatus Indicated by Numbers on Diagram.**

1. Girls' sand box. The dimensions of this are 1x5x12 feet. It is equipped with a shelf running around the top, which serves either as a seat or a molding table. It is filled with a coarse grade of sand, which will not become dusty in dry weather or muddy when moistened.

2. Girls' slide. This is a medium size slide and equipped with a landing pit filled with clean sand.

3. Girls' gymnasium frame, which consists of a set of six traveling rings. This particular unit has been found most satisfactory for girls.

4. Girls' volley ball court, which has posts set in sockets, so that they may be easily removed.

5. Girls' basketball court.

(Numbers four and five are convertible into tennis courts during seasons when basketball is not played.)

6. Double hand ball courts. One side for boys and the other side for girls. This consists of a plain hand ball backstop twenty feet wide, twelve feet high, with a six foot wire extension.

7. Boys' basketball court.

8. Boys' volley ball court.

(Number seven and eight are likewise convertible into tennis courts.)

9. Boys' gymnasium frame. Unit selected for boys' gymnasium frame is one horizontal bar, one climbing pole, one climbing ladder, two sets flying rings.

10. High slide for boys, equipped with landing pit filled with sand.

11. Sand box for boys, equipped as number one.

12. Soccer posts, made of 6x6 posts. Size of field is reduced to 50x80 yards, which has proven satisfactory for amateur school playground purposes.

13. Jumping pit.

14. Wire cage backstop.

15. Open pergola porch, covered with canvas in the summer time, which affords a place for small children to hold club meetings and enjoy diversified play.



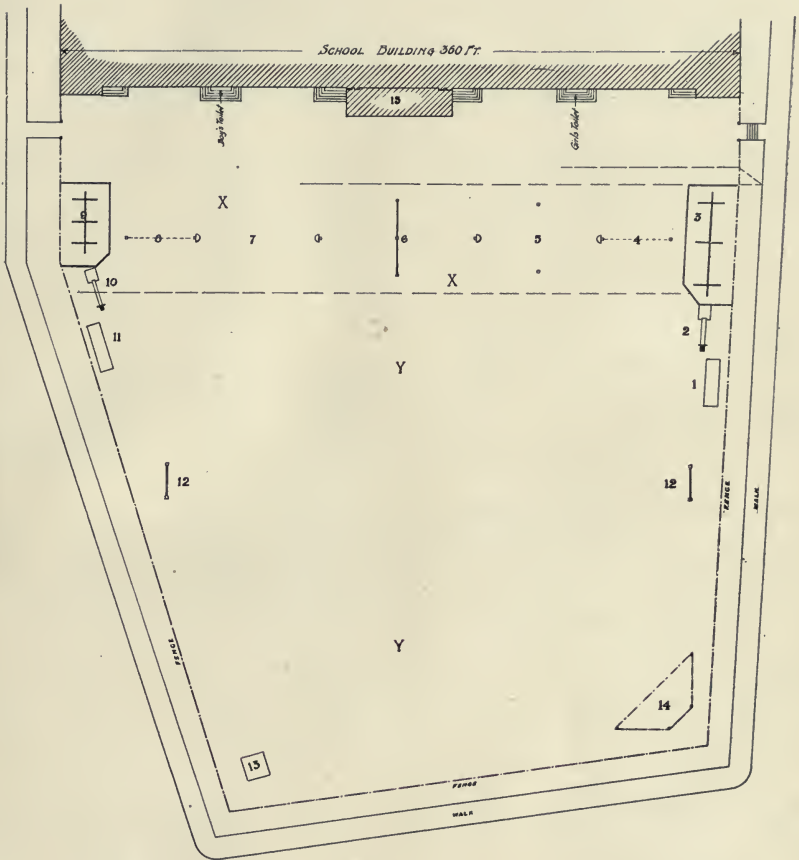


DIAGRAM SHOWING ARRANGEMENT OF STANDARD PLAYGROUND

APPENDIX B.

Budget for Elementary Schools for 1916-1917.

STATEMENT OF APPROPRIATIONS—OAKLAND SCHOOL DEPARTMENT.

May 31, 1917.

	Appropriation.	Expended.	Reserve for Contracts, Open Mkt. Orders & Miscell'n's Expenses.	Total Expended and Reserves.	Unencumbered Balance of Appropriation.	
<b>A. Expenses of General Control—</b>						
1-1	Board of Education.....	\$ 1,433.37	\$ 1,272.90	\$ 71.00	\$ 1,343.90	\$ 86.40
1-2	Secretary's Office.....	3,485.88	3,216.75	.....	3,216.75	269.13
3	Finance and Accounts Office.....	4,709.49	4,719.70	59.25	4,778.95	-69.46
4	Legal Services.....	2.50	2.50	.....	2.50	.....
6-1	Office in Charge of Buildings.....	3,470.84	3,123.57	11.35	3,135.32	335.52
6-2	Office in Charge of Supplies.....	2,679.43	2,508.83	41.66	2,550.19	129.24
7	Office Superintendent of Schools.....	8,966.93	7,613.29	165.40	7,778.69	1,188.24
8	Enforc't of Comp'sory Edu. & Truancy Laws	4,557.51	4,131.24	.....	4,131.24	426.27
9	Other Expenses of General Control.....	1,736.76	1,505.01	108.00	1,613.01	123.75
	Total of Expenses of General Control.....	\$ 31,039.71	\$ 28,093.89	\$ 456.66	\$ 28,550.55	\$ 2,489.16
<b>B. Expenses of Instruction—</b>						
11	Salaries of Supervisors of Grades and Subjects	\$ 20,073.00	\$ 18,480.35	\$ .....	\$ 18,480.35	\$ 1,592.65
27	Other Expenses of Supervisors.....	920.93	572.71	.....	572.71	348.22
13	Salaries of Principals, Vice-Prin. and Clerks..	74,032.79	68,367.27	.....	68,367.27	5,665.52
14	Other Expenses of Principals.....	933.73	536.74	3.50	540.24	396.49
15	Salaries of Teachers.....	711,111.64	649,539.74	.....	649,539.74	61,571.90
16-1	Text-Books.....	6,601.00	6,059.56	563.90	6,623.46	.....
16-2 & 3	Text-books, Stamping, Repairs, etc.....	129.54	111.54	18.00	129.54	.....
17	Stationery and Supplies.....	18,083.38	11,930.21	6,016.12	17,946.33	92.05
18	Other Expenses of Instruction.....	15,912.54	14,856.86	743.33	15,599.19	313.35
	Total of Expenses of Instruction.....	\$ 847,756.55	\$ 770,453.98	\$ 7,344.85	\$ 777,798.83	\$ 69,957.72
<b>C. Expenses of Operation of School Plant—</b>						
20	Wages of Janitors and Other Employees.....	\$ 53,434.96	\$ 48,739.61	\$ .....	\$ 48,739.61	\$ 4,695.35
21	Fuel.....	12,587.73	11,858.86	660.10	12,518.96	68.77
22	Water.....	7,194.79	6,694.79	169.64	6,864.43	330.36
23	Light and Power.....	4,370.40	4,195.41	94.76	4,290.16	80.24
24	Janitors' Supplies.....	3,512.00	2,621.22	6.20	2,627.42	884.58
25	Other Expenses of Operation of School Plant.	8,287.00	7,202.92	467.45	7,670.37	616.63
	Total Expenses of Operation.....	\$ 89,386.88	\$ 81,312.80	\$ 1,398.15	\$ 82,710.95	\$ 6,675.93
<b>D. Expenses of Maintenance of School Plant—</b>						
28	Repair of Buildings and Upkeep of Grounds...	\$ 30,610.86	\$ 19,071.12	\$ 40.77	\$ 19,111.89	\$ 11,498.97
29-1	Insurance—Fire.....	7,988.86	7,547.81	487.35	8,035.16	.....
29-2	Insurance—Compensation.....	15,094.29	15,094.29	.....	15,094.29	.....
30	Other Expenses of Maintenance.....	1,562.39	1,562.39	.....	1,562.39	.....
	Total Expenses of Maintenance.....	5,933.67	1,610.30	11.59	1,621.89	.....
	Total Expenses of Maintenance.....	\$ 56,850.07	\$ 44,885.91	\$ 539.71	\$ 45,425.62	\$ 11,424.45
<b>E. Expenses of Auxiliary Agencies—</b>						
33	Libraries—Books.....	\$ 1,497.44	\$ 1,203.00	\$ 178.30	\$ 1,381.30	\$ 116.14
34	Other Expenses.....	4.90	4.90	.....	4.90	.....
35	Promotion of Health—Salaries.....	13,917.85	12,382.55	.....	12,382.55	1,535.30
36	Promotion of Health—Other Expenses.....	5,709.29	5,342.57	163.21	5,505.78	203.51
38	Transportation.....	393.70	343.70	.....	343.70	50.00
	Total Expenses of Auxiliary Agencies.....	\$ 21,523.18	\$ 19,276.72	\$ 341.51	\$ 19,618.23	\$ 1,904.95
<b>G. Miscellaneous Expenses—</b>						
41	Advertising and School Prospectus.....	\$ 39.45	\$ 39.45	\$ .....	\$ 39.45	\$ .....
43	Pensions.....	593.00	541.00	.....	541.00	52.00
44	Rent.....	190.00	190.00	.....	190.00	.....
45	Other Miscellaneous Expenses.....	2,477.14	2,313.19	230.00	2,543.19	.....
	Total of Miscellaneous Expenses.....	\$ 3,299.59	\$ 3,083.64	\$ 230.00	\$ 3,313.64	\$ .....
<b>H. Other Payments—</b>						
55	Paym'ts of War'ts & Dem'ds of Preced. Years	\$ 843.63	\$ 843.63	\$ .....	\$ 843.63	\$ .....
56	Tax Abatements and Refunds.....	30.00	21.20	.....	21.20	.....
57	Payments of Interest.....	1,450.00	1,410.13	.....	1,410.13	.....
58	Miscellaneous Payments.....	9,853.61	1,237.63	8,390.98	9,628.61	.....
	Total of Other Payments.....	\$ 12,177.24	\$ 3,512.59	\$ 8,390.98	\$ 11,903.57	\$ 273.67
	Total of Expenses—Elementary.....	\$1,062,033.22	\$ 950,619.53	\$ 18,701.86	\$ 969,321.39	\$ 92,711.83
<b>O. Outlays: Additions to Capital Investment—</b>						
405-1	Land Improvements.....	\$ 10.00	\$ 10.00	\$ .....	\$ 10.00	\$ .....
405-2	New Buildings, Structures and Improvem'ts..	35,146.49	28,323.70	5,546.60	33,870.30	1,276.19
405-3	Alterations of Old Buildings.....	7,942.58	7,653.17	43.10	7,696.27	246.31
405-4	Equipment of New Buildings and Grounds....	1,385.50	2,176.20	78.97	2,255.17	.....
405-5	Equipment of Old Buildings and Grounds....	57,243.42	16,233.63	40,493.99	56,727.62	515.80
405-6	Special Equipment.....	3,897.34	3,701.43	106.91	3,807.34	.....
	Total of Outlays.....	\$ 105,536.33	\$ 58,098.13	\$ 46,268.57	\$ 104,366.70	\$ 1,169.66
	Total of Expenses and Outlays.....	\$1,167,569.55	\$1,008,717.66	\$ 64,970.43	\$1,073,688.09	\$ 93,881.46







GIFT  
MAY 19 1917

DEPARTMENT OF  
PUBLIC INSTRUCTION  
OAKLAND CALIFORNIA

THE INTERMEDIATE SCHOOL  
SITUATION

IN

OAKLAND, CALIFORNIA

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*PART II*

OF

A GENERAL REPORT

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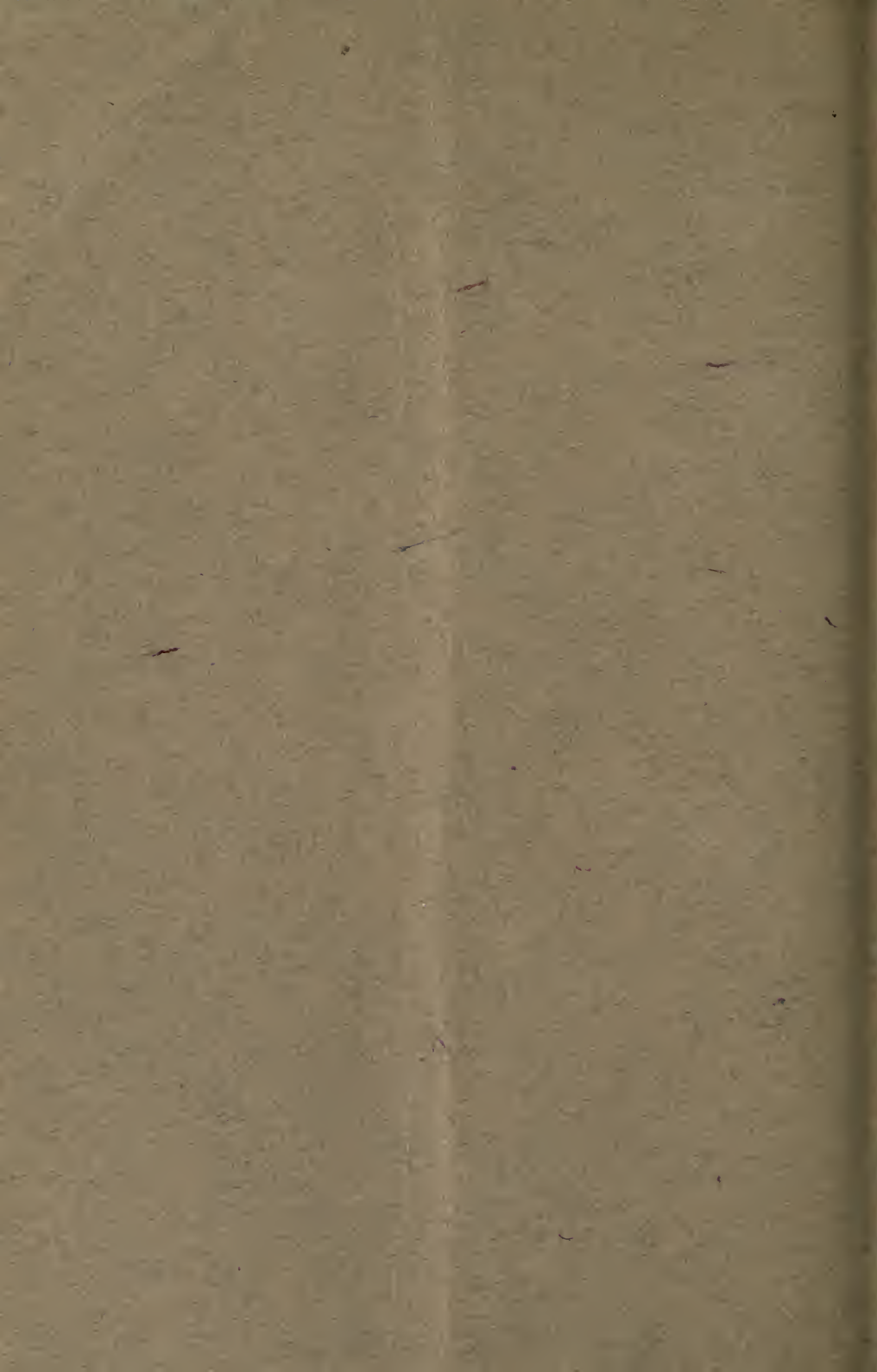
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1913-1917

