








# Online Teaching Occupations

## Labor Market Analysis: San Diego County

May 2021

### Summary

NEW PROGRAM RECOMMENDATION?	EVIDENCE OF A SUPPLY GAP?	AT OR ABOVE THE LIVING WAGE?	EXPECTED EDUCATION FOR MAJORITY OF OCCUPATIONS ANALYZED
 <p><b>Proceed with Caution</b></p>	  <p>NUMBER OF INSTITUTIONS THAT PROVIDE TRAINING</p> <p><b>HIGH</b></p> 	  <p>NUMBER OF ANNUAL JOB OPENINGS</p> <p><b>HIGH</b></p> 	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Bachelor's Degree</li> <li><input type="checkbox"/> Associate Degree</li> <li><input type="checkbox"/> Some College or Certificate</li> <li><input type="checkbox"/> HS Diploma or Equivalent</li> <li><input type="checkbox"/> Less than a HS Diploma</li> <li><input type="checkbox"/> Apprenticeship</li> </ul>

This brief provides labor market information about *Online Teaching Occupations* to assist the San Diego and Imperial Counties Community Colleges with program development and strategic planning. *Online Teaching Occupations* include “Training and Development Specialists,” “Secondary School Teachers, Except Special and Career/Technical Education,” “Adult Basic Education, Adult Secondary Education, and English as a Second Language Instructors,” “Instructional Coordinators,” and “Educational Instruction and Library Workers, All Other.” According to available labor market information, *Online Teaching Occupations* in San Diego County have a labor market demand of 1,430 annual job openings (while average demand for an occupation in San Diego County is 277 annual job openings), and 11 educational institutions supply 316 awards for these occupations, suggesting that there is a supply gap. Based on online job postings data, an average of 120 job postings per year require “Online Teaching,” which is one percent of the 1,278 average online job postings per year for *Online Teaching Occupations* (for comparison, there was an average of 560 online job postings for an occupation in San Diego County in 2020). Additionally, numerous online certification programs currently exist (see Appendix A). This brief recommends proceeding with caution when developing a **new** program because 1) a small number of online job postings require “Online Teaching;” and 2) a high number of programs exist. Colleges should also note that **employers typically require a bachelor’s degree as the minimum educational requirement for these occupations.**

## Introduction

This report provides labor market information in San Diego County for the following occupational codes in the Standard Occupational Classification (SOC)<sup>1</sup> system:

- **Training and Development Specialists (SOC<sup>2</sup> 13-1151):** Design or conduct work-related training and development programs to improve individual skills or organizational performance. May analyze organizational training needs or evaluate training effectiveness.
- **Secondary School Teachers, Except Special and Career/Technical Education (SOC 25-2031):** Teach one or more subjects to students at the secondary school level.
- **Adult Basic Education, Adult Secondary Education, and English as a Second Language Instructors (SOC 25-3011):** Teach or instruct out-of-school youths and adults in basic education, literacy, or English as a Second Language classes, or in classes for earning a high school equivalency credential.
- **Instructional Coordinators (SOC 25-9031):** Develop instructional material, coordinate educational content, and incorporate current technology into instruction in order to provide guidelines to educators and instructors for developing curricula and conducting courses. May train and coach teachers. Includes educational consultants and specialists, and instructional material directors.
- **Educational Instruction and Library Workers, All Other (SOC 25-9099):** All educational instruction and library workers not listed separately.

For the purpose of this report, these occupations are referred to as *Online Teaching Occupations*.

---

<sup>1</sup> The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. [bls.gov/soc](https://www.bls.gov/soc).

<sup>2</sup> The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. [bls.gov/soc](https://www.bls.gov/soc).

## Projected Occupational Demand

Between 2020 and 2025, *Online Teaching Occupations* are projected to increase by 598 net jobs or three percent (Exhibit 1a). Employers in San Diego County will need to hire 1,430 workers annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.

