**Online and Blended Instruction Occupations**

**Labor Market Information Report**

**Foothill College**

Prepared by the San Francisco Bay Center of Excellence

for Labor Market Research

May 2020

# Recommendation

Based on all available data, there appears to be an undersupply of Online and Blended Instruction workers compared to the demand for this cluster of occupations in the Bay region and in the Silicon Valley sub-region (Santa Clara County). There is a projected annual gap of about 2,330 students in the Bay region and 620 students in the Silicon Valley Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 0860.00 - Educational Technology 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 Foothill College and in the region.

# Introduction

This report profiles Online and Blended Instruction Occupations in the 12 county Bay region and in the Silicon Valley sub-region for a proposed new program at Foothill College. Labor market information (LMI) is not available at the eight-digit SOC Code level for Distance Learning Coordinators (11-9039.01), therefore, the data shown in Tables 1 and 2 is for Education Administrators, All Other(at the six digit SOC level) and likely overstates demand for Distance Learning Coordinators. Tables 3, 4, 6, 9, 10 and 11 use job postings data from Burning Glass at the eight-digit SOC Code level for Distance Learning Coordinators (11-9039.01).

|  |
| --- |
| * **Education Administrators, All Other (SOC 11-9039):** All education administrators not listed separately. |
| Entry-Level Educational Requirement: Bachelor's degree |
| Training Requirement: None |
| Percentage of Community College Award Holders or Some Postsecondary Coursework: 12% |
|  |
| * **Training and Development Managers (SOC 11-3131):** Plan, direct,or coordinate the training and development activities and staff of an organization. |
| Entry-Level Educational Requirement: Bachelor's *degree* |
| Training Requirement: None |
| Percentage of Community College Award Holders or Some Postsecondary Coursework: 26*%* |
|  |
| * **Training and Development Specialists (SOC 13-1151):** Design andconduct training and development programs to improve individual and organizational performance. May analyze training needs. |
| Entry-Level Educational Requirement: Bachelor's *degree* |
| Training Requirement: None |
| Percentage of Community College Award Holders or Some Postsecondary Coursework: 31*%* |
|  |
| * **Instructional Coordinators (SOC 25-9031):** Develop instructional material, coordinate educational content, and incorporate current technology in specialized fields that provide guidelines to educators and instructors for developing curricula and conducting courses. Includes educational consultants and specialists, and instructional material directors. |
| Entry-Level Educational Requirement: Master's *degree* |
| Training Requirement: None |
| Percentage of Community College Award Holders or Some Postsecondary Coursework: 11*%* |
|  |

# Occupational Demand

**Table 1. Employment Outlook for Online and Blended Instruction Occupations in Bay Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2019 Jobs | 2024 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 25% Hourly Wage | Median Hourly Wage |
| Education Administrators, All Other | 2,800 | 2,990 | 190 | 7% | 1,320 | 264 | $25.20 | $35.36 |
| Training and Development Managers | 1,787 | 1,909 | 122 | 7% | 941 | 188 | $47.43 | $68.57 |
| Training and Development Specialists | 9,676 | 10,802 | 1,126 | 12% | 6,600 | 1,320 | $26.00 | $37.83 |
| Instructional Coordinators | 5,042 | 5,427 | 385 | 8% | 2,815 | 563 | $24.52 | $32.84 |
| **TOTAL** | **19,304** | **21,128** | **1,823** | **9%** | **11,676** | **2,335** | **$27.48** | **$39.01** |

*Source: EMSI 2020.1*

**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 Online and Blended Instruction Occupations in Silicon Valley Sub-Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2019 Jobs | 2024 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 25% Hourly Wage | Median Hourly Wage |
| Education Administrators, All Other | 483 | 533 | 50 | 10% | 248 | 50 | $26.78 | $41.57 |
| Training and Development Managers | 515 | 555 | 40 | 8% | 276 | 55 | $61.55 | $76.42 |
| Training and Development Specialists | 2,848 | 3,219 | 372 | 13% | 1,993 | 399 | $24.80 | $35.92 |
| Instructional Coordinators | 961 | 1,074 | 113 | 12% | 584 | 117 | $27.24 | $33.54 |
| **TOTAL** | **4,805** | **5,381** | **575** | **12%** | **3,101** | **620** | **$29.42** | **$40.35** |