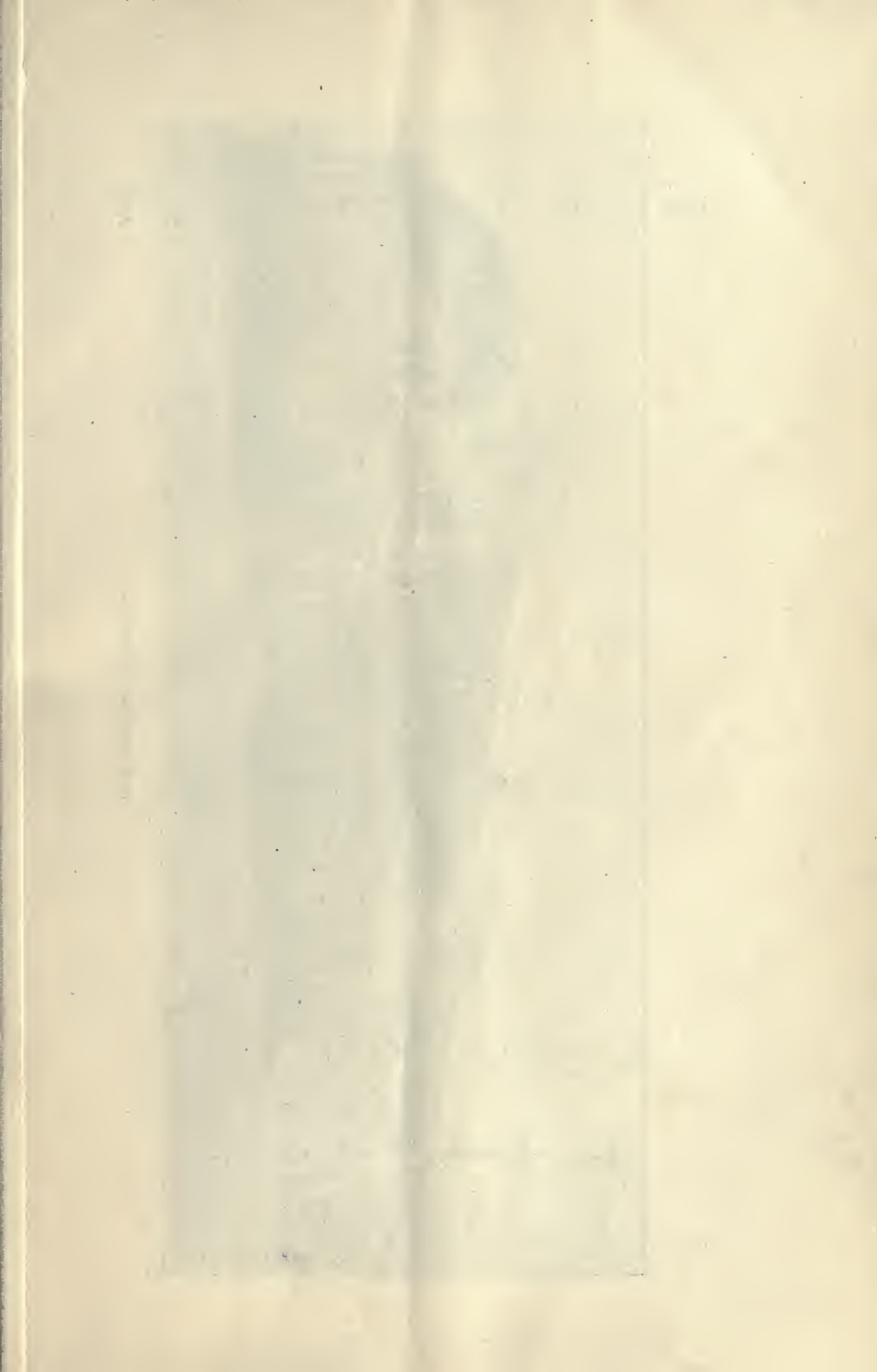
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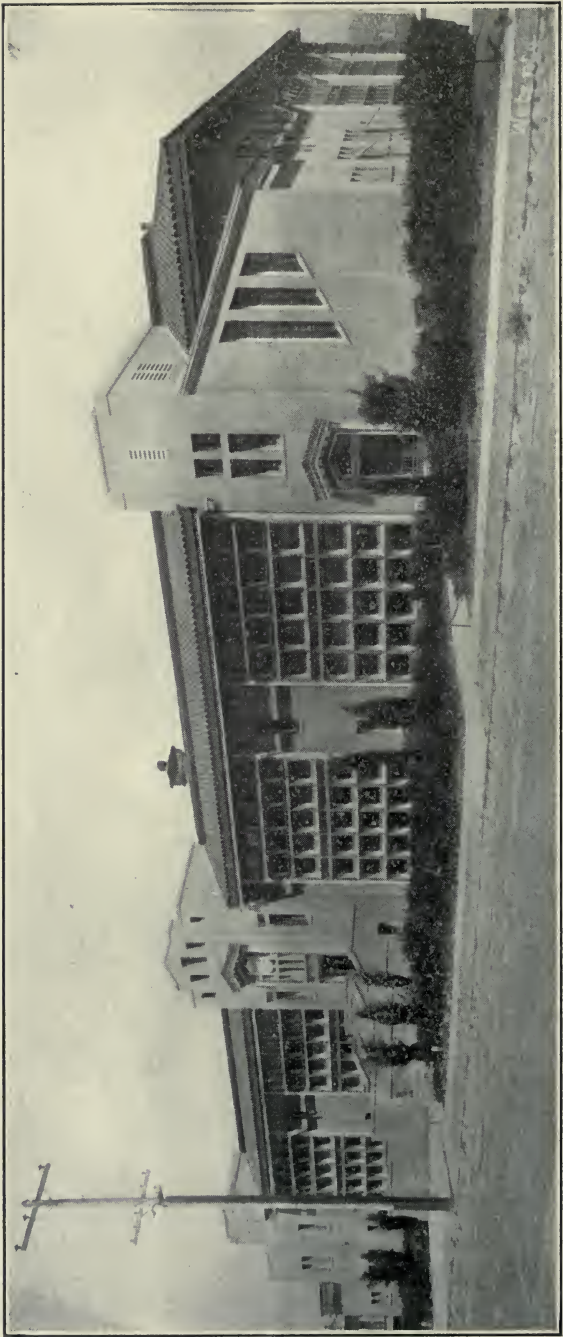
NUMBER 10

JUNE, 1917









THE DURANT SCHOOL

THE INTERMEDIATE SCHOOL  
SITUATION

IN

OAKLAND, CALIFORNIA

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*PART II*

OF

A GENERAL REPORT

BY THE

CITY SUPERINTENDENT OF SCHOOLS

1913-1917

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A. C. BARKER  
Superintendent of Schools

ANNIE F. BROWN  
President Board of Education

June 28, 1917





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## LETTER OF TRANSMITTAL.

Oakland, California, June 21, 1917.

To the Honorable Board of Education,  
Ladies and Gentlemen:

I have the honor to submit for your consideration a brief account of the intermediate school problem in Oakland in which I have endeavored to record what has been accomplished by the introduction of departmental instruction into the upper grades of the elementary schools. Though twelve of the twenty-one elementary schools providing departmental teaching conform to the definition of the intermediate school given by the California Commissioner of Secondary Schools, since they are conducted on the departmental plan and offer instruction in one or more high school subjects, not one of these twelve schools, on account of the omission of the ninth year as an integral part of the school, measures up to the generally accepted definition of an intermediate or junior high school. But the character of the instruction is probably as thorough and advanced as that offered in the corresponding grades of any independent intermediate or junior high school.

In the proposed future building program I have recommended that six intermediate school centers be provided, viz: University, Lakeview, West Oakland, East Oakland, Fruitvale, and Lockwood. Should this program be acceptable to the members of the Board and to the community, it would not be difficult to make the transition from the present departmental schools to independent intermediate schools. I congratulate your honorable Board that the policy has been successfully followed thus far with the cordial support and co-operation of the principals, the teachers, and the community.

Respectfully submitted,

A. C. BARKER,  
Superintendent of Schools.

## FOREWORD.

Twenty-three years have passed since the classic report of the Committee of Ten on Secondary School Studies, of which Ex-President Eliot of Harvard acted as chairman, appeared. Its recommendations, so far as they pertained to the elementary school, were revolutionary, as the Committee advocated the introduction of foreign languages, concrete geometry, the elements of physics, chemistry, and natural history, ancient history, and physical geography as a part of its curriculum.

The intermediate school is an attempt to carry out the recommendations of the Committee of Ten. It retains the traditional studies of the elementary school, often with a reduced time allotment, and endeavors to teach them more effectively by the departmental method with better trained teachers. But it also admits to the curriculum of the seventh and eighth grades such subjects as general history, science, and modern languages, heretofore reserved for the high schools and colleges. The intermediate school endeavors to combine in one institution the common school and the lower classes of such higher European schools as the French Lycee and the German Realschule. In other words, it partakes of the nature of both the elementary and the high school. Though originally established as an academic or school of general education, of recent years several variations have appeared, as boys' industrial or prevocational, girls' trade or home economics, commercial, and cosmopolitan, which combines in one school all the foregoing types.

Though several cities as Kalamazoo and Springfield, Mass., adopted departmental teaching for the seventh and eighth grades a generation ago, the intermediate school is a recent institution in its present conception as an independent school. The pioneers appear to have been Richmond, Indiana, organized in 1896, Columbus, Ohio, in 1909, Berkeley, California, in 1910, and Los Angeles, California, in 1911. Although about two hundred cities in the United States have established some form of the inter-



mediate school the number of pupils enrolled in such schools is still comparatively small.

The results of the \*investigation by Mr. W. E. Talbert, Director of Reference and Research of the Oakland School Department, indicate that three intermediate plans are in operation in the United States. Thirty of the cities which replied to his questionnaire have established the separate junior high school, nine have included in one or more high schools the seventh and eighth grades, and thirty-six have departmental instruction in the elementary schools. Though fifty-three of the cities included in the report have adopted or are experimenting with one or more types of the intermediate school only a very small percentage of the pupils are enrolled in the standard types of such schools. Of the 568,011 pupils in the seventh, eighth, and ninth grades of these cities, it is interesting to note that eighty-six and seven-tenths per cent are still enrolled in the traditional elementary and high schools, one and eight-tenths per cent in independent intermediate schools, one-half of one per cent in combined junior and senior high schools, and eleven per cent in departmentally organized elementary schools.

\* See Appendix A.



THE INTERMEDIATE SCHOOL ORCHESTRA

## PART I.

### INTRODUCTION OF DEPARTMENTAL INSTRUCTION INTO THE UPPER GRADES OF THE ELEMENTARY SCHOOLS.

Semi-departmental instruction for the seventh and eighth grades of East Oakland was made possible in August, 1912, by the organization of an intermediate school in the building of the Swett School by distributing the primary grades of this school among the neighboring elementary schools and transferring to this new intermediate school the seventh and eighth grades of the Franklin and Garfield schools.

In 1913 the Board of Education, owing to the opposition of various civic and improvement clubs, abandoned the policy of establishing independent intermediate schools for the seventh and eighth grades by a redistribution of the school population, using some of the existing buildings for the first six grades and others for intermediate schools. Realizing the necessity of adopting a policy which would conform to the best modern practice in the training of seventh and eighth grade children, I was confronted with the necessity of making a choice between the following alternatives, either the maintaining of the traditional organization until new buildings could be provided by a bond issue for separate intermediate schools, or introducing departmental instruction into the seventh and eighth grades of elementary and high schools.

Therefore, the next year departmental instruction was provided in the Grant and Washington elementary schools. This policy has as fast as possible been extended to other elementary and to two of the high schools which have the seventh and eighth grades, with the result that at the present time one hundred seven of the one hundred twenty-one seventh and eighth grade classes in the city are conducted under the departmental plan. Of course, it has not been practicable in outlying schools, having only two or three classes of the seventh and eighth grades, to offer such instruction. Five classes of the seventh and eighth, or the sixth,



seventh, and eighth grades, have been recognized as the minimum number justifying the introduction of departmental teaching. From several years experience, principals and teachers agree that it is advantageous to include the sixth grade in the departmental group where necessary to obtain five classes.

In changing to departmental instruction, it was found advisable to determine a uniform time allotment. The following was adopted as the standard course of study for the seventh and eighth grades, with five daily periods, two of which are fifty minutes in length and the remaining three sixty minutes.

### Required Subjects.

Subject	Periods per Week
English .....	8
Music .....	2
History and Geography or Civics and Hygiene .....	5
Mathematics .....	5
Manual Training or Home Eco- nomics alternating with Draw- ing .....	5
	—
	25 required of all pupils.

### Elective Subjects (Optional).

(Offered in one or more schools, sometimes as an over-time subject from 8:00 to 9:00 a. m.)

Foreign Language .....	5
Typewriting .....	5
Extra Drawing or Music .....	5
Extra Hand Work .....	5

Physical training and playground courses, to which attendance has been voluntary, are given after school.

That the opportunity for choosing electives, offered by the change to departmental organization, has been readily accepted is shown in the accompanying tables.



TABLE 1.

	Total Enrollment in departmental classes.	Latin.	German.	French.	Spanish.	Instrumental Music.	Extra Drawing, Freehand.	Extra Manual Training.	Extra Vocal Music.	Total taking electives.
Bay .....	138	.....	.....	.....	.....	2	.....	33	.....	35
Claremont .....	149	.....	.....	.....	.....	16	.....	11	.....	27
Cole .....	171	.....	.....	.....	.....	14	.....	15	.....	29
Durant .....	193	.....	.....	24	.....	42	.....	36	.....	102
Elmhurst .....	129	.....	.....	.....	.....	15	.....	.....	.....	15
Emerson .....	133	.....	.....	.....	.....	15	.....	35	.....	50
Garfield .....	157	.....	.....	.....	50	52	.....	20	.....	122
Grant .....	222	.....	.....	.....	90	15	.....	.....	.....	105
Hawthorne .....	117	.....	.....	.....	.....	6	.....	.....	.....	6
Intermediate ..	512	128	165	.....	.....	96	28	137	205	759
Jefferson .....	119	.....	.....	.....	.....	22	.....	30	.....	52
Lakeview .....	202	.....	.....	144	.....	31	.....	15	.....	190
Lincoln .....	221	.....	40	.....	.....	12	.....	12	.....	64
Lockwood .....	124	.....	21	.....	40	50	.....	.....	1	112
Longfellow .....	148	.....	.....	.....	.....	18	.....	12	.....	30
Melrose Hgts. ..	89	.....	.....	.....	30	24	.....	.....	.....	54
Piedmont .....	106	.....	.....	16	.....	14	.....	16	.....	46
Prescott .....	96	.....	.....	.....	.....	45	.....	.....	.....	45
University .....	120	5	18	18	25	9	61	53	.....	189
Vocational .....	271	.....	.....	.....	36	38	.....	.....	.....	74
Washington .....	206	.....	30	.....	.....	40	19	52	.....	141
Totals.....	3623	133	274	202	271	576	108	477	206	2247

TABLE 2.

Subjects	Emerson	Inter- mediate	University	Vocational	Totals
Extra Sewing.....	.....	34	24	.....	58
Extra Cooking .....	24	.....	21	.....	45
Typewriting .....	.....	115	.....	.....	115
Drawing, Mechanical ..	.....	17	.....	.....	17
Science .....	.....	.....	90	.....	90
Vocational Work:					
Automobile Repairing ..	.....	.....	.....	23	23
Cabinet Making .....	.....	.....	.....	22	22
Electrical Work .....	.....	.....	.....	3	3
Forge .....	.....	.....	.....	18	18
Machine Shop.....	.....	.....	.....	5	5
Pattern Making.....	.....	.....	.....	31	31
Printing .....	.....	.....	.....	4	4
Dressmaking .....	.....	.....	.....	22	22
Millinery .....	.....	.....	.....	12	12
Totals.....	24	135	135	140	465

The following has proved to be the most satisfactory distribution of subjects to the teachers of five departmentally organized classes:

1 teacher,	English
1 teacher,	English and Music
1 teacher,	History and Geography, or Civics and Hygiene
1 teacher,	Mathematics
1 teacher, half-time	Drawing
1 teacher, half-time	Manual Training
1 teacher, half-time	Home Economics

This makes an equivalent of five full-time teachers and one half-time teacher. It has usually been possible to obtain one or two teachers of the required subjects prepared to give instruction also in foreign languages from 8:00 to 9:00 a. m. Here follows a typical program for five seventh and eighth grade classes:

#### TYPE PROGRAM FOR SEVENTH AND EIGHTH GRADES.

		Period I. 8 to 9 a. m.	Period II. 9 to 10 a. m.	Period III. 10:10 to 11 a. m.	Period IV. 11:10 to 12 m.	Period V. 1 to 2 p. m.	Period V. 2:15 to 3:15 p. m.	3:15 to 5:15 p.m.
8B	Elective Courses	English	English and Music	Hist. and Geog.	Math.	Hand Work		
8A	in Foreign Lang- uages,	Hand Work	English	English and Music	Hist. and Geog.	Math.		Physical Training
7B	Hand Work,	Math.	Hand Work	English	English and Music	Hist. and Geog.		or Play- ground
7A	etc.	Hist. and Geog.	Math.	Hand Work	English	English and Music		Optional
7A	Optional	English and Music	Hist. and Geog.	Math.	Hand Work	English		

As the foregoing program provides for four full-time and three (drawing, manual training, and home economics) part-time teachers, it has seemed better to seat the five classes (usually numbering from 150 to 175 pupils) in four class rooms for the roll call and attendance records, the drawing, manual training, and home economics teachers having no responsibility for the records except for their own classes. The part-time teachers usually teach in two schools, two or three hours per week for each class. Though the schedule provides that one teacher shall give instruction in music two periods per week and in English three periods, in practice it has been found advisable to divide the period with twenty minutes daily for music and the remainder for English.

In several elementary schools, ten classes are taught departmentally with the following faculty consisting of eleven teachers:

3	English teachers
2	Mathematics teachers
2	History and Geography or Civics and Hygiene teachers
1	Manual Training teacher
1	Music teacher
1	Home Economics teacher
1	Drawing teacher

Where the demand for foreign languages or other elective courses has been sufficient to justify the employment of additional teachers for full time, it has been necessary to increase the length of the daily session to six hours or to increase the number of periods by shortening them, in order to include these additional subjects; but the seven period plan has not been so satisfactory, as it has not permitted sufficient time for supervised study.

Since the California state law prohibits the assigning of work for home study to pupils under fifteen years of age, the periods of the daily program are divided into two parts, one for recitation and one for supervised study. The following is the procedure in the supervision of study in one of the schools, and the method here pursued is fairly typical. Each period is divided into twenty-five or thirty minute halves. The first half is devoted to oral discussion of work studied in the second half of the period of the day before and to the development of new work arising therefrom. The second half of each period is given



to study which is supervised by the teachers with as much attention to individual needs as is possible in the time. The plan of supervised study has the unanimous endorsement of the teaching and supervising force.