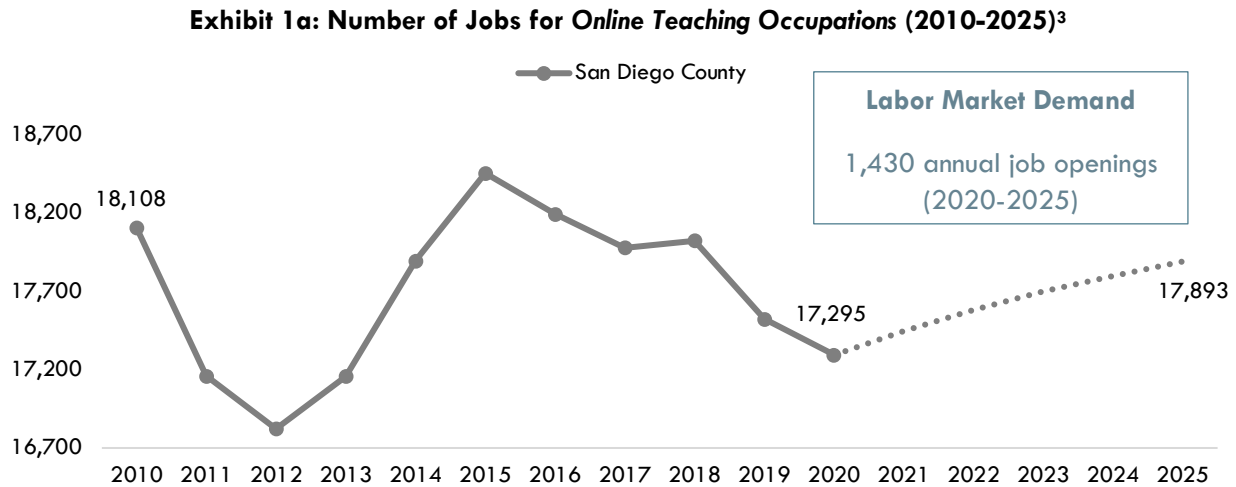


Exhibit 1b disaggregates the projected number of jobs change by occupation. “Secondary School Teachers, Except Special and Career/Technical Education” are projected to have the most labor market demand between 2020 and 2025, with 647 annual job openings.

**Exhibit 1b: Number of Jobs for Chemical Lab Occupations in San Diego County (2020-2025)<sup>4</sup>**

Occupational Title	2020 Jobs	2025 Jobs	2020 - 2025 Net Jobs Change	2020-2025 % Net Jobs Change	Annual Job Openings (Demand)
Secondary School Teachers, Except Special and Career/Technical Education	9,241	9,523	282	3%	647
Training and Development Specialists	3,217	3,420	203	6%	339
Educational Instruction and Library Workers, All Other	2,591	2,636	45	2%	226
Instructional Coordinators	1,678	1,762	84	5%	159
Adult Basic Education, Adult Secondary Education, and English as a Second Language Instructors	568	552	-16	-3%	59
<b>Total</b>	<b>17,295</b>	<b>17,893</b>	<b>598</b>	<b>3%</b>	<b>1,430</b>

<sup>3</sup> EMSI 2021.1; QCEW, Non-QCEW, Self-Employed.

<sup>4</sup> EMSI 2021.1; QCEW, Non-QCEW, Self-Employed.

## Earnings

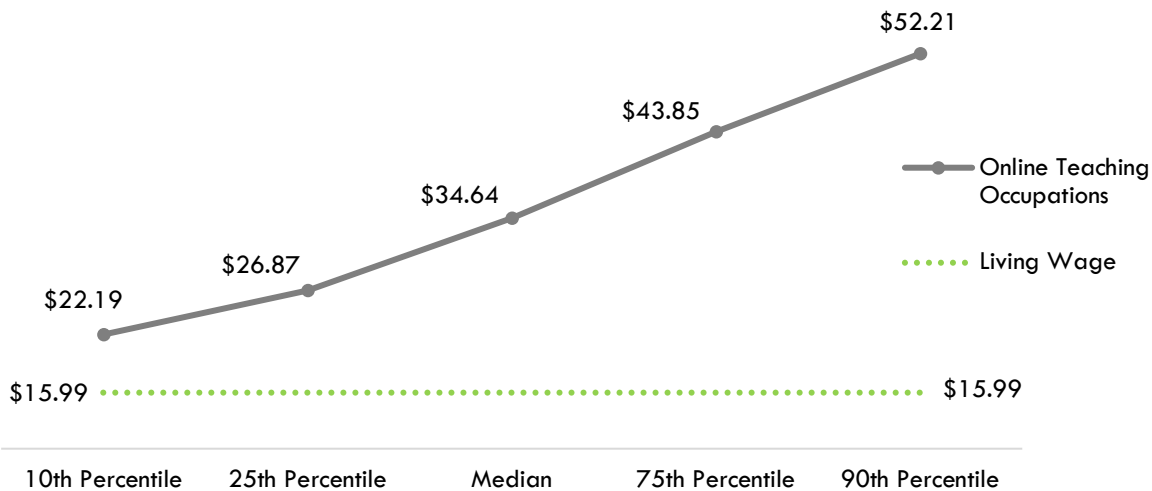
The entry-level hourly earnings for *Online Teaching Occupations* range from \$16.40 to \$33.87 (Exhibit 2a).

