

# 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% |
| 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 |
| 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 |
| 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 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

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