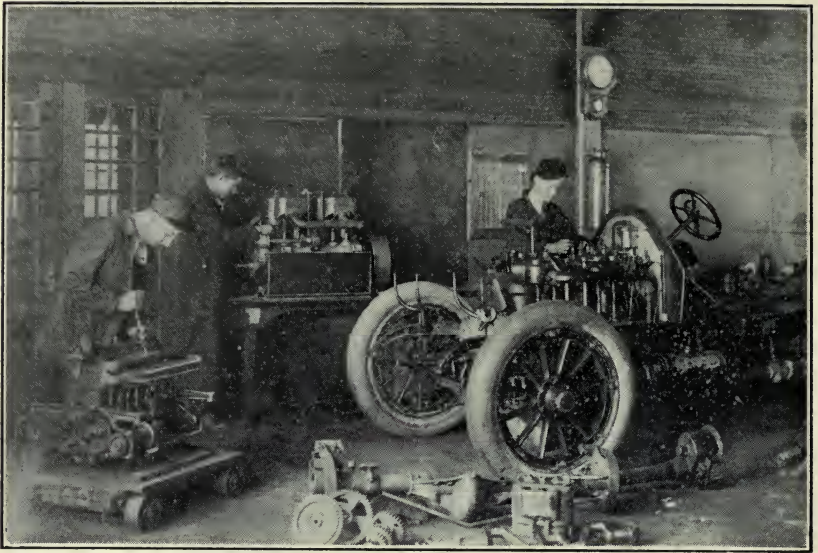
The introduction of departmental instruction has resulted in better trained teachers and more thorough teaching, better provision for supervised study, a limited opportunity for a choice of subjects in accordance with the pupil's interests, aptitudes, and abilities, and no increase in cost except as the size of classes has been reduced.

While nearly all the teachers employed at the time of the change to the departmental plan were retained, a large proportion of the new teachers appointed are college graduates with successful experience in elementary as well as in high schools. It has not been difficult to secure teachers with high school standards of training for foreign languages, English, mathematics, history and geography, home economics, and manual training, but well trained teachers of drawing have been difficult to obtain. At the present time approximately one-half of the teachers in the seventh and eighth grades where the departmental method is employed are college graduates with sufficient graduate training to meet the state requirements for high school certification.

Of course, the superior qualifications of the departmental teachers have resulted in more intelligent and more thorough instruction. Many of the graduates of the eighth grade enter the high school with one or two high school credits and frequently enter second or third term high school classes in drawing and foreign languages. The instruction in seventh and eighth year foreign language corresponds to the first year of the high schools and uniformity of results is obtained by providing for the same supervision for language teaching in the elementary and high schools. The scope of the teaching in English, music, drawing, and foreign languages represents about the equivalent of the instruction usually provided in the first year of the high school. While a limited number of electives is offered, the instruction in the departmental grades is as thorough and advanced as usually given in similar grades of independent intermediate schools.



The elective system, one of the possibilities of departmental organization, in my opinion, marks a distinct advance in the elementary school. As has long been recognized in the best private schools of Europe and America, it is the only method of securing teachers with special training for each subject in the curriculum. Obviously, no teacher can be equally well prepared to teach all the subjects in the course of study nor to attack difficulties in the teaching of all these various subjects with equal skill and enthusiasm. Perhaps the largest but least tangible effect of the departmental school upon the pupil is the opportunity for contact with several well-trained teachers. It is inevitable, nevertheless, that no one instructor, however capable, will make a corresponding appeal to all her pupils, or be capable of arousing equal interest in all lines of work. Hence, the departmental school affords a wider horizon, and thus renders possible more general interest and larger enthusiasms.



AUTOMOBILE SHOP OF THE VOCATIONAL SCHOOL



MILLINERY CLASS IN THE VOCATIONAL HIGH SCHOOL

## PART II.

### VARIATIONS FROM THE STANDARD DEPARTMENTALIZED SCHOOL.

#### INTERMEDIATE DEPARTMENT OF THE UNIVERSITY SCHOOL.

This department, comprising the seventh, eighth, and ninth grades, is conducted on the strictly departmental plan and all the teachers of academic subjects are college graduates. Subjects that have usually been considered fit only for high school students are here introduced in the seventh grade, but in a manner adapted to the younger children. Thus, an opportunity is offered to start a foreign language in the seventh grade. Individual lessons in the usual orchestral instruments are given. Important work is done in elementary science. English, history, geography, and arithmetic are taught by junior high school methods; that is to say, the instruction is adapted to the adolescent child.

Hand training is not neglected. Facilities are afforded all pupils of the seventh and eighth grades who wish to take drawing, manual training, or domestic science. Singing is taught, and harmony of bodily rhythm in supervised physical training.

#### COURSES OFFERED IN THE INTERMEDIATE DEPARTMENT WITH TIME ALLOTMENT FOR SUBJECTS.

Grade	Academic	Elective	Electives
	(For College Entrance)		
	English .....8	Same as Course I, except that other electives may be taken in place of foreign language.	Foreign Language ....5
	Arith. ....5		Drawing .....2
7	U. S. Hist. and Geog.....5		Science .....3
	Music .....2		Manual Training or Domestic Science ..3
	Foreign Language .....5 (Spanish, German, French, Latin.)		
8	Same as above, except United States History in the low eighth grade and civics in the high eighth grade for all courses.		
	English .....5	English .....5	Ancient History
	Algebra .....5	Elective .....5	Algebra
9	Foreign Language .....5 (Spanish, French, German, Latin.)	Elective .....5	General Science
		Elective .....5	Foreign Language
			Drawing—Freehand, Mechanical
			Music—Harmony, Choral, Orchestral
			Shop Work or Domestic Science



In the intermediate department study is supervised much as it is in the senior high school. Special pains are taken in arranging this supervision. A well-trained teacher is assigned to the study hall each period in the day. Not only is order maintained by the teacher, but she is expected to pass about the room giving guidance and encouragement to students who, for any reason, seem unable to make satisfactory progress.

#### INTERMEDIATE DEPARTMENT OF THE VOCATIONAL SCHOOL.

Circumstances force many pupils to begin training for a vocation at about fifteen years of age, even though they have not received as much preliminary schooling as they ought to have. The Vocational School, therefore, provides an intermediate department to which are admitted pupils from the seventh, eighth, or ninth grades who are of sufficient maturity to profit by the instruction. These pupils are given the same academic courses as they would receive in other elementary schools, and upon completion of the eighth grade receive the same diploma, entitling them to enter any high school.

#### TIME ALLOTMENT OF COURSES.

##### Boys.

	Periods per Week
<b>SEVENTH YEAR</b>	
English .....	8
Mathematics .....	5
History and Geography .....	5
Drawing .....	2
Music .....	2
Physical Culture .....	2
Study .....	5
Shop .....	10
<b>EIGHTH YEAR</b>	
English .....	5
Mathematics .....	4
History and Geography (first term).....	5
Civics and Hygiene (second term).....	5
Drawing .....	2
Music .....	2
Physical Culture .....	2
Shop Work .....	20
<b>NINTH YEAR</b>	
Shop Work .....	20 or 25
Drawing .....	4
Mathematics .....	4
Elementary Mechanics and Electricity .....	4
English .....	4
Music .....	2
Physical Culture .....	2



**Girls.**

	Periods per Week
<b>SEVENTH YEAR</b>	
English .....	8
Mathematics .....	5
History, Geography, and Hygiene .....	6
Drawing .....	2
Music .....	2
Physical Culture .....	2
Cooking and Housewifery .....	10
Study .....	5
<b>EIGHTH YEAR</b>	
English .....	5
Mathematics .....	4
History and Geography (first term).....	
Civics and Hygiene (second term).....	4
Drawing .....	2
Music .....	2
Physical Culture .....	2
Vocations for Girls .....	1
Shop Work .....	20
<b>NINTH YEAR</b>	
Millinery, Dressmaking and Home Economics .....	20
English .....	5
General Science .....	5
Drawing and Design .....	3
Mathematics .....	3
Music .....	2
Physical Culture .....	2

The school day for vocational classes is six hours long, three hours in the forenoon and three hours in the afternoon. The student devotes one-half the day to academic subjects and the other half to shop work. As the school is in session eight hours daily, pupils who desire it may elect an additional period in the morning or afternoon or both, although this is not required.

The intermediate department of the Vocational School affords an opportunity for the pupil, during the last two years of the elementary course to try the work of several different trades, and usually to discover one that he wishes to learn. This trying out process is essentially pre-vocational. When a pupil has found a trade in which he has a permanent interest he usually elects that one to pursue, and his work then becomes vocational. This opportunity for first hand investigation and experimentation on the part of the pupil together with the systematic study of vocations carried on in the class room becomes real practical vocational guidance. Vitalizing the course of study (through a wider range of electives and a more appreciable connection of all subjects with real life) enables pupils to realize a relation between their school work and the work they hope to do after leaving school. Thus some are kept in school who, if held to the traditional courses, would drop out without any adequate preparation for their vocations.

## THE PRESCOTT SCHOOL.

In the Prescott School, a departmentally organized elementary school, a modified form of the "Gary Plan" has been in operation for the past two years. Through the adoption of this system, it has been possible to secure physical training and manual training as required subjects in all the grades with a slight saving in the teaching force. Under the standard plan of departmental organization there are eleven teachers for ten classes, whereas in this school a faculty of thirteen teachers suffices for twelve classes. This variation from the standard has the additional advantages of a gradual transition from the traditional method of instruction to the departmental plan, thus accustoming the pupil more and more to the independent effort demanded in high school, and an unusual flexibility of program with the consequent increased provision for individual needs.

### TIME ALLOTMENT

#### For the Sixth, Seventh, and Eighth Grades.

Subjects	Periods per Week
English (Composition, Penmanship, Grammar, Poems).....	16
Arithmetic .....	10
Geography and History .....	10
Hygiene .....	2
Nature Study .....	2
Physical Training .....	5
Manual Training or Cooking and Sewing, alternating with Drawing .....	10
Music .....	5
	60

The program here given shows the disposition of the foregoing subjects for the seventh and eighth grades.

### TYPE PROGRAM.

Double Period	Double Period	Double Period	Double Period	Single Period	Single Period	Double Period
English	Arithmetic	English Poems Hygiene Nature Study	Man. Tr. or Cooking and Sewing alternating with Drawing	Music	Phy- sical Train- ing	History and Geography

In comparing the time allotment here shown with that of the standard course, allowance must be made for the division of the day into a greater number of periods. The session is five and a quarter hours in length and is divided into twelve periods, eight of which are morning periods twenty minutes in length;

the remaining four afternoon periods are twenty-five minutes in length. Three minutes as intermissions are allowed at the end of every odd period and seven minutes at the end of every even period, thus making double periods forty-three and fifty-three minutes respectively. Resolving the half periods into the full period of the standard course, this allotment is found to be nearly identical with that of the standard course, except that physical training is given an additional half period daily.

### THE OAKLAND INTERMEDIATE SCHOOL.

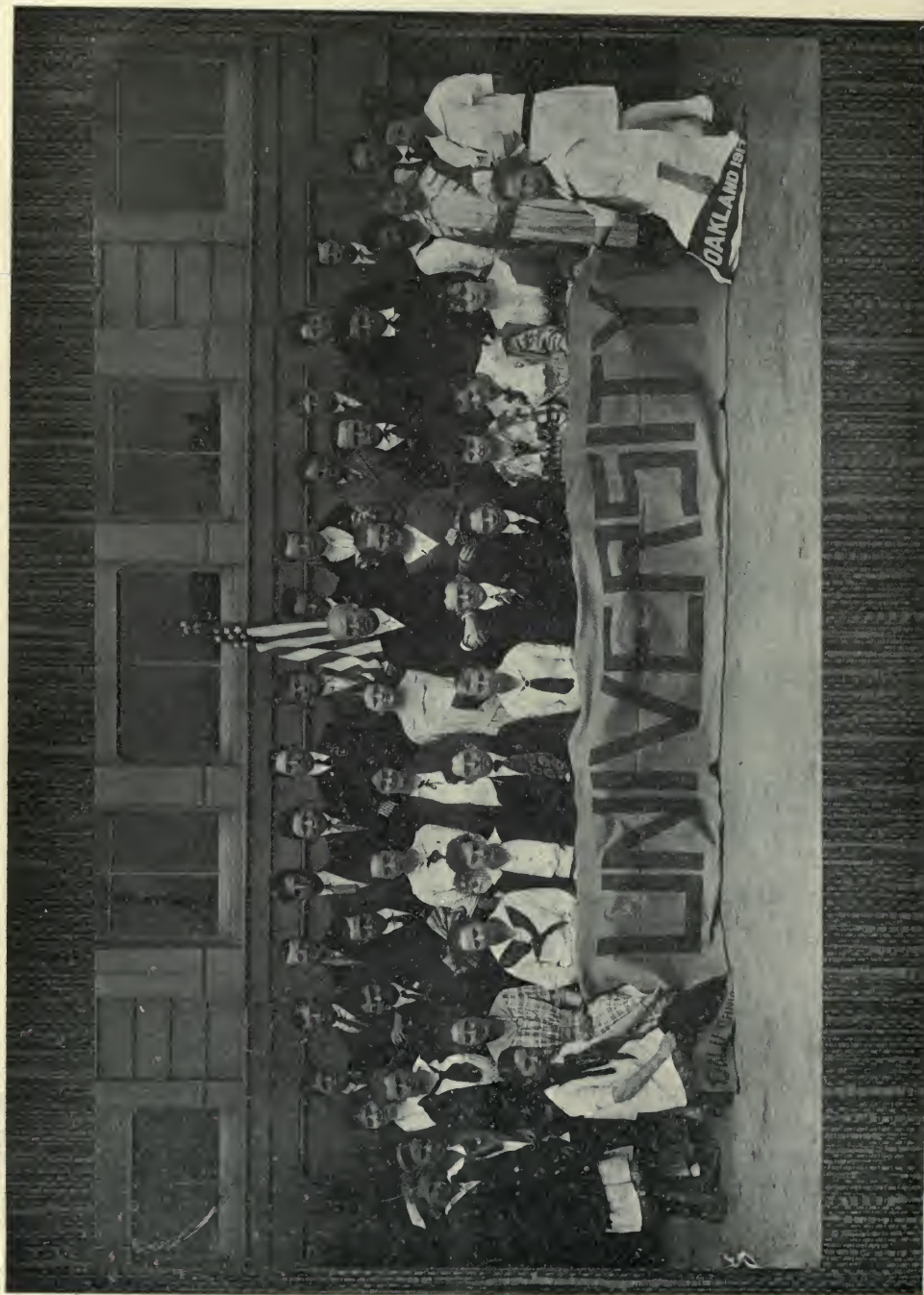
The Intermediate School, though the only departmentally organized school in Oakland that houses the seventh and eighth grades separately, does not conform to the generally recognized standard of the intermediate school, by reason of the fact that the ninth grade is not included. However, it more closely approaches the most commonly accepted type and consequently offers most of the advantages, such as, wider range of electives, segregation, etc., of the academic intermediate school.

#### Time Allotment of Courses.

SEVENTH GRADE, A AND B		EIGHTH GRADE, A AND B	
	Periods per week each		Periods per week each
English (including composition, spelling, grammar, penmanship).....	7	English .....	7
Arithmetic .....	3	Arithmetic and Accounts..	3
Geography and History....	5	Geography .....	2 or 3
Music .....	2	History and Civics .....	3
Drawing .....	2	Music .....	2
Physical Training .....	1½	Physical Training and Hygiene .....	2
Manual Training or Domestic Science and Art..	4	Manual Training and Domestic Science and Art	4
	<hr/>		<hr/>
	23½		23 or 24
ELECTIVES		ELECTIVES	
Latin .....	5	Latin .....	5
German .....	5	German .....	5
Extra English .....3	} 5	Typing .....	5
Extra Geography .....1		Freehand or Mechanical Drawing .....	5
Extra Arithmetic .....1		Extra Manual Training....	5
Extra work by any who are able to carry it in typing and music, either vocal or orchestra.		Extra Sewing .....	5
		Extra Music .....	2 to 5

The required number of recitations per week for each pupil is twenty-five. The program provides for seven periods of forty minutes each, and one period of twenty-five minutes. This allows nine forty minute periods and three twenty-five minute periods per week for supervised study.







### PART III.

#### CONCLUSIONS AND RECOMMENDATIONS.

The plan outlined in the foregoing paragraphs can in no sense be termed an experiment. Departmental teaching has been for a century the standard form of instruction in the best schools of Europe and America. Better trained teachers have meant more thorough and intelligent teaching. The introduction of electives in the seventh and eighth grades have brought greater opportunity to ambitious and talented pupils and additional incentive to better scholarship. To be sure the course of study now in use is not an ideal one. It represents what has been possible under present conditions. It could have been greatly improved by requiring elementary science and physical training, but for these subjects neither laboratories nor trained teachers have been available. Though credit has been given many pupils entering the high schools with one or two years study of a foreign language, it has not always been possible on account of conflicts in programs for them to enroll in advanced classes. After several years trial ninety-five per cent of the principals and teachers have been enthusiastic in commendation of the results obtained. As a result of three years' experience, I would recommend that the session be lengthened to provide six or seven daily periods and that the course of study outlined below be adopted for the seventh and eighth grades. It would, however, require an increase of twenty-five per cent in the teaching force or approximately the same per capita cost for instruction as an economically organized intermediate school of the academic type.

