

Special Education TK-12 Occupations Labor Market Information Report

Prepared by the San Francisco Bay Center of Excellence for Labor Market Research March 2018

Recommendation

Based on all available data, there appears to be an undersupply of Special Education TK-12 workers for the Bay region. With annual openings of 831 and annual supply of 80 awards on TOP 1305.20 - Children with Special Needs, there is an undersupply of about 750 students. In the Mid-Peninsula sub-region, there is also a labor market gap for these occupations with 151 annual openings and annual supply of 24 awards, resulting in an annual undersupply in the sub-region of 127 students.

This report also provides student outcomes data on employment and earnings for Children with Special Needs programs (TOP 1305.20). It is recommended that this data be reviewed to better understand how student outcomes for City College of San Francisco (CCSF) compare to potentially similar programs at colleges in the state, region and sub-region, as well as to outcomes across all CTE programs at CCSF and in the region.

Introduction

This report profiles Special Education TK-12 occupations in the 12 county Bay region and the Mid-Peninsula sub-region (San Francisco and San Mateo counties) for a proposed new Certificate of Achievement in Special Education TK-12 at CCSF. All of the occupations selected appear to require a Bachelor's degree for entry. CCSF's program prepares students to enter four year colleges that offer teaching credentials for this cluster of occupations. In addition, from the online job postings for these occupations in the Bay region, only 58% of postings over the latest 12-month period had Bachelor's level or higher as the minimum level of education advertised. So, perhaps there will be opportunities for students upon exiting with this Certificate to gain employment in the occupations selected, without a Bachelor's degree.

• **Special Education Teachers, Preschool (25-2051):** Teach preschool school subjects to educationally and physically handicapped students. Includes teachers who specialize and work with audibly and visually handicapped students and those who teach basic academic and life processes skills to the mentally impaired.

Entry-Level Educational Requirement: Bachelor's Degree

Training Requirement: None

Percentage of Community College Award Holders or Some Postsecondary Coursework: 11%

Special Education Teachers, Kindergarten and Elementary School (25-2052): Teach elementary school subjects
to educationally and physically handicapped students. Includes teachers who specialize and work with audibly
and visually handicapped students and those who teach basic academic and life processes skills to the mentally
impaired.

Entry-Level Educational Requirement: Bachelor's Degree

Training Requirement: None

Percentage of Community College Award Holders or Some Postsecondary Coursework: 11%

Special Education Teachers, Middle School (25-2053): Teach middle school subjects to educationally and
physically handicapped students. Includes teachers who specialize and work with audibly and visually
handicapped students and those who teach basic academic and life processes skills to the mentally impaired.

Entry-Level Educational Requirement: Bachelor's Degree

Training Requirement: None

Percentage of Community College Award Holders or Some Postsecondary Coursework: 11%

Special Education Teachers, Secondary School (25-2054): Teach secondary school subjects to educationally
and physically handicapped students. Includes teachers who specialize and work with audibly and visually
handicapped students and those who teach basic academic and life processes skills to the mentally impaired.

Entry-Level Educational Requirement: Bachelor's Degree

Training Requirement: None

Percentage of Community College Award Holders or Some Postsecondary Coursework: 11%

• Special Education Teachers, All Other (25-2059): All special education teachers not listed separately. Perform work involved in developing and processing photographic images from film or digital media. May perform precision tasks such as editing photographic negatives and prints.