**Exhibit 2a: Hourly Earnings for Online Teaching Occupations in San Diego County<sup>5</sup>**

Occupational Title	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 <sup>th</sup> Percentile)
Secondary School Teachers, Except Special and Career/Technical Education	\$33.87	\$42.00	\$47.21
Adult Basic Education, Adult Secondary Education, and English as a Second Language Instructors	\$33.85	\$38.50	\$45.26
Training and Development Specialists	\$25.21	\$33.63	\$40.94
Instructional Coordinators	\$25.06	\$34.71	\$51.49
Educational Instruction and Library Workers, All Other	\$16.40	\$24.35	\$34.36

On average, the entry-level hourly earnings for *Online Teaching Occupations* are \$26.87; this is more than the living wage for a single adult in San Diego County, which is \$15.99 per hour (Exhibit 2b).<sup>6</sup>

**Exhibit 2b: Average Hourly Earnings<sup>7</sup> for Online Teaching Occupations in San Diego County<sup>8</sup>**



<sup>5</sup> EMSI 2021.1; QCEW, Non-QCEW, Self-Employed.

<sup>6</sup> "California Family Needs Calculator (formerly the Self-Sufficiency Standard)," Insight: Center for Community Economic Development, last updated 2018. [insightccd.org/2018-self-sufficiency-standard](https://insightccd.org/2018-self-sufficiency-standard).

<sup>7</sup> 10th and 25th percentiles could be considered entry-level wages, and 75th and 90th percentiles could be considered experienced wages for individuals who may have been in the occupation longer, received more training than others, etc.

<sup>8</sup> EMSI 2021.1; QCEW, Non-QCEW, Self-Employed.

## Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of awards in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes.<sup>9</sup> There are **three** TOP codes and **seven** CIP codes related to *Online Teaching Occupations* (Exhibit 3).

**Exhibit 3: Related TOP and CIP Codes for Online Teaching Occupations**

TOP or CIP Code	TOP or CIP Program Title
TOP 0801.00	Education, General
TOP 0802.00	Educational Aide (Teacher Assistant)
TOP 0860.00	Educational Technology
CIP 13.0301	Curriculum and Instruction
CIP 13.0501	Educational/Instructional Technology
CIP 13.1201	Adult and Continuing Education and Teaching
CIP 13.1211	Online Educator/Online Teaching
CIP 13.1214	College/Postsecondary/University Teaching
CIP 13.1299	Teacher Education and Professional Development, Specific Levels and Methods, Other
CIP 13.1502	Adult Literacy Tutor/Instructor

<sup>9</sup> TOP data comes from the California Community Colleges Chancellor's Office MIS Data Mart ([datamart.cccco.edu](http://datamart.cccco.edu)) and CIP data comes from the Integrated Postsecondary Education Data System ([nces.ed.gov/ipeds/use-the-data](http://nces.ed.gov/ipeds/use-the-data)).

According to TOP data, two community colleges supply the region with awards for these occupations: Palomar College and San Diego Mesa College. According to CIP data, nine non-community-college institutions supply the region with awards: Alliant International University-San Diego, Ashford University, California State University-San Marcos, National University, Northcentral University, San Diego Christian College, San Diego State University, United States University, and University of San Diego (Exhibit 4).

**Exhibit 4: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions  
(Program Year 2016-17 through PY2019-20 Average)**

TOP or CIP Code	TOP or CIP Program Title	3-Yr Annual Average CC Awards (PY17-18 to PY19-20)	Other Educational Institutions 3-Yr Annual Average Awards (PY16-17 to PY18-19)	3-Yr Total Average Supply (PY16-17 to PY19-20)
0801.00	Education, General	<b>41</b>	<b>0</b>	<b>41</b>
	• Palomar	41	0	
0802.00	Educational Aide (Teacher Assistant)	<b>1</b>	<b>0</b>	<b>1</b>
	• San Diego Mesa	1	0	
13.0301	Curriculum and Instruction	<b>0</b>	<b>66</b>	<b>66</b>
	• Northcentral University	0	0	
	• San Diego State University	0	0	
	• University of San Diego	0	66	
13.0501	Educational/Instructional Technology	<b>0</b>	<b>23</b>	<b>23</b>
	• Ashford University	0	22	
	• National University	0	0	
	• San Diego State University	0	1	
13.1201	Adult and Continuing Education and Teaching	<b>0</b>	<b>5</b>	<b>5</b>
	• San Diego State University	0	5	
13.1299	Teacher Education and Professional Development, Specific Levels and Methods, Other	<b>0</b>	<b>180</b>	<b>180</b>
	• Alliant International University-San Diego	0	80	
	• Ashford University	0	0	