#### Recommended Course of Study.

Subjects	Periods per Week
English and Penmanship .....	5
(Pupils deficient in English should be required to take five periods extra in place of the elective.)	
Music .....	2
History and Geography, 7th year.....	} 5
History and Hygiene, 8th year.....	
Mathematics .....	4
Physical Training .....	2
Elementary Science .....	2
Manual Training or Cooking and Sewing, alternating with Drawing .....	5
	—
	25
1 Elective .....	5
	—
	30

In the traditional organization a teacher is required for every class, and one-tenth of the time of two additional teachers for home economics and manual training or twelve teachers for ten classes. Under the departmental plan as operated in Oakland ten classes require only eleven teachers, or twelve teachers if an elective is offered, viz., three for English, one for music, two for mathematics, two for history and geography, one for art, one for manual training, one for home economics, and one for an elective subject, which is French in the Lakeview School. The course recommended for the future will require three additional teachers, one for science and two for physical training, but the physical training teachers would be able to devote part time to other classes in the school. To secure the best results one room should be properly equipped for science and two gymnasiums provided, though in the California climate the latter, although desirable, are not a necessity.

However, no argument is needed to convince one of the superior advantages in building and equipment of the independent intermediate school planned for its work with lockers, science laboratories, auditorium, shops, and gymnasiums. For all who are interested in the building program of the intermediate school, my advice is first to **formulate the aims of the school**, adopt a course of study, determine the number of pupils to be provided for, and then it is a simple matter to fix the building requirements. I wish to commend to any board of education or superintendent, contemplating the building of separate intermediate schools, the plans of the Port Arthur Intermediate School, designed by Mr. William B. Ittner of St. Louis, as a model of its kind in America.

Of course, there would be distinct additional advantages, such as superior housing facilities and equipment, even a wider range in choice of subjects, a discipline and spirit closely approximating that of the senior high school with the consequent greater independence and individuality of action on the part of the pupils, in establishing separate intermediate schools. It has been, however, the purpose in this account to show what it has been possible to accomplish in the elementary schools under present conditions and limitations and without additional expense.

## APPENDIX A.

As the findings of the following investigation throw considerable light on the manner in which cities throughout the country are solving the problem presented by the intermediate school, it has seemed advisable to include it in this report.

### THE ORGANIZATION OF SEVENTH, EIGHTH, AND NINTH GRADES IN CITIES OF OVER 50,000 INHABITANTS IN THE UNITED STATES.

By WILFORD E. TALBERT,

Director of Reference and Research of the Oakland Schools.

The following study is the result of a questionnaire which was sent to the superintendents of schools of all cities of over 50,000 inhabitants in the United States. For convenience, the replies were grouped as in the following table which shows the number of cities in the group and the number of replies received:†

**TABLE 1.**  
**Showing Grouping of Cities and Number of Replies Received.**

Population of Group*	Number of Cities	Number of Replies	Pct. of Cities Replying
I. Over 500,000.....	9	7	77.8%
II. 300,000 to 500,000.....	10	9	90.0%
III. 200,000 to 300,000.....	10	9	90.0%
IV. 150,000 to 200,000.....	33	29	87.9%
V. 50,000 to 100,000.....	60	44	73.3%
Total.....	122	98	80.3%

\* As estimated by U. S. Census Bureau in 1914, Oakland belongs to Group IV.

† Replies from the following cities were received in time to be included in this report:

Group I—New York, Chicago, Philadelphia, St. Louis, Boston, Cleveland, Baltimore. Total, 7.

Group II—Buffalo, San Francisco, Los Angeles, Milwaukee, Cincinnati, Newark, New Orleans, Washington, Minneapolis. Total, 9.

Group III—Jersey City, Kansas City, Indianapolis, Portland, Rochester, Providence, St. Paul, Louisville, Columbus. Total, 9.

Group IV—Oakland, Toledo, Birmingham, Worcester, Syracuse, New Haven, Memphis, Scranton, Spokane, Patterson, Richmond, Omaha, Fall River, Grand Rapids, San Antonio, Bridgeport, Nashville, Dallas, New Bedford, Cambridge, Salt Lake City, Trenton, Houston, Tacoma, Reading, Albany, Camden, Youngstown, Springfield, Mass. Total, 29.

Group V—Lynn, Kansas City, Kan.; Yonkers, Wilmington, Schenectady, Duluth, Oklahoma City, Somerville, Elizabeth, St. Joseph, Waterbury, Troy, Manchester, Wilkesbarre, Ft. Wayne, Erie, Harrisburg, Savannah, Passaic, Bayonne, South Bend, Wichita, Johnstown, Holyoke, Sacramento, Allentown, Charleston, Springfield, Ill., Canton, Pawtucket, Altoona, Covington, Mobile, Sioux City, Saginaw, Atlantic City, Little Rock, Berkeley, Rockford, Binghamton, New Britain, Tampa, El Paso, Springfield, Ohio. Total, 44.



Thus it will be seen that the replies are not only representative of the larger cities as a whole but of each separate population group:

### Types of Schools.

In the questionnaire, superintendents were asked which of the following types of organization were maintained in their respective schools for pupils of the seventh, eighth, and ninth grades:

1. The traditional types of schools; namely, (a) where all elementary pupils are housed together and are given instruction by grades rather than by subjects, and (b) where pupils of the high school grades are housed in the regular four-year high schools.

2. Separate intermediate or junior high schools; namely, where all or part of these grades are separated from the lower elementary grades on the one hand and the upper high school grades on the other.

3. Elementary departments of the regular high schools, that is, where grades which ordinarily belong to the elementary schools are housed in the same building with pupils of the upper grades of the high schools, the curricula of which, methods of teaching, promotion, etc., etc., correspond to intermediate or high school methods.

4. Departmental classes of regular elementary schools housing all or some of the lower grades, that is, where the instruction, though the pupils are housed with the regular elementary school grades, is conducted on the intermediate departmental plan, this plan requiring that in such intermediate classes the curriculum, methods of instruction, etc., correspond to those of the separate intermediate, junior, or senior high school; viz., departmental instruction, with specially trained teachers, differentiated curricula and activities, some secondary studies, promotion by subjects, and other features which formerly belonged to the high schools.

While the fourth type was limited to schools offering one or more high school subjects, it was evident from some of the replies that ordinary departmental elementary grades had been



included; hence all cities reporting departmentalized instruction with differentiated curricula were considered in the summaries as belonging under this heading.

Table 2 shows a summary of the number of cities of each group which maintain each of the various types mentioned.

**TABLE 2.**  
**Showing Types of Schools Maintained.**

Popula- tion Group	Traditional		Separate Junior High Schools (Type 2)	Elem. Depts. of High Schools (Type 3)	Dept. Work in Elem. Schools (Type 4)	Number of Cities Repre- sented	Number having some type of Junior High School
	Elem. (Type 1a)	High (Type 1b)					
I.	7	6	2	1	2	7	3
II.	7	8	3	2	5	9	7
III.	8	8	2	1	4	9	5
IV.	28	26	9	3	11	29	14
V.	33	36	14	2	14	44	24
Totals..	83	84	30	9	36	98	53

In so far as the number of cities is concerned, it would seem that few have abandoned the traditional type of organization entirely and that only about half of them have tried any form of reorganization. The latter is true not only of all cities but of each group with the possible exception of Group II, where seven out of nine cities have tried at least one experiment.

The plan of putting elementary grades in the regular high school seems the least popular, and departmentalized elementary schools lead the separate junior high schools by only a small majority. About one-third of all cities have one or the other of these last two types.

#### Extent of Experimentation.

While Table 2 shows in a general way the extent of experimentation that has already been made, this is brought out even more clearly in Table 3, which follows:

TABLE 3.

Showing Number of Cities Trying Each Form of Experiment.

Popu- lation Group	Number of cities which have tried							Total having some form of Junior High School
	Only Type 2	Only Type 3	Only Type 4	Types 2 and 4	Types 3 and 4	Types 2 and 3	All Types	
I.	1	....	1	....	....	....	1	3
II.	1	....	4	....	....	1	1	7
III.	1	....	3	....	....	....	1	5
IV.	3	....	4	4	1	....	2	14
V.	9	....	9	4	1	1	....	24
Totals	15	....	21	8	2	2	5	53

The names of cities having only one type of organization will be enumerated later. The following cities have all types, the numbers in parentheses indicating the population groups to which they belong:

Cleveland, Ohio (1)	Oakland, California (4)
Cincinnati, Ohio (2)	Grand Rapids, Mich. (4)
Columbus, Ohio (3)	

a combination of types 2 and 3 are found in:

Los Angeles, California (2)	and Yonkers, N. Y. (5)
-----------------------------	------------------------

Types 3 and 4 are combined in:

Syracuse, N. Y. (4)	and El Paso, Texas (5)
---------------------	------------------------

Types 2 and 4, the most popular types, are found together in:

Memphis, Tenn. (4)	South Bend, Ind. (5)
Richmond, Va. (4)	Sacramento, Cal. (5)
Houston, Texas (4)	Allentown, Penn. (5)
Springfield, Mass. (4)	Rockford, Ill. (5)

Note that no city has tried Type 3 alone.

### Enrollment in Various Types of Schools.

It seems very difficult to obtain complete enrollment figures, especially from the smaller cities where the superintendents are not provided with proper clerical assistance, but the following table has been compiled from data submitted by those whose replies were complete:

TABLE 4.

Summary of Enrollment Statistics Submitted by 79 of the 98 Cities Replying.

Type	Popu- lation Group	Latest Available Enrollment				Number of Schools	Cities Repre- sented
		7th grade	8th grade	9th grade	Total		
1a	I.	122,365	105,983	15,694	244,042	1,285	7
	II.	22,265	21,379	-----	43,644	508	6
	III.	4,651	3,769	-----	8,420	53	4
	IV.	19,884	13,694	1,500	35,078	734	20
	V.	17,091	12,407	1,236	30,734	367	26
	Total.....	186,256	157,232	18,430	361,918	2,947	63
1b	I.	-----	-----	51,296	51,296	70	6
	II.	-----	-----	19,091	19,091	36	7
	III.	-----	-----	5,148	5,148	9	4
	IV.	99	1,754	14,751	16,604	37	19
	V.	-----	491	13,676	14,167	41	31
	Total.....	99	2,245	103,962	106,306	193	67
2	I.	2,427	1,989	202	4,618	10	2
	II.	3,589	3,971	1,409	8,969	12	3
	III.	1,389	1,443	974	3,806	8	2
	IV.	3,050	3,045	1,584	7,679	19	7
	V.	2,748	3,488	2,080	8,316	16	12
	Total.....	13,203	13,936	6,249	33,388	65	26
3	I.	351	254	-----	605	2	1
	II.	431	461	474	1,366	5	2
	III.	54	879	933	1,866	5	1
	IV.	304	554	486	1,344	4	3
	V.	300	268	227	795	1	2
	Total.....	1,440	2,416	2,120	5,976	17	9
4	I.	5,249	4,183	1,044	10,476	13	2
	II.	7,369	6,231	2,791	16,391	111	4
	III.	5,804	5,295	-----	11,099	91	3
	IV.	5,326	4,577	-----	9,903	85	8
	V.	6,979	5,229	346	12,554	97	13
	Total.....	30,727	25,515	4,181	60,423	397	30
Totals All Types	I.	130,392	112,409	68,236	311,037	1,380	7
	II.	33,654	32,042	23,765	89,461	672	9
	III.	11,898	11,386	7,055	30,339	166	5
	IV.	28,663	23,624	18,321	70,608	879	22
	V.	27,118	21,883	17,565	66,566	522	36
	Total.....	231,725	201,344	134,942	568,011	3,619	79

Table 5 shows the percentage of the total enrollment of each grade which receive instruction in each of the various types represented:



**TABLE 5.**

**Per Cent of Totals Who Are in Each Type of School. (All Cities.)**

Type	Enrollment of				Number of Schools	Number of Cities
	7th Grade	8th Grade	9th Grade	All Grades		
1a	80.4%	78.1%	13.7%	63.7%	81.4%	79.7%
1b	.....	1.1%	77.0%	18.7%	5.3%	84.8%
2	5.7%	6.9%	4.6%	5.9%	1.8%	32.9%
3	0.6%	1.2%	1.6%	1.1%	0.5%	11.4%
4	13.3%	12.7%	3.1%	10.6%	11.0%	38.0%
Total..	100.0%	100.0%	100.0%	100.0%	100.0%	.....

It should be noted that while this table shows the truth regarding the data which it attempts to set forth, its real significance is somewhat affected by the fact that over half of the pupils in these grades in the seventy-nine cities are in population Group I where the traditional schools predominate.

Data on the distribution of each type of school, taken separately, follow here.

#### **Type 1a—Traditional Elementary Schools.**

Normally, this type of schools concludes with the eighth grade. In some cities, however, the ninth grade has also been added, while in still others the elementary course ends with the seventh grade. The advocates of each plan claim that it has advantages, but there is not room to discuss them here. The effect on the junior high school problem, however, is worthy of mention. Some of the superintendents whose courses end with the seventh grade claim that "the junior high school makes too convenient a stopping place," and that the tendency of pupils leaving the elementary schools at an early age is to proceed through the senior high school. Approximately eighty per cent of all the seventh and eighth grade pupils in all of our larger cities are still taught in this type of school.

#### **Type 1b—Traditional High Schools.**

Ordinarily, the ninth grade is the only one of those grades studied which forms a part of the regular four-year high school course. About seventy-seven per cent of all ninth grade pupils are in this type of school, and of those who are not in such a school a larger per cent are in the traditional elementary school than in any of the new forms of junior high school.



## Type 2—Separate Intermediate or Junior High School.

In all, thirty cities report having tried some form of the separate junior high school and more than 33,000 pupils are enrolled in the sixty-five schools represented. This means an average enrollment of slightly over five hundred pupils per school. About one-fifth of these pupils are in the ninth grade, the remaining pupils being distributed equally between the seventh and eighth grades.

In the very largest cities (Group I) only seven out of every one thousand schools having these grades is a separate junior high school. In Group II there are eighteen schools per one thousand; in Group III forty-eight schools; in Group IV, twenty-two schools; and in Group V, thirty-one schools. It would seem therefore that this type of school flourishes most in cities of from 200,000 to 300,000 inhabitants.

A number of auxiliary questions were asked in connection with the regular questionnaire. As they have an important bearing on the separate junior high school problem, the replies will be summarized here.

1. With only one exception, every superintendent who expressed any opinion as to which type of school produced the best educational results replied in favor of the separate junior high school.

2. It is also the type of school which is being emphasized most in practically all cities which are following any definite plan of reorganization.

3. As to the conditions under which a separate junior high school should be organized, five superintendents say "when the city is large enough to support several high schools" and four more advocate it as a "relief to overcrowded high schools". Eight superintendents would put such a school wherever there are enough pupils in the upper grammar grades who live within a given radius. One superintendent advocates the separate school where an elementary school is available, thus saving the redistricting of the city. Seven insist on a suitable building before establishing such a school, and two more caution against trying to have a separate school in the same building with some other school. Two replies state that the separate school is

expensive and should only be established when the district has plenty of money, and two more argue in favor of the separate school as a means of economy. Only four superintendents express any opposition to this type of school, and their objection is usually based on the excess cost over Type 4. One man says the separate school is not worth the extra cost unless properly trained teachers can be secured.

Of those superintendents who answered our request to state their future plans respecting the junior high school in any form, fourteen are advocating the separate junior high school, one wants larger buildings, one wants additional manual arts, three want prevocational courses, one wants improvement in the teaching force, one will put the upper grades in the high school, and one plans to have departmental work in the elementary grades.

The following cities now have separate junior high schools. (Numbers in parentheses show number of schools):

GROUP I.  
Cleveland, Ohio (7)  
Baltimore, Md. (3)

GROUP II.  
San Francisco, Cal. (3)  
Los Angeles, Cal. (8)  
Cincinnati, Ohio (1)

GROUP III.  
Rochester, N. Y. (1)  
Columbus, Ohio (7)

GROUP IV:  
Oakland, Cal. (1)  
Worcester, Mass. (5)  
Memphis, Tenn. (1)  
Richmond, Va. (3)  
Grand Rapids, Mich. (2)  
Salt Lake City, Utah (8)  
Trenton, N. J. (1)  
Houston, Texas (3)  
Springfield, Mass. (1)

GROUP V.  
Kansas City, Kan. (1)  
Yonkers, N. Y. (1)  
Duluth, Minn. (3)  
Somerville, Mass. (2)  
St. Joseph, Mo. (1)  
South Bend, Ind. (1)  
Johnstown, Pa. (1)  
Sacramento, Cal. (?)  
Allentown, Pa. (2)  
Altoona, Pa. (1)  
Berkeley, Cal. (4)  
Rockford, Ill. (1)  
New Britain, Conn. (2)  
Tampa, Fla.

