



Labor Market Analysis for Program Recommendation Early Care and Education (ECE) Occupations Diablo Valley College

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

Based on all available data, there appears to be an “undersupply” of Early Care and Education (ECE) workers compared to the demand for this cluster of occupations in the Bay region and in the East Bay sub-region (Alameda, Contra Costa counties). There is a projected annual gap of about 4,280 students in the Bay region and 1,436 students in the East Bay Sub-Region.

Introduction

This report provides student outcomes data on employment and earnings for TOP 1305.90 Infants and Toddlers programs in the state and region. It is recommended that these data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at colleges in the state and region, as well as to outcomes across all CTE programs at Diablo Valley College and in the region.

This report profiles Early Care and Education (ECE) Occupations in the 12 county Bay region and in the East Bay sub-region for a proposed new ECE Practitioner program at Diablo Valley College.

- **Education and Childcare Administrators, Preschool and Daycare (11-9031):** Plan, direct, or coordinate the academic and nonacademic activities of preschool and childcare centers or programs. Excludes “Preschool Teachers” (25-2011).
Entry-Level Educational Requirement: Bachelor’s degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 12%
- **Preschool Teachers, Except Special Education (25-2011):** Instruct preschool-aged children in activities designed to promote social, physical, and intellectual growth needed for primary school in preschool, day care center, or other child development facility. Substitute teachers are included in “Teachers and Instructors, All Other” (25-3099). May be required to hold State certification. Excludes “Childcare Workers” (39-9011) and “Special Education Teachers” (25-2050).
Entry-Level Educational Requirement: Associate’s degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 38%
- **Teaching Assistants, Except Postsecondary (25-9045):** Perform duties that are instructional in nature or deliver direct services to students or parents. Serve in a position for which a teacher has ultimate responsibility for the design and implementation of educational programs and services. Excludes “Graduate Teaching Assistants” (25-1191).
Entry-Level Educational Requirement: Some college, no degree

Training Requirement: None

Percentage of Community College Award Holders or Some Postsecondary Coursework: 39%

Occupational Demand

Table 1. Employment Outlook for ECE Occupations in Bay Region

Occupation	2020 Jobs	2025 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Education and Childcare Administrators, Preschool and Daycare	2,256	2,234	-22	-1.0%	853	171	\$21	\$27
Preschool Teachers, Except Special Education	16,141	16,564	423	3.0%	8,738	1,748	\$16	\$19
Teaching Assistants, Except Postsecondary	30,099	30,377	277	1.0%	14,353	2,871	\$15	\$18
Total	48,497	49,176	679	1%	23,944	4,790		

Source: EMSI 2021.4

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 ECE Occupations in East Bay Sub-region

Occupation	2020 Jobs	2025 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Education and Childcare Administrators, Preschool and Daycare	658	647	-10	-2.0%	235	47	\$21	\$27
Preschool Teachers, Except Special Education	4,942	5,015	72	1.0%	2,556	511	\$15	\$18
Teaching Assistants, Except Postsecondary	9,917	10,013	96	1.0%	4,656	931	\$14	\$17
Total	15,517	15,675	158	1%	7,447	1,489		

Source: EMSI 2021.4

East Bay Sub-Region includes: Alameda, Contra Costa Counties

Job Postings in Bay Region and East Bay Sub-Region

Table 3. Number of Job Postings by Occupation for latest 12 months (May 2021 - Apr 2022)

Occupation	Bay Region	East Bay
Preschool Teachers, Except Special Education	7,656	2,662
Teacher Assistants	4,821	1,967
Education Administrators, Preschool and Childcare Center/Program	689	218

Source: Burning Glass

Table 4a. Top Job Titles for ECE Occupations for latest 12 months (May 2021 - Apr 2022) - Bay Region

