

# Labor Market Analysis for Program Recommendation

# Deaf Education Occupations

# Ohlone College

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

**March 2022**

## Recommendation

Based on all available data, there appears to be an “undersupply” of Deaf Education 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 4,319 students in the Bay region and 1,447 students in the East Bay Sub-Region.

## Introduction

This report provides student outcomes data on employment and earnings for TOP 0899.00 Other Education 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 Ohlone College and in the region.

This report profiles Deaf Education Occupations in the 12 county Bay region and in the East Bay sub-region for a proposed new program at Ohlone College.

* **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. Substitute teachers are included in “Teachers and Instructors, All Other” (25-3099).
  Entry-Level Educational Requirement: Bachelor’s degree
  Training Requirement: None
  Percentage of Community College Award Holders or Some Postsecondary Coursework: 12%
* **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. Substitute teachers are included in “Teachers and Instructors, All Other” (25-3099).
  Entry-Level Educational Requirement: Bachelor’s degree
  Training Requirement: None
  Percentage of Community College Award Holders or Some Postsecondary Coursework: 12%
* **Special Education Teachers, Middle School (25-2057):** 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. Substitute teachers are included in “Teachers and Instructors, All Other” (25-3099).
  Entry-Level Educational Requirement: Bachelor’s degree
  Training Requirement: None
  Percentage of Community College Award Holders or Some Postsecondary Coursework: 12%
* **Special Education Teachers, Secondary School (25-2058):** 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. Substitute teachers are included in “Teachers and Instructors, All Other” (25-3099).
  Entry-Level Educational Requirement: Bachelor’s degree
  Training Requirement: None
  Percentage of Community College Award Holders or Some Postsecondary Coursework: 12%
* **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 Deaf Education 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** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Special Education Teachers, Preschool | 722 | 761 | 39 | 5% | 351 | 70 | $30 | $63 |
| Special Education Teachers, Kindergarten and Elementary School | 3,155 | 3,227 | 72 | 2% | 1,405 | 281 | $33 | $64 |
| Special Education Teachers, Middle School | 1,013 | 1,023 | 9 | 1% | 443 | 89 | $38 | $64 |
| Special Education Teachers, Secondary School | 1,750 | 1,807 | 57 | 3% | 804 | 161 | $42 | $74 |
| Teaching Assistants, Except Postsecondary | 30,937 | 31,426 | 488 | 2% | 18,602 | 3,720 | $14 | $40 |
| **Total** | **37,577** | **38,244** | **667** | **2%** | **21,605** | **4,321** |  |  |
| Source: EMSI 2021.3 |

**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 Deaf Education 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** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Special Education Teachers, Preschool | 372 | 389 | 16 | 4% | 175 | 35 | $31 | $63 |
| Special Education Teachers, Kindergarten and Elementary School | 1,068 | 1,088 | 20 | 2% | 467 | 93 | $28 | $61 |
| Special Education Teachers, Middle School | 582 | 587 | 5 | 1% | 249 | 50 | $37 | $63 |
| Special Education Teachers, Secondary School | 558 | 573 | 15 | 3% | 249 | 50 | $40 | $70 |
| Teaching Assistants, Except Postsecondary | 10,244 | 10,416 | 172 | 2% | 6,107 | 1,221 | $12 | $39 |
| **Total** | **12,824** | **13,053** | **229** | **2%** | **7,247** | **1,449** |  |  |
| Source: EMSI 2021.3 |

**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 (Mar 2021 - Feb 2022)**

| **Occupation** | **Bay Region** | **East Bay** |
| --- | --- | --- |
| Teacher Assistants | 4,863 | 1,911 |
| Special Education Teachers, Middle School | 2,147 | 764 |
| Special Education Teachers, Kindergarten and Elementary School | 338 | 110 |
| Special Education Teachers, Preschool | 337 | 150 |
| Special Education Teachers, Secondary School | 102 | 28 |
| Source: Burning Glass |