**Note**—The reports of several of these cities were not complete; hence the number of schools just enumerated is not the same shown in Table 4.

In addition to those above, the following cities report that they expect in the near future to start the organization of separate junior high schools:

## GROUP I.

New York City (authorized on recommendation of Bd. of Supts.).  
Chicago (one opened Feb. 1, 1917).

## GROUP II.

Buffalo (contemplated).  
Newark (under consideration).  
Kansas City, Mo. (contemplated).  
St. Paul (contemplated for next year).  
Scranton (now working on plans for separate school).  
Fall River (planning to build two this fall).  
New Bedford (steps being taken to establish three schools).  
Salt Lake City (working for separate buildings).  
Youngstown ("in prospect").  
Lynn (hopes to have three schools by September, 1919).  
Kansas City, Kan. (planning five additional separate schools).  
Camden (gradual reorganization preparatory to junior high school).  
Wilmington (planning bond issue for four junior high schools).  
Oklahoma City (considering bond issue for next year).  
St. Joseph (plans under way).  
Wilkes-Barre (planning for junior high school).  
Harrisburg (three schools to be ready in a year or two).  
Savannah (planning "as a matter of economy and efficiency").  
Holyoke ("just about to organize on 6-3-3 plan").  
Altoona (now erecting plant).  
Sioux City ("to have one in each of the four or five natural divisions of the city within the next few years").  
Little Rock ("building being built for the purpose").  
El Paso (one just begun).

### **Type 3—Where Elementary Grades Are Housed in the Regular High Schools.**

In all, nine cities have solved their junior high school problem in part by creating a six-year high school, beginning with the seventh grade. That no city has tried this plan to the exclusion of all others and that it is the least popular of all plans leads us to believe that, as in Oakland, cities only adopt it for special purposes. Such an organization is fundamental to a good trade school, but in some cities there may be other reasons such as having plenty of room in high school buildings, etc. In still others, supervision of these grades by the high school authorities is considered a distinct advantage.



#### **Type 4—Where the Upper Elementary Grades Are Organized On the Departmental Plan.**

Of all the various types of junior high school, this is the most popular from the standpoint of the number of cities, schools, or pupils. Usually only the seventh and eighth grades are included in the plan, but about 4000 of the 60,000 pupils reported are in the ninth grade.

A great many of the superintendents who advocate the separate junior high school admit that this plan affords many of the advantages of the separate school without the excessive costs or the problem of salaries. On the other hand, a few even doubt the wisdom of making the additional expenditure for what they claim are but small gains over this simple type of organization.

By departmentalizing the work of the upper grades, a great many interesting improvements have been made over the old traditional type of instruction. For example, Bridgeport, Conn., offers four distinct courses (traditional, industrial, commercial, and normal). Foreign languages, commercial branches, mathematics, and science seem to be the most common high school branches offered. Good examples are Richmond, Va.; New Haven, Conn.; Worcester, Mass., and Buffalo, N. Y. Another interesting innovation is the "preparatory school," found in Baltimore and Louisville, where only the brightest pupils from the sixth grade are admitted. They usually save from one-half to one year on their high school course. Boston and Minneapolis report that they are planning to add the ninth grade to the regular departmental elementary school.

#### **Some Interesting Special Experiments.**

The following cities have tried experiments not enumerated in the foregoing paragraphs:

Cincinnati—A separate school for grades six to ten inclusive.

Richmond and Wilmington—Separate schools for grades six to eight.

Houston—Planning to eliminate all pupils of first two years of high school from regular high school building.

Sacramento—Organized on 6-2-2-2-2 plan, the last three "2's" being junior high, senior high, and junior college.

Salt Lake City—Junior high school distinct in organization but housed with elementary school.

Trenton—Same, but under supervision of high school principal and department heads.

Erie—Planning to have both junior and senior high schools in every high school building.

## Summary and Conclusion.

To summarize:

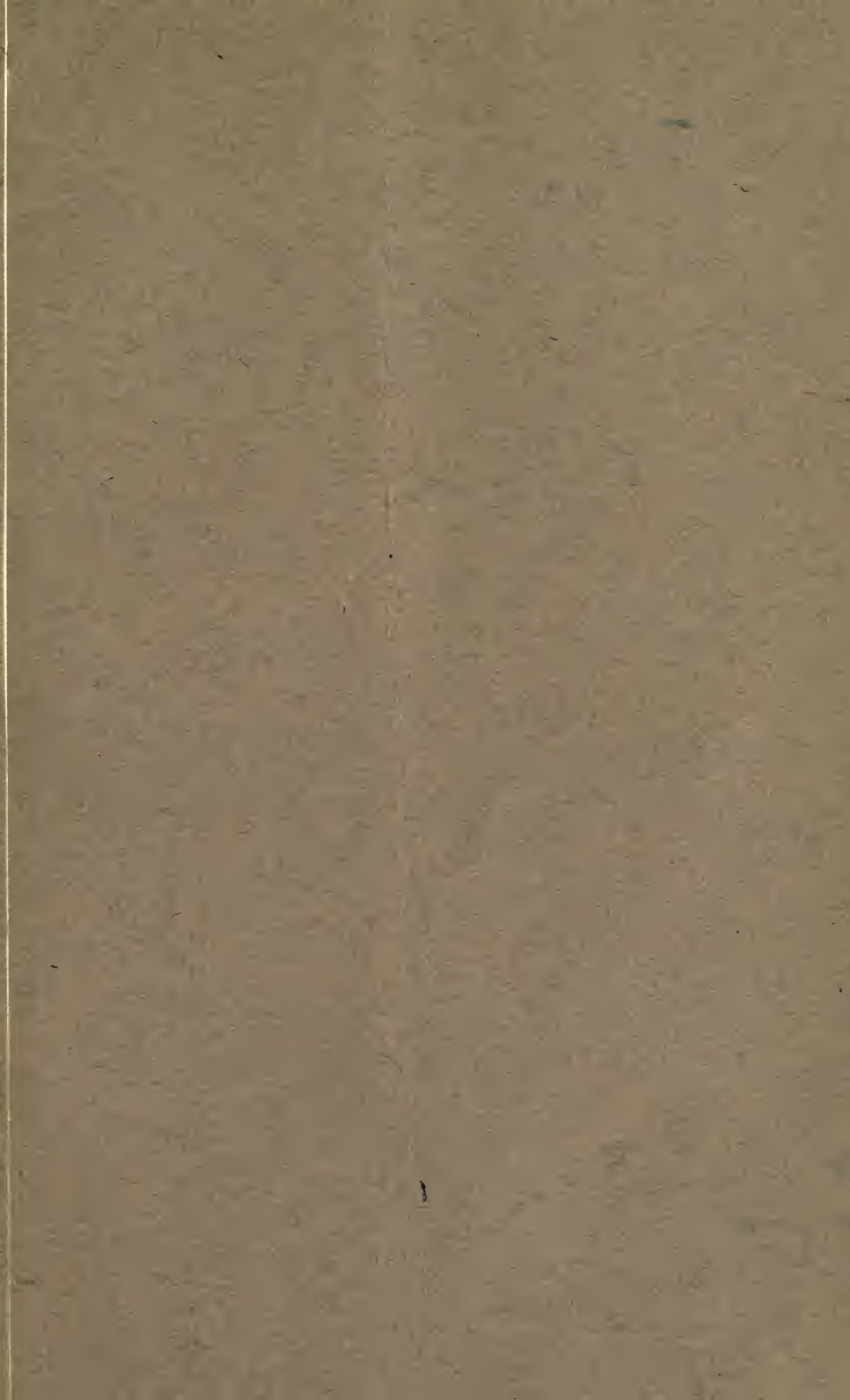
Cities generally throughout the United States are doing just about what Oakland is doing with respect to the junior high school problem; namely, experimenting. Oakland not only ranks among the five cities in the United States who have tried all of the five types of schools for these grades, but has at the same time avoided excessive trial of what are universally conceded to be the more expensive types. If, in the proposed bond issue, it should include several separate junior high schools, it would be in direct line with the practically unanimous opinion of the leaders of educational thought in the nation as a whole.

When we review the results of this, as of other similar studies that have been made, we cannot help remarking that the junior high school problem is one which calls for a different type of study from any yet given to it. While any of the new types of separate schools is bound to add millions of dollars to the cost of school buildings and hundreds of thousands to the cost of maintenance in practically every large city, still we go on experimenting without controlled conditions, or looking hither and thither for the opinions of people who know no more than we do, or whose conditions are wholly different from ours. The great need is for a real scientific investigation, under expert direction and properly controlled conditions, of the educational and other results of all of the various types, under all possible or probable conditions. Such a survey might cost \$200,000 or more, but there is no large city in the country that could not easily afford to contribute its quota. Or Congress might enable the U. S. Bureau of Education to do the work. And, if all public agencies failed, we would commend the proposition to some of the nation's philanthropists.













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GIFT  
MAY 10 1917

DEPARTMENT OF  
PUBLIC INSTRUCTION  
OAKLAND, CALIFORNIA

GENERAL STATISTICS  
OF THE  
OAKLAND SCHOOLS



PART IV  
of

A General Report

by the

City Superintendent  
of Schools

1913-1917



BOARD OF EDUCATION BULLETIN

NUMBER 12

JUNE, 1917

## P R E F A C E

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During the year 1915, the writer began a comprehensive statistical survey of the local school department with the following general aims in mind:

1. To preserve in permanent form information which had been gleaned from widely scattered original records and which would be hard to replace in case of loss;
2. To answer the questions most frequently asked by the general public;
3. To furnish to school officers and to the community a compendium of facts that should be generally known;
4. To meet the needs of educational investigators from whose studies we might hope to gain assistance in the solution of our own problems.

In view of these aims, the report which was made contained only "facts and figures" without any comment other than a summary, at the end of each chapter, of the "important facts noted." The report was to have been issued in two volumes, the first containing general, business, and financial statistics, and the second containing educational statistics, some facts about individual schools, and reports of special studies made. Volume I was completed in typewritten form, and bound copies are on file in the Superintendent's office and in the Oakland Public Library, but the material which was collected for Volume II was never entirely digested for use in a completed report.

The purpose of the present bulletin is to summarize in brief form some of the best things contained in the larger work with figures for the last two years added so as to bring all of the information down to date. The method of treatment is also somewhat changed so as to meet the requirements of the general reader.

It is a pleasure to acknowledge the invaluable services of Mrs. Mabel Anderson, my assistant, under whose immediate supervision the statistical tables used in this bulletin were assembled in the remarkably short time of ten working days.

Oakland, California, June 28, 1917.

WILFORD E. TALBERT,  
Director of Reference and Research.

# GENERAL STATISTICS

— OF THE —

## OAKLAND SCHOOLS

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Compiled by

WILFORD E. TALBERT

Director of Reference and Research  
of the Oakland School Department

FOR A

GENERAL REPORT

OF THE

CITY SUPERINTENDENT

OF SCHOOLS

1913-1917

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A. C. BARKER  
Superintendent of Schools

MISS ANNIE F. BROWN  
President Board of Education

June 28, 1917



**TABLE 1**  
**SUMMARY OF ALL SCHOOL DEPARTMENT POSITIONS—JUNE, 1917**

(Exclusive of unemployed substitute teachers  
and laborers not regularly employed)

M—Men. W—Women.

Items Numbered to Correspond with Items in Fiscal Schedule to Which Salaries are Charged	Number of Persons Holding Positions in												Total Employees	
	Day Schools				Evening Schools				Both Elementary and Secondary Schools					
	Elementary		Secondary		Elementary		Secondary							
	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.	M.	W.		
10. Total Officers of General Control.....	2	1								16	12	18	13	31
11. Supervisors .....	3	6								8	2	11	8	19
13. Principals (Supervising only).....	25	6	3				2			2		32	6	38
Clerks to Principals.....		1		3			1	1		2		1	7	8
15. Teachers .....	40	604	74	115	16	8	40	25				170	752	922
18. Other Officers of Instruction .....				4						2		2	4	6
26. Janitors, Engineers, etc.....	92	6	25							3	4	120	10	130
32. School Librarians.....				5									5	5
35. Doctors and Nurses.....		8								1	1	1	9	10
Playground Supervisors.....	10	31										10	31	41
<b>Total Positions.....</b>	<b>172</b>	<b>663</b>	<b>102</b>	<b>127</b>	<b>16</b>	<b>8</b>	<b>43</b>	<b>26</b>		<b>32</b>	<b>23</b>	<b>365</b>	<b>847</b>	<b>1212</b>
1. Of the above the following were part time positions only (Exclusive of persons employed part time in each of two positions)														
(a) General Control .....										1		1		1
(b) Supervisors .....		1								1		1	1	2
(c) Teachers .....	1	3	3	4	7	5	33	21				44	33	77
<b>Total Number Employed by the board for part time only...</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>4</b>	<b>7</b>	<b>5</b>	<b>33</b>	<b>21</b>		<b>2</b>		<b>46</b>	<b>34</b>	<b>80</b>
2. Of the above the following persons were counted twice:														
(a) Supervisors, also H. S. Teachers.....	2									1	1	3	1	4
(b) Director of Evening Lectures, also Elementary School Principal .....										1		1		1
(c) Evening School Principals Also Day School Principal .....								1				1		1
Also Day School Teacher .....							1					1		1
(d) Evening School Teachers, also Day School Teachers.....					4	6	33	10				37	16	53
(e) Attendance Officer, also Evening School Teacher.....	1											1		1
<b>Total Number of Persons Counted Twice.....</b>	<b>3</b>				<b>4</b>	<b>6</b>	<b>35</b>	<b>10</b>		<b>2</b>	<b>1</b>	<b>44</b>	<b>17</b>	<b>61</b>
3. School officers not paid by the Board of Education—														
(a) Members of Board of Education (Paid by City).....												5	2	7
(b) Superintendent of School Playgrounds (Paid by City).....												1		1
(c) Principal of University School and Four Teachers (Paid by State University).....												2	3	5
(d) Playground Supervisors.....												10	10	20
<b>Total School Officers Not Paid by the Board of Education....</b>												<b>18</b>	<b>15</b>	<b>33</b>

NOTES TO TABLE 1

1. "Elementary" includes Kindergartens, of which there are thirty.
2. In the evening schools though there are twenty-four teachers in the elementary department and sixty-five in the high school department, there are actually the equivalent of only 18.6 teachers in the evening elementary schools and 39.8 in the evening high schools since nearly all of these evening school teachers are on part time. In this case, it is only possible to show the number of men and women teachers by reporting the entire number of different individuals rather than merely the number of positions.

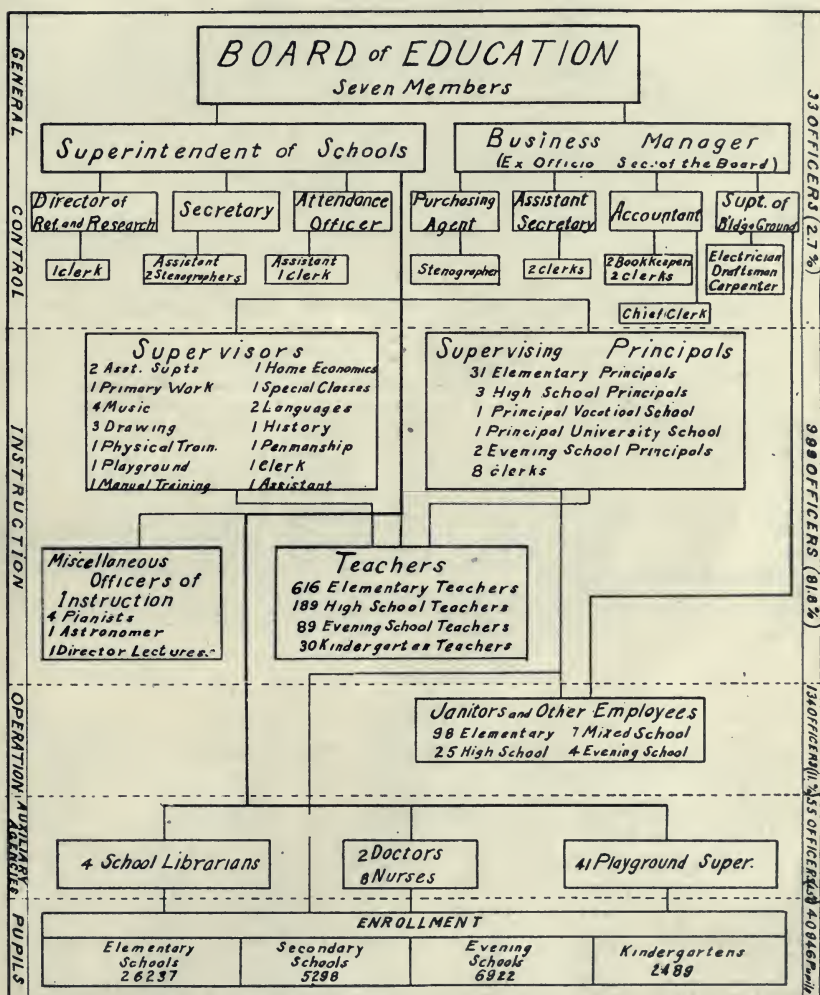


FIG. 1—ORGANIZATION AND SCOPE OF THE DEPARTMENT, JUNE, 1917.