TOP or CIP Code	TOP or CIP Program Title	3-Yr Annual Average CC Awards (PY17-18 to PY19-20)	Other Educational Institutions 3-Yr Annual Average Awards (PY16-17 to PY18-19)	3-Yr Total Average Supply (PY16-17 to PY19-20)
	• California State University-San Marcos	0	0	
	• San Diego Christian College	0	26	
	• San Diego State University	0	74	
	• United States University	0	0	
			<b>Total</b>	<b>316</b>

## Demand vs. Supply

Comparing labor demand (annual openings) with labor supply<sup>10</sup> suggests that there is a **supply gap** for these occupations in San Diego County, with **1,430** annual openings and **316** awards. Comparatively, there are **18,012** annual openings in California and **1,256** awards, suggesting that there is also a supply gap across the state<sup>11</sup> (Exhibit 5).

**Exhibit 5: Labor Demand (Annual Openings) Compared with Labor Supply (Average Annual Awards)**

	<b>Demand</b> (Annual Openings)	<b>Supply</b> (Total Annual Average Supply)	<b>Supply Gap or Oversupply</b>
San Diego	1,430	316	<b>1,114</b>
California	18,012	1,256	<b>16,756</b>

**Please note:** This is a basic analysis of supply and demand of labor. The data does not include workers currently in the labor force who could fill these positions or workers who are not captured by publicly available data. This data should be used to discuss the potential gaps or oversupply of workers; however, it should not be the only basis for determining whether or not a program should be developed.

<sup>10</sup> Labor supply can be found from two different sources: EMSI or the California Community Colleges Chancellor's Office MIS Data Mart. EMSI uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

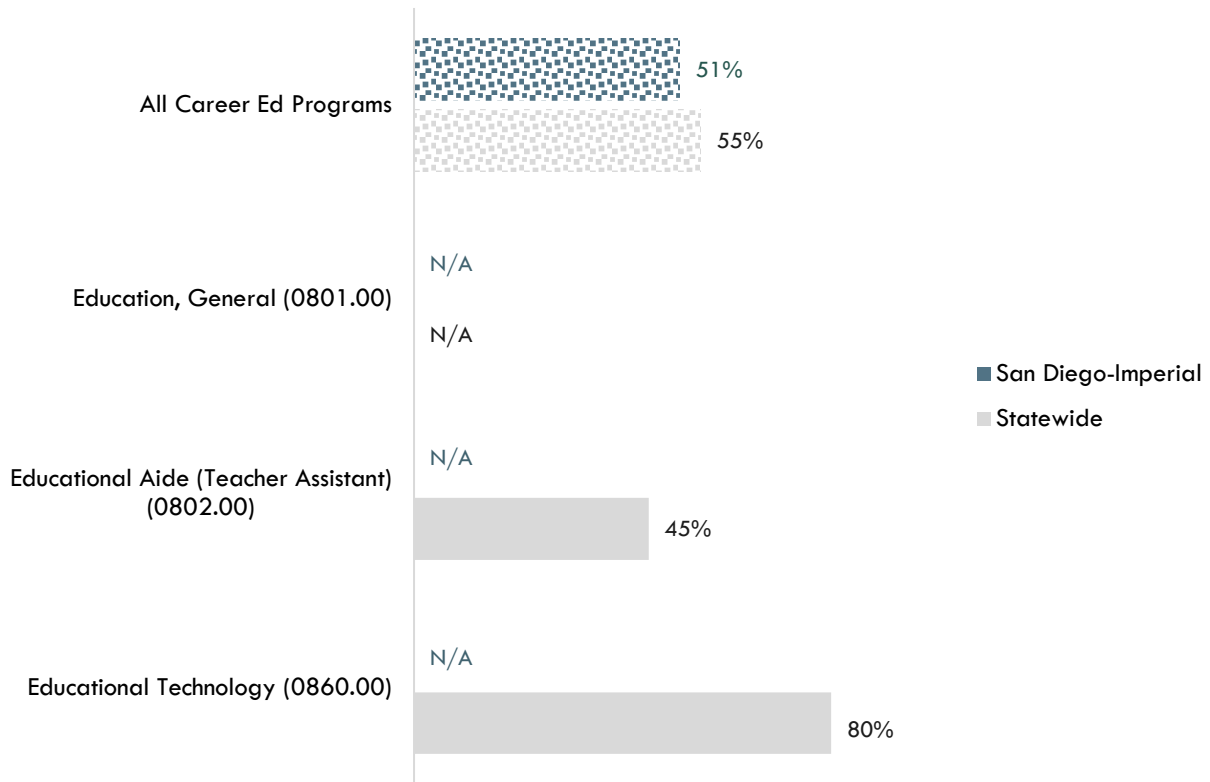
<sup>11</sup> "Supply and Demand," Centers of Excellence Student Outcomes, [coecc.net/Supply-and-Demand.aspx](http://coecc.net/Supply-and-Demand.aspx).