**Table 4a. Top Job Titles for Deaf Education Occupations for latest 12 months (Mar 2021 - Feb 2022) Bay Region**

| **Title** | **Bay** | **Title** | **Bay** |
| --- | --- | --- | --- |
| Assistant Teacher | 243 | Special Education Paraprofessional | 82 |
| Special Education Teacher Sped | 214 | Instructional Aide | 78 |
| Special Education Teacher | 212 | Associate Teacher | 73 |
| Paraprofessional/Educator | 156 | Behavior Interventionist | 71 |
| Instructional Assistant | 129 | Special Education Teacher/Schools | 66 |
| Paraprofessional | 110 | School Special Education Teacher | 58 |
| Teacher Assistant | 99 | Teacher's Aide | 50 |
| Paraeducator | 98 | Behavior Assistant Rbt /Classroom Aide | 49 |
| Special Education Teacher/ Resource Specialist | 83 | Teacher Aide | 48 |
| Source: Burning Glass |

**Table 4b. Top Job Titles for Deaf Education Occupations for latest 12 months (Mar 2021 - Feb 2022) East Bay Sub-Region**

| **Title** | **East Bay** | **Title** | **East Bay** |
| --- | --- | --- | --- |
| Assistant Teacher | 116 | Special Education Paraprofessional | 31 |
| Special Education Teacher | 79 | Associate Teacher | 29 |
| Paraprofessional/Educator | 69 | Special Education Teacher/Resource Specialist | 29 |
| Special Education Teacher  | 64 | Teacher Aide | 27 |
| Teacher Assistant | 48 | Instructional Aide | 24 |
| Paraprofessional | 44 | Teacher's Aide | 23 |
| Instructional Assistant | 42 | Behavior Assistant Rbt /Classroom Aide - After | 22 |
| Paraeducator | 36 | Behavior Assistant Rbt /Classroom Aide | 20 |
| Behavior Interventionist | 32 | Elev8 Academic Intervention Specialist | 19 |
| Source: Burning Glass |

## Industry Concentration

**Table 5. Industries hiring Deaf Education 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) | 23,800 | 21,834 | -8% | 64% |
| Elementary and Secondary Schools | 5,410 | 5,671 | 5% | 15% |
| Child Day Care Services | 2,629 | 2,290 | -13% | 7% |
| Religious Organizations | 647 | 645 | 0% | 2% |
| Services for the Elderly and Persons with Disabilities | 602 | 702 | 17% | 2% |
| Local Government, Excluding Education and Hospitals | 473 | 475 | 1% | 1% |
| Colleges, Universities, and Professional Schools (Local Government) | 449 | 449 | 0% | 1% |
| Other Individual and Family Services | 227 | 287 | 26% | 1% |
| Temporary Help Services | 224 | 219 | -2% | 1% |
| Colleges, Universities, and Professional Schools (State Government) | 207 | 219 | 6% | 1% |
| Source: EMSI 2021.3 |

**Table 6. Top Employers Posting Deaf Education Occupations in Bay Region and East Bay Sub-Region (Mar 2021 - Feb 2022)**

| **Employer** | **Bay** | **Employer** | **East Bay** |
| --- | --- | --- | --- |
| Stepping Stones | 376 | Oakland Unified School District | 164 |
| Oakland Unified School District | 164 | Stepping Stones | 147 |
| Atx Learning | 135 | Pleasanton Unified School District | 82 |
| Kindercare | 128 | Center For Autism And Related Disorders, Inc | 66 |
| Healthpro Heritage | 125 | West Contra Costa Unified School District | 59 |
| Soliant | 108 | Atx Learning | 49 |
| Vacaville Unified School District | 84 | Kindercare | 48 |
| Pleasanton Unified School District | 82 | San Ramon Valley Unified School District | 44 |
| Center For Autism and Related Disorders, Inc | 78 | Sylvan Learning Center | 42 |
| Swing Education | 74 | Soliant | 41 |
| Source: Burning Glass |

## Educational Supply

There is one (1) community college in the Bay Region and East Bay Sub-Region (Ohlone College) issuing 2 awards on average annually (last 3 years ending 2018-19) on TOP 0899.00 Other Education.