The figures show positions rather than persons and so include some duplications. The electrician and carpenter are charged to "jobs," hence are not included as officers of general control in Table 1.

**TABLE 2**  
**GROWTH OF OAKLAND AND ITS SCHOOLS—BY DECADES**

Fiscal Year Ending July 1	Population By U. S. Census	City Assessed Valuation	Total School Enrollment All Schools	Av. Daily Attendance All Schools	Total Class Teachers
1853 .....	100 <sup>2</sup>	No record	No record	16	1
1860 .....	1,549	No record	130	58	2
1870 .....	10,500	No record	1,410	735	19
1880 .....	34,555	\$ 28,348,778	6,125	4,983	127
1890 .....	48,682	35,843,979	9,565	6,372	155
1900 .....	66,960	43,275,381	11,976	8,512	230
1910 <sup>1</sup> .....	150,174	107,793,550	17,621	12,919	353
1917 .....	206,402 <sup>3</sup>	144,271,100	40,946	26,353	847

<sup>1</sup> For the year 1910, only the Total Population includes the annexation of 1909.

<sup>2</sup> Estimated.

<sup>3</sup> Based on U. S. Census Bureau estimates.

**TABLE 3**  
**ENROLLMENT AND NUMBER OF SCHOOL DAYS**

YEAR	Kinder- gartens	Elementary Schools		Secondary Schools		Total Enrollment All Schools	Days of School
		Day	Evening	Day	Evening		
1910-11 .....	209	18,297	977	2,480	None	21,963	191
1911-12 .....	203	20,274	1,260	2,690	"	24,427	191
1912-13 .....	458	21,247	1,185	3,140	"	26,230	193 ½
1913-14 .....	871	22,912	1,884	3,354	"	29,021	184
1914-15 .....	1,934	24,351	2,367	4,045	"	32,697	186 ½
1915-16 .....	2,446	24,811	1,390	4,727	1,299	34,673	188
1916-17 .....	2,489	26,237	2,002	5,298	4,920	40,946	189
<b>Increase in Seven Years</b>	<b>1090.9%</b>	<b>43.3%</b>	<b>104.9%</b>	<b>113.6%</b>	<b>.....</b>	<b>86.4%</b>	<b>.....</b>

**TABLE 4**  
**AVERAGE DAILY ATTENDANCE**

YEAR	Kinder- gartens	Elementary Schools		Secondary Schools		Average Daily Attendance All Schools
		Day	Evening	Day	Evening	
1910-11 .....	83	14,834	245	2,170	None	17,332
1911-12 .....	92	15,621	261	2,363	"	18,337
1912-13 .....	203	16,425	248	2,299	"	19,175
1913-14 .....	360	17,874	370	2,597	"	21,201
1914-15 .....	718	18,998	411	3,089	"	23,216
1915-16 .....	1,136	19,595	226	3,562	238	24,757
1916-17 .....	1,139	20,208	304	3,894	808	26,353
<b>Increase in Seven Years.</b>	<b>1272.2%</b>	<b>36.2%</b>	<b>24.1%</b>	<b>79.4%</b>	<b>...</b>	<b>52.0%</b>



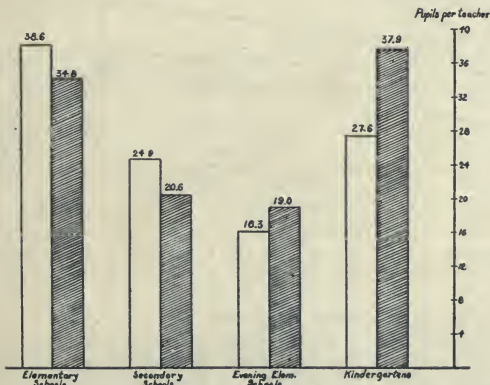
**TABLE 5**  
**NUMBER OF CLASS TEACHERS EMPLOYED<sup>1</sup>**

YEAR	Kinder-gartens	Elementary Schools		Secondary Schools		Total No. of Class Teachers All Schools
		Day	Evening	Day	Evening	
1910-11 .....	3	384	15	87	None	489.
1911-12 .....	3	397	15	93	"	508.
1912-13 .....	7	430	15	100	"	552.
1913-14 .....	12	478	19	117	"	626.
1914-15 .....	20	519	21	146	"	706.
1915-16 .....	30	549	11.4	170.7	9.4	770.5
1916-17 .....	30	580	16	189	32.3	847.3
<b>Increase in Seven Years.....</b>	<b>900%</b>	<b>51.0%</b>	<b>6.6%</b>	<b>117.2%</b>	<b>...</b>	<b>73.2%</b>

<sup>1</sup> Owing to varying methods of counting "class teachers," this table is only approximately correct. During the last four years, the numbers represent the average of the number employed during each of the ten months of the year. Manual training, instrumental music, and other non-class teachers are not counted in the Elementary Schools. In the High Schools, all teachers, including librarians and pianists, are counted. Supervising principals, clerks, and vice-principals who do not teach are not included. Domestic Science teachers were non-class teachers prior to 1915-16. In every case, teachers are counted only for the portion of time which they give.

**TABLE 6**  
**NUMBER OF PUPILS PER CLASS TEACHER**  
(Based on Average Daily Attendance)

YEAR	Kinder-gartens	Elementary Schools		Secondary Schools		Average for All Schools
		Day	Evening	Day	Evening	
1910-11 .....	27.6	38.6	16.3	24.9	None	35.4
1911-12 .....	30.6	39.3	17.4	25.4	"	36.1
1912-13 .....	29.0	38.1	16.5	23.0	"	34.7
1913-14 .....	30.0	37.4	19.4	22.2	"	33.8
1914-15 .....	35.2	36.6	19.2	21.1	"	32.8
1915-16 .....	37.8	35.6	19.8	20.8	25.3	32.1
1916-17 .....	37.9	34.8	19.0	20.6	25.0	31.1
<b>Change in Seven Years .....</b>	<b>Increase 37.3%</b>	<b>Decrease 9.8%</b>	<b>Increase 16.6%</b>	<b>Decrease 17.2%</b>	<b>...</b>	<b>Decrease 12.1%</b>



NOTE—A decrease of only one pupil per teacher from the standard of 1910-1911 would represent an increase of 6.5 teachers in the High schools, and of 13.4 teachers in the Elementary schools in order to teach the children of 1916-1917. This would increase the cost of instruction respectively \$10,140 and \$16,080. Note also that an average of 34.8 pupils of actual attendance per teacher means many overcrowded classes.

**FIG. 2—SHOWING NUMBER OF PUPILS OF AVERAGE DAILY ATTENDANCE PER CLASS TEACHER, IN 1910-1911 (Left hand) AND IN 1916-1917 (Right hand).**



TABLE 7

ASSESSED VALUATION SUBJECT TO LOCAL TAXATION

YEAR	Valuation Shown by City Assessor <sup>1</sup>	Valuation Shown by County Ass'r	Estimated Population <sup>2</sup>	True Wealth <sup>2</sup> Per Capita (City Val.)
1910-11	\$127,548,050	\$117,344,224	159,601	\$1,598.32
1911-12	116,881,725	109,124,037	167,401	1,396.42
1912-13	129,467,400	127,156,828	175,201	1,477.92
1913-14	137,727,750	133,823,778	183,002	1,505.20
1914-15	141,691,600	135,592,527	190,802	1,485.22
1915-16	142,914,775	138,754,220	198,602	1,439.20
1916-17	144,839,340	138,393,205	206,402	1,403.46
<b>Increase in Seven Yrs.</b>	<b>13.5%</b>	<b>17.9%</b>	<b>29.3%</b>	.....

1. This is the total valuation for the entire city. Valuation in various parts of the city have increased as follows:

YEAR	Original City	Annexations of 1891 and 1897	Annexations of 1909
1910-11	\$89,700,250	\$21,515,850	\$15,704,550
1916-17	91,711,565	29,227,490	23,900,285
<b>Increase in Seven Yrs.</b>	<b>2.2%</b>	<b>35.8%</b>	<b>52.1%</b>

2. Estimates furnished by U. S. Census Bureau.

3. The assessed valuation is said to be about 50% of the true value in the city assessment and about 60% of the true value in the county assessment.

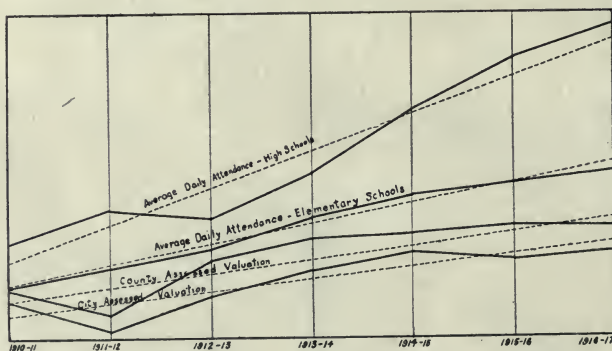


FIG. 3—INCREASE IN ASSESSED VALUATIONS AND IN SCHOOL ATTENDANCE COMPARED.

County and Local School Taxes are both based on the assessed valuation by the County Assessor. Is any reason shown in this diagram for a raise in the tax rate?

NOTE ON LOGARITHMIC CURVES

Figure 3 and Figure 4 have been drawn on a logarithmic scale so that the trends of the curves shown would appear as straight lines (these being easiest for the eye to follow). The dotted lines in the diagrams show the trends as mathematically plotted from the statistical data. Since the curves have been so arranged as to show which are the steepest, rather than to show relative values between curves, it is quite impossible to make vertical scales which would be intelligible to the average reader. Figures for the data lines in the charts will be found in accompanying statistical tables.

**TABLE 8**  
**TAXATION IN OAKLAND.**  
 (Based on Each \$100 of Assessed Valuation.)

(The following tax rates were paid by the entire city. For additional taxes in certain parts of the city, see note below.)

Purpose of Tax	1910-11	1911-12	1912-13	1913-14	1914-15	1915-16	1916-17	Increase in seven years
<b>School district and county taxes</b>								
Kindergarten Special .....						\$.03	\$.04	
Elementary Special .....	\$.24	\$.13	\$.13	\$.26	\$.50	.30	.30	25.0%*
Secondary Special .....	.20	.15	.15	.15	.31	.12	.19	5.0%*
County Elementary Sch'l .....	.30	.305	.30	.28	.28	.27	.27	10.0%*
County Secondary School .....						.14	.16	
County tax (other than school) .....	.86	.635	.58	.54	.56	.58	.59	31.3%*
<b>Total School District and County Tax Rates.....</b>	<b>1.60</b>	<b>1.22</b>	<b>1.16</b>	<b>1.23</b>	<b>1.65</b>	<b>1.44</b>	<b>1.55</b>	<b>3.1%*</b>
<b>Municipal Taxes.</b>								
For School Buildings.....					.025	.025	.025	
For School Bonds .....		.085	.0574	.1156	.1447	.1435	.1481	
For other purposes.....	1.08	1.515	1.4026	1.4344	1.5603	1.4215	1.4769	36.7%
<b>Total City Tax Rate..</b>	<b>1.08</b>	<b>1.60</b>	<b>1.46</b>	<b>1.55</b>	<b>1.73</b>	<b>1.59</b>	<b>1.65</b>	<b>52.7%</b>
<b>Summary.</b>								
For Schools .....	.74	.67	.6374	.8056	1.2597	1.0285	1.1331	52.8%
For other purposes.....	1.94	2.15	1.9826	1.9744	2.1203	2.0015	2.0669	6.5%
<b>Total Tax Rate.....</b>	<b>2.68</b>	<b>2.82</b>	<b>2.62</b>	<b>2.78</b>	<b>3.38</b>	<b>3.03</b>	<b>3.20</b>	<b>19.3%*</b>
<b>School taxes are what per cent of total .....</b>	<b>27.6%</b>	<b>23.7%</b>	<b>24.3%</b>	<b>28.9%</b>	<b>37.2%</b>	<b>33.9%</b>	<b>35.4%</b>	<b>28.2%</b>

\*Decrease.

NOTE—The above table includes only taxes levied for obligations subsequent to the annexation of 1909. It is neither a correct measure of the amount of revenue collected for the schools nor for other purposes since the schools receive considerable state aid and the city and county governments receive a great deal from fees, licenses, etc.

According to the Oakland School Survey the median percentage of all taxes which goes for school purposes in western cities generally is 37.4%.

The following table shows the additional taxes paid in various parts of the city for obligations prior to annexation:

YEAR.	Taxes for School District Bonds					
	Oakland	Fruitvale	Highland	Lockwood	Melrose	Fremont Union High
1910-11 .....	\$.08	\$.20	\$.32	\$.27	\$.20	\$.10
1916-17 .....	.05	.11	.14	.09	.09	.04

YEAR	Taxes for Municipal Bonds.				Taxes for Sanitary District Bonds.				
	Original City	Territory Annexed in			Fruitvale No. 2	Melrose No. 1	Melrose No. 2	Adeline	Golden Gate
		1891	1897	1909					
1910-11 .....	\$.30	\$.29	\$.26	...	\$.14	\$.15	\$.90	\$.08	\$.12
1916-17 .....	.24	.24	.24	...	...	.08	.60	...	...

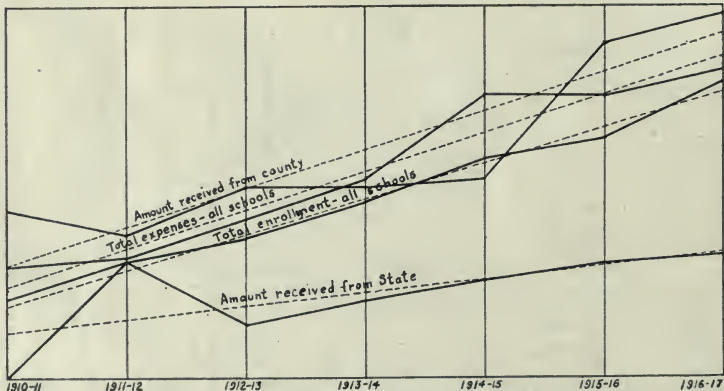
NOTE—With the exception of taxes for school district bonds, the only tax for schools in the above figures was a tax of \$.03 in 1910-11 for the old School Building Bonds of 1892. The tax was levied only in the original city and the annexation of 1891 and the last of these bonds was paid off in 1912.

**TABLE 9**  
**RECEIPTS OF STATE, COUNTY, AND SCHOOL DISTRICT FUNDS**  
 As Shown by Official Reports to the County Superintendent of Schools

YEAR.	From State Apportionment	From County Apportionment	From District Taxes	Miscellaneous.	Total Receipts.
<b>For Elementary Schools and Kindergartens.</b>					
1910-11 .....	\$ 235,438.67	\$ 346,631.15	\$ 276,799.46	\$ 2,861.99	\$ 861,731.27
1911-12 .....	322,561.47	322,664.45	143,475.00	328.90	789,029.82
1912-13 .....	266,535.63	372,315.93	162,890.90	462.94	802,205.40
1913-14 .....	288,053.45	366,418.26	340,311.58	19,072.60	1,013,855.89
1914-15 .....	304,151.01	370,472.04	656,372.06	12,215.74	1,343,210.85
1915-16 .....	314,052.50	375,626.05	462,015.90	1,451.78	1,153,146.23
1916-17 .....	314,052.50	378,762.77	470,179.44	2,444.92	1,165,439.63
Total .....	\$2,044,845.23	\$2,532,890.65	\$2,512,044.84	\$38,838.87	\$7,128,619.09
<b>For Secondary Schools.</b>					
1910-11 .....	\$ 17,501.48	.....	\$ 226,491.56	\$ 380.20	\$ 244,373.24
1911-12 .....	29,902.86	.....	168,698.99	403.75	199,005.60
1912-13 .....	26,134.25	\$ 1,378.22	190,540.71	1,562.61	219,615.79
1913-14 .....	25,603.36	6,597.83	197,861.08	343.75	230,406.02
1914-15 .....	28,776.39	9,876.52	407,002.24	5,568.94	451,224.09
1915-16 .....	36,188.07	185,656.36	173,496.49	766.10	396,107.02
1916-17 .....	43,890.73	229,724.37	262,732.25	168.90	536,516.25
Total .....	\$ 207,997.14	\$ 433,233.30	\$1,626,823.82	\$ 9,194.25	\$2,277,248.01
Total Receipts in 7 years....	\$2,252,842.37	\$2,966,123.95	\$4,188,867.66	\$48,033.12	\$9,405,867.10
Percent of total	23.9%	31.5%	44.0%	0.6%	100.0%
Percent of total in 1916-17....	21.0%	35.8%	43.1%	0.1%	100.0%

NOTE—Throughout the table, figures for 1916-17 are for eleven months only; more money is expected. The state and county aid, based on the attendance of the preceding year, amounted to the following for each day's attendance by a single pupil:

	1910-11	1911-12	1912-13	1913-14	1914-15	1915-16	1916-17
Elementary Schools	20.9c	22.5c	21.2c	20.3c	20.3c	19.3c	18.5c
Secondary Schools..	4.9c	7.2c	6.1c	7.2c	9.1c	38.5c	39.3c



**FIG. 4—INCREASE IN STATE AND COUNTY APPORTIONMENTS, COST OF CONDUCTING ALL SCHOOLS, AND TOTAL SCHOOL ENROLLMENT COMPARED**

Note that the steep slope of the curve representing county apportionments is due almost entirely to the receipts of the last two years when the new high school law went into effect. See note on logarithmic curves on page 8.