*Source: EMSI 2020.1*

**Silicon Valley Sub-Region** includes Santa Clara County

### Job Postings in Bay Region and Silicon Valley Sub-Region

**Table 3. Number of Job Postings by Occupation for latest 12 months (April 2019 - March 2020)**

| Occupation | Bay Region | Silicon Valley |
| --- | --- | --- |
| Training and Development Specialists | 2,485 | 788 |
| Training and Development Managers | 963 | 251 |
| Instructional Designers and Technologists | 781 | 353 |
| Distance Learning Coordinators | 42 | 8 |
| **TOTAL** | **4,271** | **1,400** |

*Source: Burning Glass*

**Table 4a. Top Job Titles for Online and Blended Instruction Occupations for latest 12 months (April 2019 - March 2020) Bay Region**

|  |  |  |  |
| --- | --- | --- | --- |
| Common Title | Bay | Common Title | Bay |
| Instructional Designer | 652 | Learning Development Specialist | 33 |
| Training Coordinator | 343 | Sales Training Manager | 27 |
| Training Specialist | 337 | Director, Learning, Development | 27 |
| Training Manager | 296 | Developer | 25 |
| Technical Trainer | 149 | Machine Learning Developer | 21 |
| Development Coordinator | 110 | Operations Specialist | 20 |
| Trainer | 106 | Field Trainer | 20 |
| Development Specialist | 69 | Curriculum Designer | 19 |
| Director, Staff Development | 63 | Machine Learning Specialist | 18 |
| Sales Trainer | 54 | Supervisor, Training | 17 |
| Education Specialist | 52 | Sales Training Specialist | 17 |
| Learning Specialist | 41 | Director of Sales | 17 |
| Development Trainer | 38 | Head, Development | 16 |
| Training Developer | 34 | Behavior Technician, Training | 16 |

**Table 4b. Top Job Titles for Online and Blended Instruction Occupations for latest 12 months (April 2019 - March 2020) Silicon Valley Sub-Region**

|  |  |  |  |
| --- | --- | --- | --- |
| Common Title | Silicon Valley | Common Title | Silicon Valley |
| Instructional Designer | 327 | Developer | 11 |
| Training Coordinator | 145 | Program Analyst | 8 |
| Training Specialist | 94 | Learning Development Specialist | 8 |
| Training Manager | 92 | Staff Assistant | 7 |
| Technical Trainer | 65 | Machine Learning Specialist | 7 |
| Trainer | 29 | Learning Specialist | 7 |
| Development Coordinator | 23 | Field Training Officer | 7 |
| Director, Staff Development | 18 | Education Specialist | 7 |
| Sales Trainer | 17 | Development Trainer | 7 |
| Machine Learning Developer | 17 | Commercial Learning Trainer | 7 |
| Training Developer | 15 | Product Trainer | 6 |
| Development Specialist | 14 | Management Training Program | 6 |
| Sales Training Manager | 11 | Learning Technology Specialist | 6 |
| Principal Epic Trainer, Billing, Healthcare Industry | 11 | Director, Development | 6 |

*Source: Burning Glass*

# Industry Concentration

**Table 5. Industries hiring Online and Blended Instruction Workers in Bay Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Industry – 6 Digit NAICS (No. American Industry Classification) Codes | Jobs in Industry (2019) | Jobs in Industry (2022) | % Change (2019-24) | % Occupation Group in Industry (2019) |
| Elementary and Secondary Schools (Local Government) (903611) | 1,625 | 1,686 | 4% | 8% |
| Corporate, Subsidiary, and Regional Managing Offices (551114) | 824 | 864 | 5% | 4% |
| Internet Publishing and Broadcasting and Web Search Portals (519130) | 800 | 1,042 | 30% | 4% |
| Colleges, Universities, and Professional Schools (State Government) (902612) | 725 | 695 | -4% | 4% |
| Educational Support Services (611710) | 719 | 842 | 17% | 4% |
| Custom Computer Programming Services (541511) | 715 | 914 | 28% | 4% |
| Colleges, Universities, and Professional Schools (611310) | 665 | 731 | 10% | 3% |
| Local Government, Excluding Education and Hospitals (903999) | 622 | 649 | 4% | 3% |
| Elementary and Secondary Schools (611110) | 520 | 550 | 6% | 3% |
| Software Publishers (511210) | 514 | 646 | 26% | 3% |
| Computer Systems Design Services (541512) | 404 | 495 | 23% | 2% |
| Sports and Recreation Instruction (611620) | 316 | 356 | 13% | 2% |
| Administrative Management and General Management Consulting Services (541611) | 312 | 383 | 23% | 2% |
| Exam Preparation and Tutoring (611691) | 306 | 347 | 13% | 2% |
| State Government, Excluding Education and Hospitals (902999) | 294 | 312 | 6% | 2% |
| Colleges, Universities, and Professional Schools (Local Government) (903612) | 277 | 261 | -6% | 1% |
| Federal Government, Military (901200) | 270 | 261 | -3% | 1% |