## Student Outcomes and Regional Comparisons

According to the California Community Colleges LaunchBoard, 45 to 80 percent of students statewide earned a living wage after completing a program related to *Online Teaching Occupations*, compared to 55 percent of students in Career Education programs in general across the state (Exhibit 6a).<sup>12</sup>

**Exhibit 6a: Percentage of Students Who Earned a Living Wage by Program, PY2017-18<sup>13</sup>**



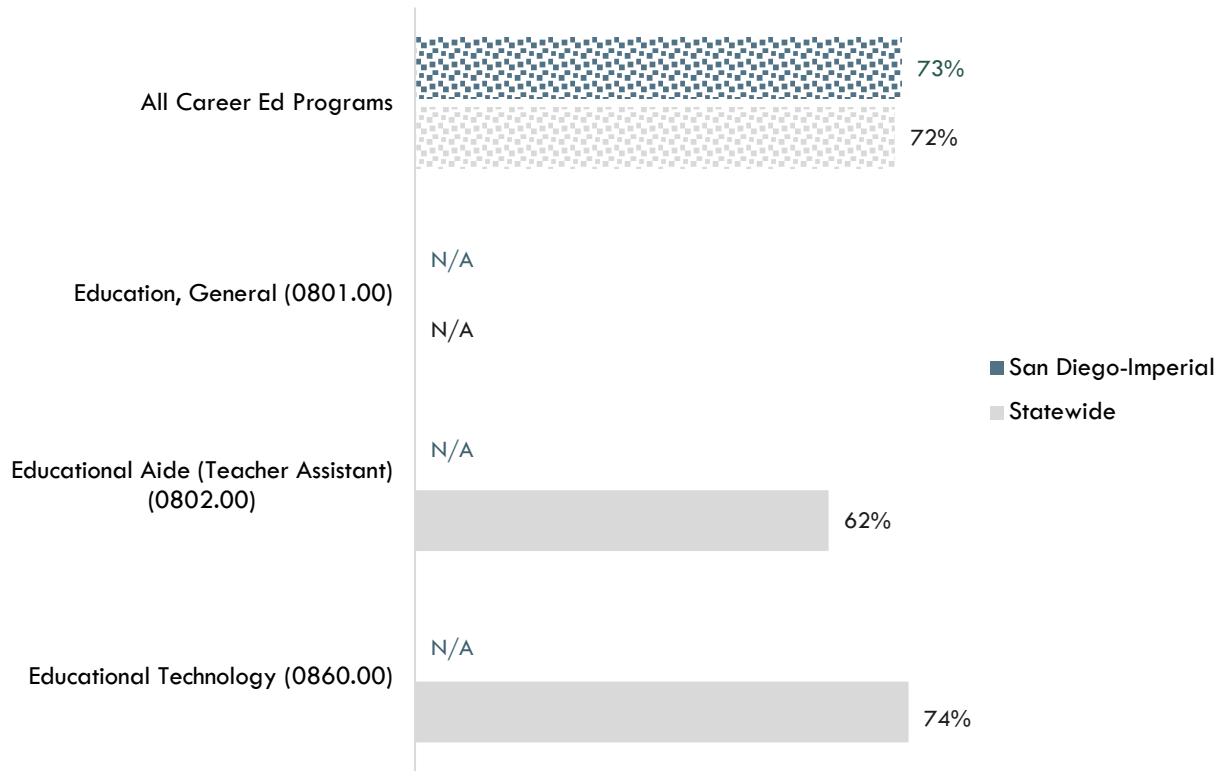
“N/A” indicates insufficient data

<sup>12</sup> “California Community Colleges Strong Workforce Program,” California Community Colleges, [calpassplus.org/LaunchBoard/SWP.aspx](http://calpassplus.org/LaunchBoard/SWP.aspx).