**TABLE 10**  
**EXPENDITURES FROM CITY AND OTHER FUNDS**

(These expenditures indicate the moneys, other than those in the preceding table which have been available for school purposes.)

	1910-11	1911-12	1912-13	1913-14	1914-15	1915-16	1916-17	Total in Seven Years
<b>Paid by City Treasurer—</b>								
Maintenance of Schools.....		2,660.00	2,871.25	3,324.65	3,361.01	2,954.85	2,560.00	\$ 17,731.76
Sites, Buildings, and Equipment.....			319.70	1,108.69	17,659.81	40,708.38	47,862.40	107,658.98
Miscellaneous Payments, mostly for interest and principal of city school bonds.....	22,754.50	104,643.56	99,069.62	87,320.47	190,972.77	208,406.20	156,885.01	870,053.13
<b>Paid by Co. Treasurer—</b>								
Interest and principal of school district bonds.....	108,610.00	105,230.00	103,215.00	100,400.00	98,075.00	96,187.50	94,045.00	705,762.50
<b>Summary—</b>								
Totals shown in this table.....	131,364.50	212,533.56	205,475.57	192,153.81	310,068.59	348,256.93	301,353.41	1,701,206.37
Totals shown in Table 9.....	1,106,104.51	988,035.42	1,021,821.19	1,244,261.91	1,794,434.94	1,549,253.25	1,701,955.88	9,405,867.10
<b>Total available funds for schools.....</b>	<b>\$1,237,469.01</b>	<b>\$1,200,568.98</b>	<b>\$1,227,296.76</b>	<b>\$1,436,415.71</b>	<b>\$2,104,503.53</b>	<b>\$1,897,510.18</b>	<b>\$2,003,309.29</b>	<b>\$11,107,073.47</b>

NOTE—Chabot Observatory, which is held and maintained in trust by the Board of Education, is not considered a part of the school system; hence expenditures for its improvement and maintenance are not included. Also the proceeds of bond sales are excluded.





**TABLE 12**  
**SUMMARY OF COST PER PUPIL**

Based on Average Daily Attendance and Current Expenses  
(See Tables 4 and 11)

Kind of School.	1910-11	1911-12	1912-13	1913-14	1914-15	1915-16	1916-17	Increase in Seven Yrs.
Kindergartens .....	\$40.48	36.84	36.02	47.52	31.24	33.04	46.98	16.1%
Day Elementary .....	45.87	43.99	47.14	47.82	56.26	51.78	51.66	12.6%
Evening Elementary .....	43.32	44.62	46.70	37.95	37.01	29.97	18.84	56.5%*
Day Secondary .....	79.44	81.93	91.07	93.03	104.21	98.87	106.93	34.6%
Evening Secondary .....	.....	.....	.....	.....	.....	23.90	19.27	.....
<b>All Schools .....</b>	<b>50.02</b>	<b>48.85</b>	<b>52.28</b>	<b>53.18</b>	<b>61.53</b>	<b>57.23</b>	<b>58.26</b>	<b>16.5%</b>

\*Decrease.

NOTE—Figures for 1916-17 are based on budget allowances for the year. They are approximately correct. Fluctuations in evening school per capita costs are due largely to varying methods of segregating expenses between day and evening schools.

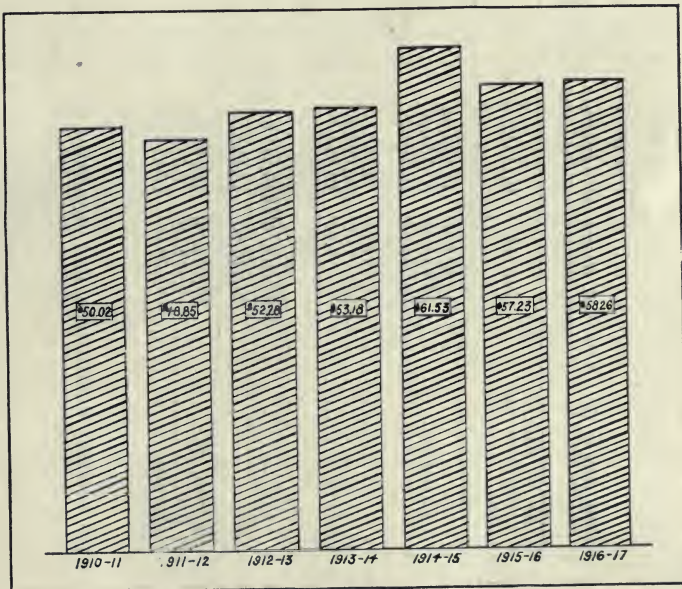


FIG. 5—SHOWING INCREASE IN TOTAL COST PER PUPIL IN ALL SCHOOLS.

By reference to Table 13 it will be seen that expenses vary somewhat with the cost of repairs and other charges of maintenance of plant.

**TABLE 13**  
**ANALYSIS OF IMPORTANT EXPENSE ITEMS**

The following are a few selected items of expenses which generally prove most interesting. For a complete summary, see Table 11. For completely itemized reports, see reports of U. S. Commissioner of Education.

Items Numbered As in Fiscal Schedule of U. S. Commissioner of Education	1910-11	1911-12	1912-13	1913-14	1914-15	1915-16	1916-17	Increase in Seven Years
7-8 Superintendent's Office.....	\$ 9,680.00	\$ 8,030.00	\$ 8,199.56	\$ 11,544.12	\$ 14,162.01	\$ 15,659.43	\$ 16,857.82	74.5%
1-6,9 Business Offices.....	13,304.00	14,836.00	18,516.13	22,907.43	27,303.79	20,460.25	25,324.00	90.3%
11-12 Supervisors of Instruction.....	32,490.00	27,960.00	21,828.35	28,150.45	33,162.96	29,109.13	25,590.89	24.3%*
13-14 Supervising Principals and Clerks..	70,560.00	75,360.00	73,329.88	77,925.39	88,217.55	91,103.24	106,249.83	50.6%
15 Teachers' Salaries—								
Kindergarten .....	3,360.00	3,390.00	7,313.75	17,108.15	22,433.25	32,939.65	32,773.75	875.4%
Day Elementary.....	457,278.00	474,125.00	507,099.52	555,297.26	671,124.10	685,599.99	705,382.70	54.3%
Evening Elementary.....	9,038.00	10,194.00	9,583.65	11,521.70	12,416.85	5,918.90	5,728.94	34.5%*
Day Secondary.....	118,019.00	135,501.00	151,909.35	171,661.20	218,173.50	261,305.55	279,176.37	136.6%
Evening Secondary.....						5,689.50	15,574.10	.....
Total Teachers' Salaries.....	\$587,695.00	\$625,211.00	\$677,506.27	\$767,490.81	\$926,147.70	\$991,543.59	\$1038,635.86	76.7%
20 Wages of Janitors.....	48,170.00	48,480.00	47,619.95	54,995.66	68,955.45	73,471.59	74,388.45	54.4%
21-25 Fuel, Power, Water, etc.....	24,239.00	23,229.00	22,958.07	28,849.64	36,159.33	40,505.23	57,111.98	135.6%
31 Repairs, Replacements, etc.....	39,566.00	28,925.00	70,924.24	75,733.89	132,661.91	51,075.17	92,608.62	134.1%
32-34 Libraries, Books, etc.....	7,672.00	8,546.00	9,142.21	12,049.82	15,038.16	12,252.89	11,668.34	45.5%
35-36 (a) Doctors and Nurses.....	8,603.00	12,458.00	13,014.35	12,379.26	15,798.30	15,573.43	12,379.45	43.8%
35-36 (b) School Playgrounds.....					10,184.31	9,039.11	10,089.00	.....

\* Decrease.

NOTE—Some of the extreme fluctuations, and especially the decreases shown are due largely to methods of segregating expenses in the accounting department. Figures for 1916-17 are based on budget allowances for the year.



**TABLE 14**  
**SUMMARY OF OUTSTANDING INDEBTEDNESS**

(For Details, See Financial Survey in Office of Superintendent of Schools)

Purpose of Issue	Total Amount Sold	Amount Payable Yearly	Taxes for 1916-17 Original City (On \$100 Valuation)	Amount Outstanding June 30, 1917
<b>Bonds for Schools—</b>				
School District Bonds....	\$1,577,000.00	\$ 48,500.00	\$.05	\$1,054,000.00
Municipal School Bonds....	2,703,900.00	79,821.26	.1481	2,298,613.12
Total for Schools.....	\$4,280,900.00	\$ 128,321.26	\$.1981	\$3,352,613.12
<b>Bonds for Other Purposes—</b>				
Sanitary District Bonds..	.....	3,050.00	.....	31,950.00
Municipal Bonds.....	7,249,500.00	175,888.74*	.51	5,858,650.38
Total for Other Purposes	.....	\$ 178,938.74	\$.51	\$5,890,600.38
<b>Total Bonds—</b>				
School District and Sanitary Districts.....	.....	51,550.00	.05	1,085,950.00
Municipal Bonds.....	9,953,400.00	255,710.00	.51	8,157,263.50
Grand Total.....	.....	\$ 307,260.00	\$.56	\$9,243,213.50

\* Average. The amount payable on some of these issues varies from year to year.

NOTE.—Of the \$4,280,900 worth of bonds originally sold for school purposes, \$3,417,900 was for elementary schools and \$863,000 for secondary schools. The bonds issued by the municipality for schools were payable by the whole city, but of the school district bonds sold, \$1,240,000 was payable by the city as it existed prior to 1909, and the remaining \$337,000 only by the districts annexed in 1909.

Nine issues of school district bonds were sold between 1898 and 1909, running for from 15 to 40 years, and bearing interest at from 4 to 6 per cent. Since 1911, three issues of municipal bonds, running from 30 to 40 years, and bearing interest at 4½ to 5 per cent, have been sold.

The total bonded indebtedness outstanding is 5.6% of the assessed valuation in the municipality and 0.8% of the valuation in the school and sanitary districts. The legal limit in either case is 15%. The present total indebtedness for the schools is 2.3% of the city assessed valuation or 36.3% of the total indebtedness for all purposes.

**TABLE 15**  
**ESTIMATED VALUE OF SITES AND BUILDINGS AND INSURANCE CARRIED**

Kind of Buildings.	Estimated Valuation (Buildings only)	Insurance carried on Buildings.	Insurance carried on Contents.	Total Insurance Carried.	Insurance on Bldg. is what Pct of Estimated Valuation.
Concrete Bldgs. . .	\$1,557,241	\$ 447,500	\$ 106,200	\$ 553,700	35.6%
Brick Bldgs. ....	1,646,430	373,500	44,700	418,200	25.4%
Frame Bldgs. ...	940,728	770,100	132,350	902,450	95.9%
Total .....	\$4,144,399	\$1,591,100	\$ 283,250	\$1,874,350	45.2%

NOTE.—The estimated value of all school sites is \$1,874,397.00. From July 1, 1902, to the present, \$41,450 has been received from insurance (an average of \$2,763.33 per year). Records of the amounts paid between 1902 and 1906 are not readily available, but since July 1, 1906, the sum of \$60,294.52, or \$5,481.32 per year, has been paid out for insurance.



TABLE 16  
THE COST OF SCHOOL BONDS

	1910-11	1911-12	1912-13	1913-14	1914-15	1915-16	1916-17	Total in 7 years
<b>Payments on Principal</b>								
School district bonds.....	\$ 51,000	\$ 48,500.00	\$ 48,500.00	\$ 48,500.00	\$ 48,500.00	\$ 48,500.00	\$ 48,500.00	\$ 342,000.00
Municipal bonds for schools .....	20,000	82,900.00	64,340.75	36,420.37	77,870.38	91,770.37	63,000.00	436,301.87
Total .....	\$ 71,000	\$131,400.00	\$112,840.75	\$ 84,920.37	\$126,370.38	\$140,270.37	\$111,500.00	\$ 778,301.87
<b>Interest Payments</b>								
School district bonds.....	\$ 57.610	\$ 56,730.00	\$ 54,715.00	\$ 51,900.00	\$ 49,575.00	\$ 47,687.50	\$ 45,545.00	\$ 363,762.50
Municipal bonds for schools .....	2,500	21,743.56	34,728.87	50,112.53	113,102.39	116,535.83	93,886.01	432,709.19
Total .....	\$ 60,110	\$ 78,473.56	\$ 89,443.87	\$102,012.53	\$162,677.39	\$164,323.33	\$139,431.01	\$ 796,471.69
Total Payments on Bonds.	\$131,110	\$209,873.56	\$202,284.62	\$186,932.90	\$289,047.77	\$304,593.70	\$250,931.01	\$1,574,773.56

NOTE.—Figures for 1916-17 are for payments to May 31, 1917, only.

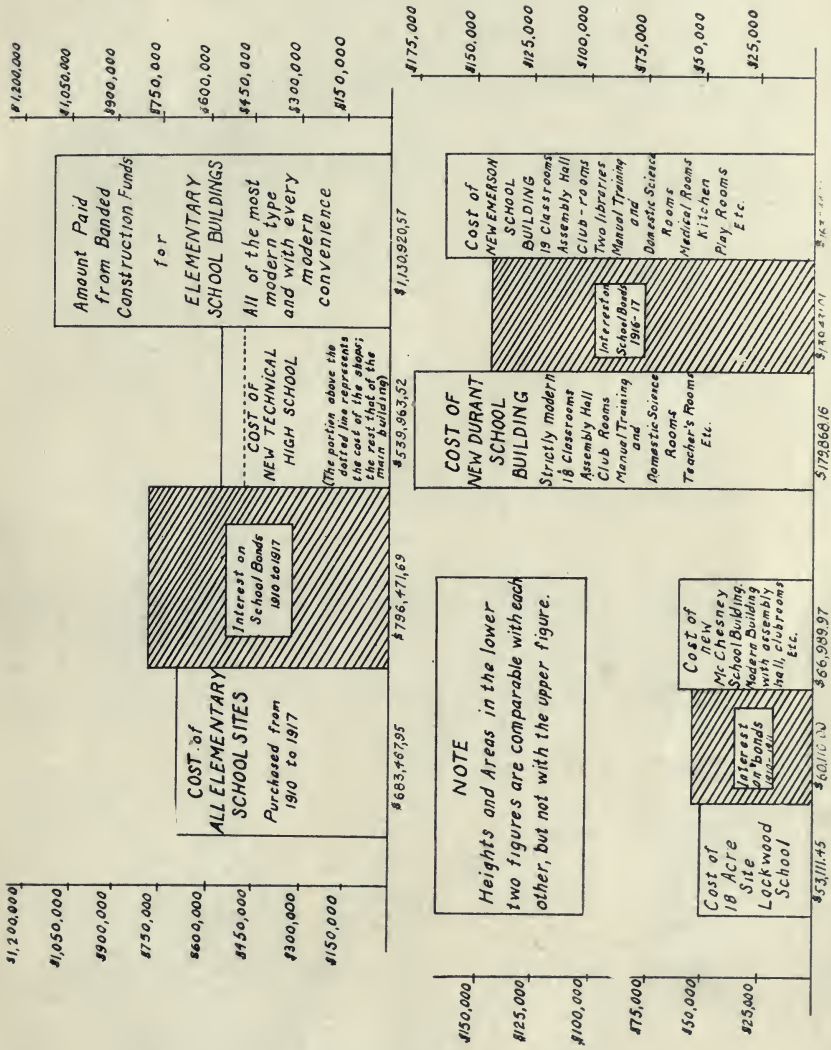


FIG. 6—SHOWING PURCHASING POWER OF MONEY SPENT FOR INTEREST ON SCHOOL BONDS QUERY: Who gets the benefit of interest on bonds?