Entry-Level Educational Requirement: Bachelor's Degree

Training Requirement: None

Percentage of Community College Award Holders or Some Postsecondary Coursework: 11%

Occupational Demand

Table 1. Employment Outlook for Special Education TK-12 Occupations in Bay Region

Occupation	201 <i>7</i> Jobs	2022 Jobs	5-Yr Change	5-Yr % Change	5-year Open- ings	Annual Open- ings	10% Hrly Wage	Median Hrly Wage
Special Education Teachers, Preschool	421	518	97	23%	261	52	\$16.27	\$26.25
Special Education Teachers, Kindergarten and Elementary School	3,823	4,210	387	10%	1,787	357	\$21.65	\$33.03
Special Education Teachers, Middle School	1,555	1,719	164	11%	735	147	\$23.48	\$32.54
Special Education Teachers, Secondary School	1,826	2,069	243	13%	921	184	\$24.32	\$38.33
Special Education Teachers, All Other	920	1,032	112	12%	453	91	\$13.73	\$27.14
Total	8,546	9,547	1,002	12%	4,157	831	\$21.44	\$33.11

Source: EMSI 2018.1

Bay Region includes Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

Table 2. Employment Outlook for Special Education TK-12 Occupations in Mid-Peninsula Sub-Region

Occupation	201 <i>7</i> Jobs	2022 Jobs	5-Yr Change	5-Yr % Change	5-year Open- ings	Annual Open- ings	10% Hrly Wage	Median Hrly Wage
Special Education Teachers, Preschool	41	57	16	40%	33	7	\$13.05	\$23.93
Special Education Teachers, Kindergarten and Elementary School	630	706	76	12%	309	62	\$20.39	\$29.53
Special Education Teachers, Middle School	186	214	28	15%	98	20	\$25.11	\$36.01
Special Education Teachers, Secondary School	314	362	49	16%	166	33	\$22.65	\$35.30
Special Education Teachers, All Other	321	353	32	10%	150	30	\$12.66	\$15.08
Total	1,491	1,692	201	13%	757	151	\$19.59	\$28.29

Source: EMSI 2018.1

Mid-Peninsula Sub-Region includes San Francisco and San Mateo Counties

Job Postings in Bay Region and Mid-Peninsula Sub-Region

Table 3. Number of Job Postings by Occupation for latest 12 months (March 2017 - February 2018)

Occupation	Bay Region	Mid-Peninsula
Special Education Teachers, Kindergarten and Elementary School (25-2052.00)	886	91

Special Education Teachers, All Other (25-2059.00)	663	108
Special Education Teachers, Middle School (25-2053.00)	294	<i>7</i> 6
Special Education Teachers, Preschool (25-2051.00)	197	1 <i>7</i>
Special Education Teachers, Secondary School (25-2054.00)	106	26
Adapted Physical Education Specialists (25-2059.01)	31	13
Total	2,117	331

Source: Burning Glass

Table 4. Top Job Titles for Special Education TK-12 Occupations for latest 12 months (March 2017 - February 2018)

Common Title	Bay	Mid- Peninsula	Common Title	Bay	Mid- Peninsula
Special Education Teacher	530	84	Intervention Specialist	9	1
Paraeducator	246	11	Adaptive Physical Education Specialist	8	2
Early Interventionist	25	5	Coordinator Of Special Programs	8	0
Behavior Interventionist	20	0	Elementary Teacher	8	1
Early Intervention Specialist	14	0	Physical Education	8	1
Classroom Therapist	11	0	Teacher Of The Visually Impaired	8	0
Disability - All	10	4	Facilitator	7	1
Position Opening At Usajobs.Gov	10	3	Special Education	7	2

Source: Burning Glass

Industry Concentration

Table 5. Industries hiring Special Education TK-12 Teachers in Bay Region

Industry – 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2017)	Jobs in Industry (2022)	% Change (2017-22)	% in Industry (2017)
Elementary and Secondary Schools (Local Government) (903611)	6,330	6,999	11%	74.1%
Elementary and Secondary Schools (611110)	976	1,112	14%	11.4%
Services for the Elderly and Persons with Disabilities (624120)	<i>7</i> 81	937	20%	9.1%

Source: EMSI 2018.1

Table 6. Top Employers Posting Jobs in Bay Region and Mid-Peninsula for latest 12 months (March 2017 - February 2018)