Title	Bay	Title	Bay
Pre-School Teacher	1,372	Toddler Teacher	121
Assistant Teacher	278	Child Care Teacher	111
Infant/Toddler Teacher	199	Paraeducator	96
After-School Teacher	161	Teacher Assistant	96
Paraprofessional/Educator	159	Special Education Paraprofessional	95
Teacher At Kindercare	150	Pre-School Teacher Assistant	94
Paraprofessional	133	Infant Teacher	86
Teacher	126	Associate Teacher	74
Instructional Assistant	125	Pre-Kindergarten Teacher	73

Source: Burning Glass

Table 4b. Top Job Titles for ECE Occupations for latest 12 months (May 2021 - Apr 2022) - East Bay Sub-Region

Title	East Bay	Title	East Bay
Pre-School Teacher	549	Teacher	42
Assistant Teacher	131	Toddler Teacher	42
Infant/Toddler Teacher	88	Child Care Teacher	40
Teacher At Kindercare	73	Special Education Paraprofessional	38
Paraprofessional/Educator	70	Pre-School Teacher Assistant	37
After-School Teacher	66	Paraeducator	36
Paraprofessional	58	Montessori Pre-School Teacher	33
Teacher Assistant	47	Teacher For Pre-School	33
Instructional Assistant	44	Pre-School Director	31

Source: Burning Glass

Industry Concentration

Table 5. Industries hiring ECE Workers in Bay Region

Industry - 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2020)	Jobs in Industry (2025)	% Change (2020-25)	% Occupation Group in Industry (2020)
Elementary and Secondary Schools (Local Government)	20,508	19,194	-6%	41%
Child Day Care Services	13,231	12,640	-4%	27%
Elementary and Secondary Schools	5,920	6,202	5%	12%
Religious Organizations	2,284	2,227	-2%	5%

Industry - 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2020)	Jobs in Industry (2025)	% Change (2020-25)	% Occupation Group in Industry (2020)
Local Government, Excluding Education and Hospitals	973	972	0%	2%
Other Individual and Family Services	672	839	25%	1%
Services for the Elderly and Persons with Disabilities	535	625	17%	1%
Colleges, Universities, and Professional Schools (Local Government)	536	533	0%	1%
Colleges, Universities, and Professional Schools (State Government)	341	369	8%	1%
Civic and Social Organizations	372	261	-30%	1%

Source: EMSI 2021.4

Table 6. Top Employers Posting ECE Occupations in Bay Region and East Bay Sub-Region (May 2021 - Apr 2022)

Employer	Bay	Employer	East Bay
Kindercare	836	Kindercare	296
Bright Horizons	278	Oakland Unified School District	174
Stepping Stones	184	YMCA	112
Oakland Unified School District	174	Center For Autism And Related Disorders, Inc	93
YMCA	161	Stepping Stones	83
Galileo Learning	151	La Petite Academy	74
Learning Care	121	Learning Care	57
Center For Autism And Related Disorders, Inc	116	Pleasanton Unified School District	55
La Petite Academy	99	Galileo Learning	49
Soliant	83	Kidango	47

Source: Burning Glass

Educational Supply

There are two (2) community colleges in the Bay Region issuing 91 awards on average annually (last 3 years ending 2018-19) on TOP 1305.90 Infants and Toddlers. In the East Bay Sub-Region, there is one (1) community college that issued 34 awards on average annually (last 3 years) on this TOP code.

There are six (6) other CTE educational institutions in the Bay Region issuing 419 awards on average annually (last 3 years ending 2016-17) on TOP 1305.90 Infants and Toddlers. There are two (2) other CTE educational institutions in the East Bay Sub-Region issuing 19 awards on average annually (last 3 years) on this TOP code.

Table 7a. Community College Awards on TOP 1305.90 Infants and Toddlers in Bay Region

College	Subregion	Certificate Low	Noncredit	Total
Merritt	East Bay	15	19	34
San Francisco	Mid-Peninsula	57	0	57
Total		72	19	91

Source: Data Mart

Note: The annual average for awards is 2016-17 to 2018-19.