**Table 7. Community College Awards on TOP 0899.00 Other Education in Bay Region**

| **College** | **Subregion** | **Certificate Low** | **Total** |
| --- | --- | --- | --- |
| Ohlone | East Bay | 2 | 2 |
| **Total** |  | **2** | **2** |
| Source: Data Mart |

*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 4,321 annual openings for the Deaf Education occupational cluster and 2 annual (3-year average) awards for an annual undersupply of 4,319 students. In the East Bay Sub-Region, there is also a gap with 1,449 annual openings and 2 annual (3-year average) awards for an annual undersupply of 1,447 students.

## Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0899.00 Other Education**

| **Metric Outcomes** | **Bay All CTE Programs** | **Ohlone All CTE Programs** | **State 0899.00** | **Bay 0899.00** | **East Bay 0899.00** | **Ohlone 0899.00** |
| --- | --- | --- | --- | --- | --- | --- |
| Students with a Job Closely Related to Their Field of Study | 74% | 74% | 74% | N/A | N/A | N/A |
| Median Annual Earnings for SWP Exiting Students | $47,419 | $65,374 | $29,656 | N/A | N/A | N/A |
| Median Change in Earnings for SWP Exiting Students | 23% | 12% | 16% | N/A | N/A | N/A |
| Exiting Students Who Attained the Living Wage | 52% | 69% | 43% | N/A | N/A | N/A |
| Source: Launchboard Strong Workforce Program Median of 2017 to 2020. |

## Skills, Certifications and Education

**Table 9. Top Skills for Deaf Education Occupations in Bay Region (Mar 2021 - Feb 2022)**

| **Skill** | **Posting** | **Skill** | **Posting** |
| --- | --- | --- | --- |
| Teaching | 4,812 | Psychology | 323 |
| Special Education | 2,564 | Behavior Analysis | 320 |
| Cardiopulmonary Resuscitation (CPR) | 1,152 | Tutoring | 310 |
| Autism Diagnosis/Treatment/ Care | 886 | Record Keeping | 295 |
| Child Development | 871 | Vaccination | 282 |
| Child Care | 868 | Treatment Planning | 264 |
| Lesson Planning | 737 | Maintaining Student Records | 258 |
| Data Collection | 455 | Personal Protective Equipment (PPE) | 243 |
| Early Childhood Education | 432 | Health Screening | 232 |
| Scheduling | 417 | Educational Programs | 230 |
| Cleaning | 403 | Mental Health | 225 |
| Applied Behavior Analysis | 357 | Special Needs Children | 221 |
| Toileting | 353 | No Child Left Behind (NCLB) | 212 |
| Clerical Duties | 347 | Customer Service | 208 |
| Source: Burning Glass |

**Table 10. Certifications for Deaf Education Occupations in Bay Region (Mar 2021 - Feb 2022)**

| **Certification** | **Posting** | **Certification** | **Posting** |
| --- | --- | --- | --- |
| First Aid Cpr Aed | 888 | Board Certified/Board Eligible | 23 |
| Driver's License | 827 | Cross-Cultural Language and Academic Development | 21 |
| Registered Behavior Technician | 390 | Hearing Aid Specialist | 17 |
| Certified Teacher | 311 | Learning Behavioral Specialist I | 16 |
| Child Development Associate (CDA) | 294 | Teaching English As A Foreign Language (TEFL) | 15 |
| Special Education Certification | 71 | Early Childhood Education Certification | 14 |
| Board Certified Behavior Analyst (BCBA) | 68 | Ca License | 14 |
| Teachers of English To Speakers of Other Languages (TESOL) | 34 | Board Certified Assistant Behavior Analyst (BCaBA) | 11 |
| Source: Burning Glass |

*Note: 69% 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 Deaf Education Occupations in Bay Region**

| **Education (minimum advertised)** | **Latest 12 Mos. Postings** | **Percent 12 Mos. Postings** |
| --- | --- | --- |
| High school or vocational training | 2,481 | 58% |
| Associate's degree | 643 | 15% |
| Bachelor's degree and higher | 1,126 | 27% |
| Source: Burning Glass |

*Note: 45% 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.*

## 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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