TABLE 17  
HOW OAKLAND COMPARES WITH OTHER WESTERN CITIES

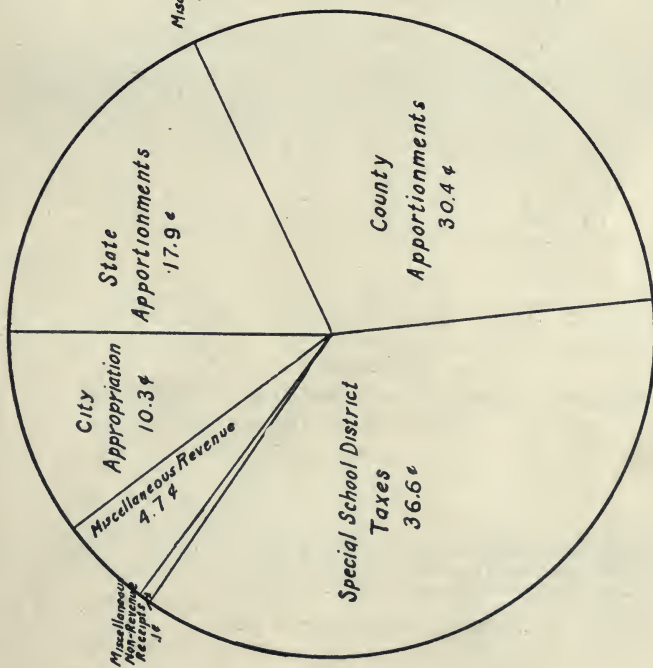
CITY	Per Cent of Total School Expenses for										Spent for each 1% of School Population	Per cent of School Age Population of	Tax Levy Per Capita	Per cent of Total Expenditure for Schools
	Business Offices	Superinten- dent's Office	Supervising Principals & Supervisors	Teachers' Salaries	Salaries of Santors	Repairs and Other Main- tenance	Secondary Schools	Teacher Pupils per	Cost per Pupil	Population of each School				
<b>California Cities.</b>														
Berkeley.....	1.2	1.1	7.2	73.6	5.3	3.9	28.0	26.4	\$63.81	\$ .543	14.7	14.60	53.1	
Los Angeles.....	3.7	1.0	9.3	70.0	4.6	5.1	59.5	22.1	76.95	.734	13.0	29.36	37.4	
Oakland.....	1.4	1.1	8.5	70.0	5.2	4.2	25.3	31.1	58.23	.504	14.1	20.93	33.4	
Pasadena.....	2.1	1.4	7.8	66.3	5.2	6.4	34.7	22.2	82.2	.882	13.6	17.63	56.1	
Sacramento.....	1.9	1.3	12.7	63.8	5.5	11.0	21.1	22.4	73.45	.667	12.1	17.72	42.4	
San Diego.....	2.3	1.2	11.8	59.2	5.6	11.1	36.0	26.4	65.07	.761	13.4	32.32	41.0	
San Francisco.....	1.7	1.0	10.3	75.6	6.7	No report	No report	34.7	45.08	.346	11.9	26.38	17.2	
San Jose.....	...	2.6	13.1	69.8	5.1	3.2	34.3	26.4	53.01	.518	13.8	11.50	48.4	
<b>Other Western Cities.....</b>														
Colorado Spr'gs.....	3.3	2.0	9.8	62.3	6.1	5.5	28.3	28.7	54.07	.468	16.0	14.78	49.6	
Denver.....	1.5	1.0	8.9	70.5	5.0	3.3	23.3	27.9	51.13	.375	15.2	15.58	31.3	
Portland.....	3.0	1.6	8.6	70.6	5.3	3.6	No report	26.4	53.79	.431	12.0	17.69	35.4	
Salt Lake City.....	2.5	1.4	10.4	63.8	6.6	7.6	18.3	29.4	45.45	.397	18.5	12.62	50.6	
Seattle.....	2.5	1.5	7.6	65.4	6.3	5.0	26.1	27.2	62.17	.460	12.5	23.30	30.1	
Spokane.....	1.7	1.2	8.7	65.8	6.6	3.4	27.2	29.1	54.77	.395	14.5	10.73	45.4	
Tacoma.....	2.7	2.3	9.2	64.9	6.1	3.2	26.2	28.4	52.42	.369	15.2	12.78	41.4	
<b>Medians.</b>														
California Cities.....	1.9	1.2	9.8	69.9	5.2	5.1	34.3	26.4	\$64.44	\$.605	13.5	\$21.28	41.7	
All West'n Cities.....	2.2	1.4	9.2	69.8	5.5	4.6	27.2	27.2	54.77	.468	13.8	17.69	41.4	
Oakland.....	1.4	1.1	8.5	70.0	5.2	4.2	25.3	31.1	58.23	.504	14.1	20.93	33.4	

NOTES. Col. 1 contains all western cities of over 30,000 inhabitants for which complete information is given in the 1916 report of the U. S. Bureau of Education, which gives data for 1914-15. Figures for Oakland are for 1915-16, the last complete figures available. Col. 9 is based on average daily attendance, and includes all teachers. Col. 11 shows the amount per capita of the total population which was spent for schools for each 1% of the population who are of school age.

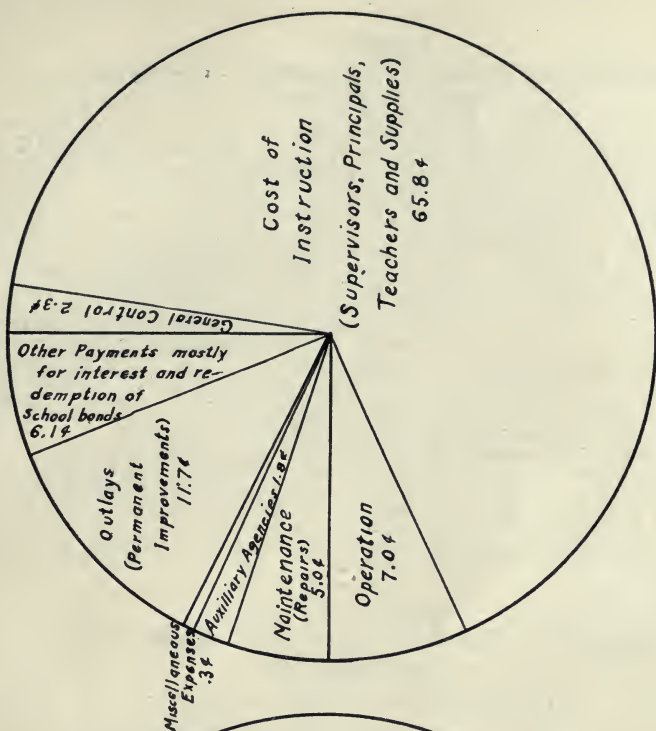
Col. 12 shows the U. S. Census Bureau's estimate of the percentage of the population who are of school age. To find what any city should have spent for its schools in proportion to its child population to meet the standard set by the median city, multiply the estimated total population by the per cent of the population who are of school age and that product by the median, shown in Col. 11. For example, in comparison with the median of California cities, Oakland should have spent 198,602x 14.1x\$.605 or \$1,694,174.36 instead of \$1,413,970, or, to meet San Francisco's standard, she should have spent only 198,602x14.1x\$.346 or \$968,899.72.

Col. 13 is the average amount of taxes for all purposes paid by each inhabitant as shown by the figures of the U. S. Census Bureau. Col. 14 shows the ratio between the total cost of schools as shown by the U. S. Commissioner of Education and the total cost of city government as shown by the U. S. Census Bureau in its "Financial Statistics of Cities."

Undoubtedly there are some errors in the distribution of expenses in some cities or even in the totals themselves, but the U. S. Census Reports represent the most accurate available statistics in print.



WHERE EACH DOLLAR CAME FROM.



WHERE EACH DOLLAR WENT.

FIG. 7—SHOWING SOURCES OF RECEIPTS AND PURPOSES OF DISBURSEMENTS IN 1916-17.

The above diagrams take no account of money spent from the proceeds of bond sales.



**TABLE 18**  
**SUMMARY OF ELEMENTARY SCHOOL PROMOTIONS**  
**FALL TERM, 1916**

(For Pupils Enrolled Dec. 15, 1916)

Promoted during term	Attending during the term not over						Pct. of Grand Total
	1 mo.	2 mo.	3 mo.	4 mo.	5 mo.	Total	
Not at all .....	65	82	101	123	2,028	2,399	11.1%
Only once .....	98	154	159	272	17,779*	18,452	85.4%
Twice .....	18	43	20	31	620	732	3.4%
Three or more times .....	1	..	..	1	18	20	0.1%
Totals .....	182	279	280	427	20,445	21,613	.....
Pct. of Grand Total .....	0.8%	1.3%	1.3%	2.0%	94.6%	.....	100%

Graduates (8th grade) for the term—Boys, 380; Girls, 448.

\* These pupils are normal, both in attendance and promotions.

The above table is read as follows: Of the 21,613 pupils reported, 17,779 were normal, both in attendance and in promotions. A total of 20,445 or 94.6% of the pupils of the city attended substantially all term, but only 19,214 pupils or 88.9% received one or more promotions; 2,399 pupils, or 11.1%, were not promoted at all, and 46 pupils, or 2.1%, attended school less than half of the term.

**TABLE 19**  
**SUMMARY OF ELEMENTARY SCHOOL PROMOTIONS**  
**SPRING TERM, 1917**

(For Pupils Enrolled June 1, 1917)

Promoted during term	Attending during the term not over						Pct. of Grand Total
	1 mo.	2 mo.	3 mo.	4 mo.	5 mo.	Total	
Not at all .....	50	74	121	144	1,497	1,886	8.9%
Only once .....	47	155	226	729	17,207*	18,374	87.2%
Twice .....	2	7	40	40	714	803	3.8%
Three or more times .....	1	1	..	..	20	22	0.1%
Totals .....	100	247	387	913	19,438	21,085	.....
Pct. of Grand Total .....	0.5%	1.2%	1.8%	4.3%	92.2%	.....	100%

Graduates (8th grade) for the term—Boys, 428; Girls, 485.

\* These pupils are normal, both in attendance and promotions.

**TABLE 20**  
**SUMMARY OF ELEMENTARY SCHOOL PROMOTIONS IN**  
**PREVIOUS YEARS**

Report for Year Ending in June

	1915	1916	1917
Per cent of pupils attending substantially all year..	78.0%	79.4%	92.2%
Per cent of pupils promoted two or more times.....	66.9%	73.6%	91.1%
Per cent of pupils who are normal, both in attendance and promotion .....	55.4%	61.8%	81.6%
Per cent of pupils who failed at least once in two terms .....	33.1%	26.4%	20.0%

**TABLE 21**  
**SUMMARY OF WORK DONE IN HIGH SCHOOLS, FALL TERM, 1916**

School.	Number of Pupils completing not over the following number of units.							
	½	1	1½	2	2½	3	3½	Total
Fremont .....	36	76	181	468	182	24	..	967
Oakland .....	22	82	137	360	97	7	..	705
Technical .....	85	152	351	984	234	29	3	1838
University .....	7	15	28	140	39	2	1	232
Vocational .....	..	30	6	15	77	4	..	132
<b>Totals .....</b>	<b>150</b>	<b>355</b>	<b>703</b>	<b>1967</b>	<b>629</b>	<b>66</b>	<b>4</b>	<b>3874</b>

NOTE—Two units is a normal term's work.

**TABLE 22**  
**SUMMARY OF WORK DONE IN HIGH SCHOOLS, SPRING TERM, 1917**

School.	Number of Pupils completing not over the following number of units.							
	½	1	1½	2	2½	3	3½	Total
Fremont .....	65	118	165	394	178	31	1	952
Oakland .....	22	62	143	380	115	3	..	725
Technical .....	88	117	349	897	285	19	4	1759
University .....	11	17	37	133	75	7	..	280
Vocational .....	6	28	1	4	25	61	24	149
<b>Totals .....</b>	<b>192</b>	<b>342</b>	<b>695</b>	<b>1808</b>	<b>678</b>	<b>121</b>	<b>29</b>	<b>3865</b>

NOTE—Two units is a normal term's work.

**TABLE 23**  
**SUMMARY OF SPECIAL PROMOTIONS AND DE-MOTIONS IN ELEMENTARY SCHOOLS, 1916-17**

(Showing promotions or de-motions made independent of class promotions)

	1st Mo.	2nd Mo.	3rd Mo.	4th Mo.	5th Mo.	6th Mo.	7th Mo.	8th Mo.	9th Mo.	10th Mo.	Total
Special promotions.....	137	175	226	239	112	120	240	299	315	116	1979
De-motions .....	20	69	38	10	3	22	75	33	14	1	285

TABLE 24

## SUMMARY OF NON-PROMOTION STATISTICS, FALL TERM, 1916

	GRADES									
	1A	1B	2A	2B	3A	3B	4A	4B	5A	5B
Total not promoted.....	494	190	149	129	168	131	147	102	144	111
Percent not promoted.....	23.2	14.5	8.7	10.1	10.4	8.9	10.0	7.8	9.2	9.2
Per cent of those not promoted who attended all term .....	77.5	85.8	86.6	89.1	85.1	88.5	81.0	78.4	80.5	86.5

	GRADES							
	6A	6B	7A	7B	8A	8B	Ungr.	Total
Total not promoted.....	110	97	173	76	78	46	54	2399
Percent not promoted.....	8.5	8.9	14.2	7.7	8.1	5.2	22.0	11.1%
Percent of those not promoted who attended all term .....	89.1	86.6	89.0	89.5	92.2	87.0	96.3	84.5%

The non-promotion study which was made, also revealed the facts that 9% of the non-promoted pupils in the first grade were already over-age, 28% of the second grade, 33% of the third grade, 48% of the fourth grade, 54% of the fifth grade, 57% of the sixth grade, 59% of the seventh grade, 54% of the eighth grade.

According to the opinions of the teachers 17.3% of the pupils failed because of irregular attendance, 7.8% because of ill-health in school, 53.0% because of dullness, immaturity, etc., 7.2% because of wrong attitude, 11.8% because of late entrance, bad home conditions, etc., and 2.9% because of crowded classes, etc., for which the school is responsible. The investigator merely asks the question, how non-promotion will cure evils over which the school has no control.

Reading, mathematics, composition, spelling, and geography are the subjects most commonly blamed for the child's failure.

The per cent of non-promoted pupils in individual schools varies from 2.6% to 61.0%.

In the high schools, 31.2% of all pupils completed less than a normal term's work. This percentage ranges from 40.5% in the 9-A grade to 15.8% in the 12-B grade.

TABLE 25

## SUMMARY OF SEVEN YEAR INCREASES

ITEM—	Percent of Increase	ITEM—	Percent of Increase
Bank clearings .....	42.2	Assessed valuation (county)...	17.9
Post office receipts.....	49.3	Estimated population .....	29.3
Water service connections.....	27.8	Total tax rate for—	
Enrollment in—		Schools .....	52.8
Kindergartens .....	1090.7	Other purposes.....	6.5
Elementary schools (day)...	43.3	Total rate .....	19.3
Elementary schools (evening) 104.9		Ordinary (maintenance) ex-	
Secondary schools (day).....	113.6	penses of—	
All schools .....	86.4	Police department .....	74.3
Average daily attendance in—		Fire department .....	92.4
Kindergartens .....	1,272.2	Street department .....	3.1
Elementary schools (day)...	36.2	Parks and boulevards.....	5.4
Elementary schools (evening) 24.1		Playgrounds .....	573.6
Secondary schools (day).....	79.4	All municipal departments..	70.3
All schools .....	52.0	School department .....	77.1
Number of class teachers employed—		Cost per pupil in—	
Kindergartens .....	900.0	Kindergartens .....	16.1
Elementary schools (day)...	51.0	Elementary schools (day)...	12.6
Elementary schools (evening) 6.6		Secondary schools (day).....	34.6
Secondary schools (day).....	117.2	School expenses for—	
All schools .....	73.2	Superintendent's office.....	74.5
Assessed valuation (city)—		Business offices.....	90.3
Original city .....	2.2	Principals' salaries.....	50.6
Annexations of 1891 and 1897 35.8		Teachers' salaries.....	76.7
Annexation of 1909.....	52.1	Janitors' salaries.....	54.4
Entire city .....	13.5	Fuel, power, etc.....	135.6
		Repairs, etc. ....	134.1

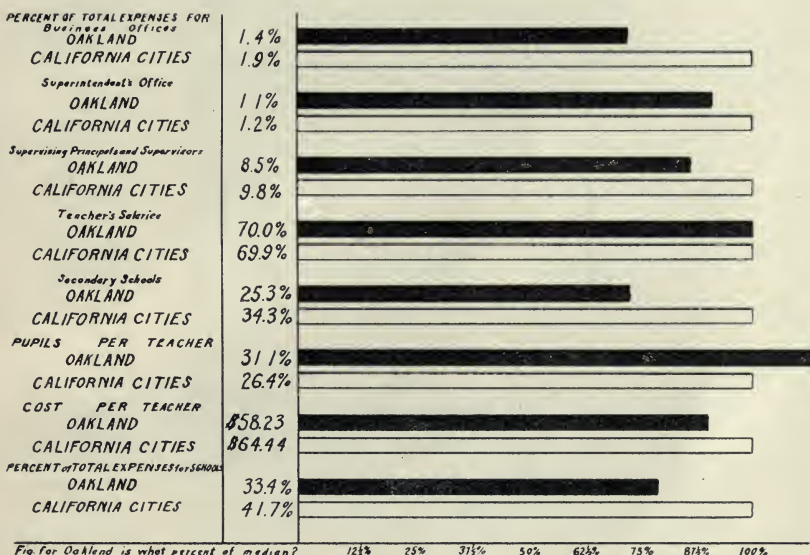


FIG. 8 — SOME SIGNIFICANT COMPARISONS WITH OTHER CALIFORNIA CITIES (See Table 17.)

NOTE—The median of other cities is taken as the basis of comparison. The diagram shows how far Oakland falls below this central tendency in each different case.



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ENQUIRER PUB. CO.



424-430 TENTH ST.

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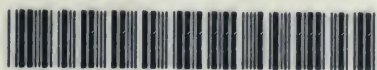






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