Employer	Bay	Employer	Bay	Employer	Mid- Peninsula
Fremont Unified School District	184	Pleasanton Unified School District	32	Coe Corporation	21
San Ramon Valley Unified School District	114	New Haven Unified	31	Cabrillo Unified School District	12
Oakland Unified School District	77	Mt Diablo Unified	29	South San Francisco Unified	12
Fairfield Suisun Unified	68	San Jose Unified School District	28	San Mateo Foster City School District	9
Pajaro Valley Unified School District	60	San Lorenzo Unified	26	Las Lomitas Elementary	7
The Stepping Stones Group	46	Santa Clara Unified School District	26	Redwood City School District	7
Alameda Unified School District	41	Education For Change	25	Sequoia Union High School District	7
Spectrum Center	39	Seneca Center	25	San Francisco	6
Cupertino Union School District	37	Monterey County Office Of Education	22	The Stepping Stones Group	6

Source: Burning Glass

Educational Supply

On the supply side, there are seven community colleges issuing 33 awards annually on TOP 1305.20 - Children with Special Needs and five other postsecondary institutions issuing 47 Bachelor's degrees or post baccalaureate certificates annually, for a total of 80 annual awards in the region. Bachelor's or Post baccalaureate programs are listed under CIP 13.1001 Special Education and Teaching, General or under CIP 13.1011 Education/Teaching of Individuals with Specific Learning Disabilities or under CIP 13.1015 Education/Teaching of Individuals in Early Childhood Special Education Programs. CCSF is the only community college in the Mid-Peninsula sub-region issuing awards; with an average of 16 awards issued annually.

Table 7. Special Education Programs in Bay Region on TOP 1305.20 - Children with Special Needs or CIP 13.1001 -Special Education and Teaching, General or CIP 13.1011 - Education/Teaching of Individuals with Specific Learning Disabilities or CIP 13.1015 - Education/Teaching of Individuals in Early Childhood Special Education Programs

College	Sub-region	CC Head- count	No. of Transfer Students	Associate or Bachelor's Degrees	Certificates (Postbac included)	Total Awards
Canada	Mid-Peninsula	34	<10	0	0	0
Chabot	East Bay	61	<10	3	1	4
De Anza	Silicon Valley	110	<10	0	5	5
Diablo Valley	East Bay	28	<10	0	0	0
Gavilan	Silicon Valley	on another TOP	0	0	1	1
Las Positas	East Bay	on another TOP	0	1	1	2
Marin	North Bay	19	<10	0	0	0
Merritt	East Bay	26	<10	0	0	0
Mission	Silicon Valley	24	<10	0	1	1
Monterey	SC-Monterey	15	<10	0	0	0
San Francisco	Mid-Peninsula	483	35	0	16	16
San Jose	Silicon Valley	34	<10	0	0	0
Santa Rosa	North Bay	33	<10	0	0	0
Skyline	Mid-Peninsula	102	<10	0	0	0
West Valley	Silicon Valley	13	<10	0	4	4
Dominican University of California	North Bay	n/a	n/a	1	0	1
Holy Names University	East Bay	n/a	n/a	0	14	14
Saint Mary's College of California	East Bay	n/a	n/a	0	16	16
San Francisco State University	Mid-Peninsula	n/a	n/a	0	8	8
Mills College	East Bay	n/a	n/a	0	8	8
Total Bay region		995	64	5	75	80
Total Mid-Peninsula		622	42	0	24	24

Source: IPEDS, Data Mart and Launchboard

NOTE: Headcount of students who took one or more courses is for 2016-17. Associate degrees and Certificates for Community Colleges is the annual average for 2014-17. Number of transfer students is for 2015-16. The annual average certificates for Other Postsecondary Educational Institutes is for 2013-16.