Table 7b. Other CTE Institutions Awards on TOP 1305.90 Infants and Toddlers in Bay Region

College	Subregion	Award 1 < 2 academic yrs	Bachelor's Degree	Total
CET-Sobrato	Silicon Valley	22	0	22
Mills College	East Bay	0	9	9
Pacific Union College	North Bay	0	6	6
Saint Mary's College of California	East Bay	0	10	10
San Francisco State University	Mid-Peninsula	0	141	141
San Jose State University	Silicon Valley	0	231	231
Total		22	397	419

Note: The annual average for awards is 2016-17 to 2018-19.

Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 4,790 annual openings for the ECE occupational cluster and 510 annual (3-year average) awards for an annual undersupply of 4,280 students. In the East Bay Sub-Region, there is also a gap with 1,489 annual openings and 53 annual (3-year average) awards for an annual undersupply of 1,436 students.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 1305.90 Infants and Toddlers

Metric Outcomes	Bay All CTE Programs	Diablo Valley All CTE Programs	State 1305.90	Bay 1305.90	East Bay 1305.90	Diablo Valley 1305.90
Students with a Job Closely Related to Their Field of Study	74%	71%	79%	80%	88%	100%
Median Annual Earnings for SWP Exiting Students	\$47,419	\$37,187	\$28,896	\$34,616	\$33,120	\$32,850
Median Change in Earnings for SWP Exiting Students	23%	25%	19%	26%	24%	26%
Exiting Students Who Attained the Living Wage	52%	44%	35%	20%	31%	N/A

Metric Outcomes	Bay All CTE Programs	Diablo Valley All CTE Programs	State 1305.90	Bay 1305.90	East Bay 1305.90	Diablo Valley 1305.90
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Source: Launchboard Strong Workforce Program Median of 2017 to 2020.

Skills, Certifications and Education

Table 9. Top Skills for ECE Occupations in Bay Region (May 2021 - Apr 2022)

Skill	Posting	Skill	Posting
Teaching	10,357	Child Care Facility	584
Child Care	4,618	Staff Management	577
Child Development	4,589	Toileting	481
Cardiopulmonary Resuscitation (CPR)	4,441	Pertussis	426
Early Childhood Education	4,077	Data Collection	423
Lesson Planning	1,510	Vaccines	399
Special Education	1,282	Record Keeping	395
Cleaning	1,116	Lifting Ability	393
Nurturing Environment	977	Music	376
Scheduling	847	Applied Behavior Analysis	351
Health Screening	733	Clerical Duties	340
Vaccination	712	Budgeting	332
Customer Service	661	Influenza	326
Autism Diagnosis / Treatment / Care	631	Measles Mumps Rubella (MMR)	323

Source: Burning Glass

Table 10. Certifications for ECE Occupations in Bay Region (May 2021 - Apr 2022)

Certification	Posting	Certification	Posting
First Aid Cpr Aed	3,903	Special Education Certification	22
Child Development Associate (CDA)	2,626	Psychologist License	20
Driver's License	895	Certified Child Care Provider	18
Registered Behavior Technician	351	Certified Health Education Specialist	14
Certified Teacher	216	Cdl Class C	14
ServSafe	60	Certified Career Development Facilitator	12

Certification	Posting	Certification	Posting
Certified Cyber Forensics Professional (CCFP)	57	Teaching Assistant	11
Board Certified Behavior Analyst (BCBA)	31	Licensed Vocational Nurse (LVN)	11
Early Childhood Education Certification	27	Social Work License	10
Childhood Development Certification	26	Administrative Services Credential	10

Source: Burning Glass

Note: 54% 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.

Table 11. Education Requirements for ECE Occupations in Bay Region

Education (minimum advertised)	Latest 12 Mos. Postings	Percent 12 Mos. Postings
High school or vocational training	5,074	58%
Associate's degree	2,284	26%
Bachelor's degree and higher	1,372	16%

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 CCCCCO 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

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