*Source: EMSI 2020.1*

**Table 6. Top Employers Posting Online and Blended Instruction Occupations in Bay Region and Silicon Valley Sub-Region (April 2019 - March 2020)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Employer | Bay | Employer | Bay | Employer | Silicon Valley |
| UC Berkeley | 34 | Microsoft Corporation | 18 | Apple Inc. | 27 |
| Facebook | 33 | Workday, Inc | 17 | Intuitive Surgical Inc | 21 |
| Google Inc. | 30 | US Army | 16 | Google Inc. | 21 |
| Reynolds & Reynolds | 28 | Pinterest | 16 | Stanford University | 18 |
| Apple Inc. | 27 | Agiloft | 16 | Servicenow, Inc | 12 |
| Amazon | 26 | UC San Francisco | 15 | Reynolds & Reynolds | 10 |
| Anthem Blue Cross | 25 | Medtronic | 14 | Core Group Technologies Inc | 10 |
| Walmart / Sam's | 23 | Genentech | 14 | Microsoft Corporation | 9 |
| Stanford University | 22 | Abbott Laboratories | 14 | Applied Materials | 9 |
| Milestone Technologies Inc | 21 | Servicenow, Inc | 13 | Anthem Blue Cross | 9 |
| Intuitive Surgical Inc | 21 | Advance Behavioral Therapies | 12 | Comerica | 8 |
| Envision | 21 | Lucile Packard Childrens Hospital | 11 | Servicenow | 7 |
| Visa | 20 | Linkedin Limited | 11 | Abbott Laboratories | 7 |
| Kaiser Permanente | 20 | Health Services Llc | 11 | Walmart / Sam's | 6 |
| University California | 19 | Tti Incorporated | 10 | Palo Alto Networks | 6 |
| Core Group Technologies Inc | 19 | GP Strategies Corporation | 10 | Linkedin Limited | 6 |
| Pacific Gas and Electric Co | 18 | Falcon Cct | 10 | Intellipro Incorporated | 6 |

*Source: Burning Glass*

# Educational Supply

There is one (1) community college in the Bay Region issuing 3 awards on average annually (last 3 years ending 2018-19) on TOP 0860.00 - Educational Technology. There are no colleges in the Silicon Valley Sub-Region issuing awards on average annually (last 3 years) on this TOP code.

There is one (1) Other Educational Institution in the Bay Region issuing two (2) Bachelor’s Degrees on average annually (last 3 years ending 2018-19) on TOP 0860.00 - Educational Technology. There are no Other Educational Institutions in the Silicon Valley Sub-Region issuing awards on average annually (last 3 years) on this TOP code.

**Table 7a. Awards on TOP 0860.00 - Educational Technology in Bay Region**

|  |  |  |  |
| --- | --- | --- | --- |
| **College** | **Sub-Region** | **Certificate Low Unit** | **Total** |
| Merritt | East Bay | 3 | 3 |
| **Total Bay Region** | | **3** | **3** |
| **Total Silicon Valley Sub-Region** | | **0** | **0** |

# Source: Data Mart

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

**Table 7b. Other Educational Institutions - Bachelor’s Degree Awards on TOP 0860.00 - Educational Technology**

**Bay Region**

|  |  |  |
| --- | --- | --- |
| **College** | **Sub-Region** | **Bachelor’s Degree** |
| Academy of Art University | Mid-Peninsula | 2 |
| **Total Bay Region** | | **2** |
| **Total Silicon Valley Sub-Region** | | **0** |

# Source: Data Mart

Note: The annual average for awards is 2014-15 to 2016-17.

# Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 2,335 annual openings for the Online and Blended Instruction occupational cluster and 5 annual (3-year average) awards for an annual undersupply of 2,330 students. In the Silicon Valley Sub-Region, there is also a gap with 620 annual openings and no annual (3-year average) awards for an annual undersupply of 620 students.

# Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0860.00-Educational Technology**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2015-16 | Bay  (All CTE Programs) | Foothill College (All CTE Programs) | State (0860.00) | Bay (0860.00) | Silicon Valley (0860.00) | Foothill College (0860.00) |
| % Employed Four Quarters After Exit | 74% | 77% | 81% | 81% | 77% | 77% |
| Median Quarterly Earnings Two Quarters After Exit | $10,550 | $15,301 | $20,325 | $22,242 | $20,549 | $20,549 |
| Median % Change in Earnings | 46% | 82% | 32% | 30% | 25% | 25% |
| % of Students Earning a Living Wage | 63% | 76% | 83% | 88% | 86% | 86% |

*Source: Launchboard Pipeline (version available on 5/6/20)*

# Skills, Certifications and Education

**Table 9. Top Skills for Online and Blended Instruction Occupations in Bay Region (April 2019 - March 2020)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Skill | Postings | Skill | Postings | Skill | Postings |
| Training Programs | 941 | Curriculum Development | 264 | Multimedia | 178 |
| Project Management | 903 | Needs Assessment | 258 | Adobe Creative Suite | 177 |
| Instructional Design | 881 | Staff Management | 224 | Talent Management | 174 |
| Training Materials | 758 | Staff Development | 222 | Course Development | 168 |
| Scheduling | 638 | Change Management | 215 | Content Management | 167 |
| Teaching | 581 | Leadership Development | 215 | Employee Training | 166 |
| Customer Service | 485 | Adobe Acrobat | 213 | Training Activities | 156 |
| Onboarding | 455 | Organizational Development | 209 | Technical Writing / Editing | 154 |
| Learning Management System | 405 | Adobe Indesign | 196 | Software as a Service (SaaS) | 153 |
| Technical Training | 388 | Project Planning and Development Skills | 194 | Performance Management | 152 |
| Budgeting | 376 | Sales Training | 193 | Quality Assurance and Control | 152 |
| Adobe Captivate | 332 | Graphic Design | 191 | New Hire Orientation | 151 |
| Sales | 308 | Stakeholder Management | 186 | Adobe Illustrator | 146 |
| Content Development | 296 | Technical Support | 184 | Psychology | 136 |
| Adobe Photoshop | 286 | Salesforce | 179 | Public Speaking | 136 |

*Source: Burning Glass*

**Table 10. Certifications for Online and Blended Instruction Occupations in Bay Region (April 2019 - March 2020)**

Note: 80% 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 |
| Driver's License | 314 | Basic Life Saving (BLS) | 16 |
| Licensed Vocational Nurse (LVN) | 75 | Microsoft Certified Trainer (MCT) | 15 |
| First Aid CPR AED | 74 | Medical Examiner's License | 14 |
| Epic Certification | 67 | Lean Six Sigma Certification | 14 |
| Project Management Certification | 59 | Six Sigma Yellow Belt | 13 |
| Security Clearance | 56 | Certified Teacher | 13 |
| Registered Nurse | 39 | Adult Learning Certificate | 12 |
| Project Management Professional (PMP) | 28 | Professional in Human Resources | 11 |
| Registered Behavior Technician | 26 | Licensed Practical Nurse (LPN) | 10 |
| Hearing Aid Dealers | 20 | Special Education Certification | 9 |
| Board Certified Behavior Analyst (BCBA) | 18 | ServSafe | 9 |
| IT Infrastructure Library (ITIL) Certification | 16 | Psychologist License | 9 |

*Source: Burning Glass*

**Table 11. Education Requirements for Online and Blended Instruction Occupations in Bay Region**

Note: 36% 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 | Percent 12 Mos. Postings |
| High school or vocational training | 444 | 17% |
| Associate Degree | 92 | 4% |
| Bachelor’s Degree or Higher | 2,004 | 79% |

*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/](http://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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