Gap Analysis

There is a large labor market gap in the Bay region for these occupations with annual openings of 831 and annual supply of 80 awards on TOP 1305.20 - Children with Special Needs. This represents an undersupply of about 750 students. In the Mid-Peninsula sub-region, there is also a labor market gap for these occupations with 151 annual openings and annual supply of 24 awards. Therefore, there is an annual undersupply in the sub-region of 127 students.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 1305.20 – Children with Special Needs

2015-16	Bay Region (All CTE Programs)	CCSF (All CTE Programs)	State (1305.20)	Bay Region (1305.20)	Mid- Peninsula (1305.20)	CCSF (1305.00)	Colle (1305.20	Performing ege in Bay) Children with ial Needs
% Employed Four Quarters After Exit	74%	72%	72%	72%	70%	69%	Merritt	100% (11 students)
Median Earnings Two Quarters After Exit	\$10,310	\$10,710	\$6,500	\$7,960	\$8,010	\$8,230	De Anza	\$9,000 (11 students)
Median % Change in Earnings	46%	46%	56%	37%	29%	29%	Merritt	123% (11 students)
% of Students Earning a Living Wage	63%	55%	41%	53%	46%	46%	De Anza	64% (11 students)

Source: Launchboard (version available 3/14/18)

Skills, Certifications & Minimum Advertised Education Level

Table 9. Top Skills for Special Education TK-12 Occupations in the Bay Region (March 2017 - February 2018)

Skill	Postings	Skill	Postings	Skill	Postings
Teaching	576	Therapy	72	Budgeting	40
Special Education	564	Instruction	69	Data Collection	40
Autism Diagnosis/Treatment	148	Severe Disability	56	Educational Materials	37
Scheduling	111	Child Development	53	Inspection	37
Lesson Planning	105	Maintaining Student Records	53	Toileting	34
Educational Programs	89	Staff Management	52	Policy Implementation	33
Supervisory Skills	89	Psychology	50	Crisis Intervention	32
Cardiopulmonary Resuscitation (CPR)	82	Microsoft Excel	45	Curriculum Development	32
Mental Health	77	Record Keeping	41	Learning Styles	31
Case Management	72	Treatment Planning	41	Proofreading	31

Source: Burning Glass

Table 10. Top Certifications for Special Education TK-12 Occupations in the Bay Region (March 2017 - February 2018)

Note: 87% of records have been excluded because they do not include a certification. As a result, the chart below may not be representative of the full sample.

Certification	Postings	Certification	Postings
First Aid CPR AED	98	Administrative Services Credential	13
Cross-Cultural Language And Academic Development	46	Security Clearance	7
Special Education Certification	46	Certified Teacher	6
Teaching License	27	Certified Testing Expert Level	6

Source: Burning Glass

Table 11. Education Requirements in Bay Region

Note: 53% of records have been excluded because they do not include a degree level. As a result, the chart below may not be representative of the full sample.

Education (minimum advertised)	Latest 12 Mos. Postings
High school or vocational training	343 (33%)
Associate Degree	89 (9%)
Bachelor's Degree or higher	602 (58%)

Source: Burning Glass

Methodology

Occupations for this report were identified by use of skills listed in O*Net descriptions and job descriptions in Burning Glass. Labor demand data is sourced from Economic Modeling Specialists International (EMSI) occupation data and Burning Glass job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CTE Launchboard and CCCCO Data Mart.

Sources

O*Net Online

Labor Insight/Jobs (Burning Glass)

Economic Modeling Specialists International (EMSI)

CTE LaunchBoard www.calpassplus.org/Launchboard/

Statewide CTE Outcomes Survey

Employment Development Department Unemployment Insurance Dataset

Living Insight Center for Community Economic Development

Chancellor's Office MIS system

Contacts

For more information, please contact:

- Karen Beltramo, Data Research Analyst, for Bay Area Community College Consortium (BACCC) and Centers of Excellence (CoE), karen@baccc.net or (831) 332-1253
- John Carrese, Director, San Francisco Bay Center of Excellence for Labor Market Research (hosted at City College of San Francisco), <u>jcarrese@ccsf.edu</u> or (415) 452-5529