<sup>13</sup> Among completers and skills builders who exited, the proportion of students who attained a living wage.

According to the California Community Colleges LaunchBoard, 62 to 74 percent of students statewide obtained a job closely related to their field of study after completing a program related to *Online Teaching Occupations*, compared to 72 percent of students in Career Education programs in general across the state (Exhibit 6b).<sup>14</sup>

**Exhibit 6b: Percentage of Students in a Job Closely Related to Field of Study by Program, PY2016-17**



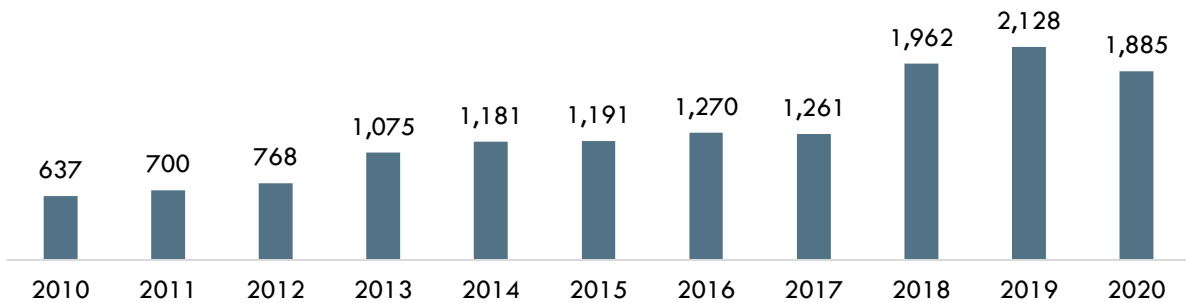
"N/A" indicates insufficient data

<sup>14</sup> "California Community Colleges Strong Workforce Program," California Community Colleges, [calpassplus.org/LaunchBoard/SWP.aspx](http://calpassplus.org/LaunchBoard/SWP.aspx).

## Online Job Postings

This report analyzes not only historical and projected (traditional LMI) data, but also recent data from online job postings (real-time LMI). Online job postings may provide additional insight about recent changes in the labor market that are not captured by historical data. Between 2010 and 2020, there was an average of 1,278 online job postings per year for *Online Teaching Occupations* in San Diego County (Exhibit 7a). Please note that online job postings do **not** equal labor market demand; demand is represented by annual job openings (see Exhibit 1b). Employers may post a position multiple times for various reasons, such as increasing the pool of applicants, for example.

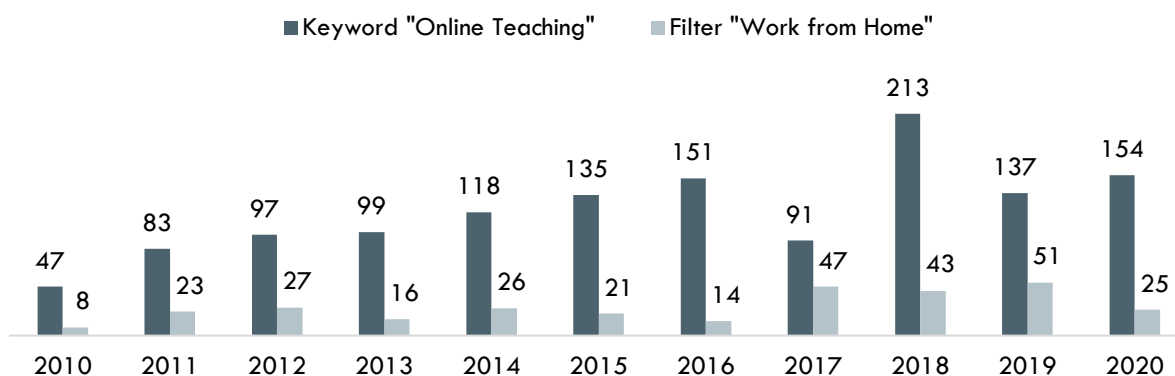
**Exhibit 7a: Number of Online Job Postings for *Online Teaching Occupations* in San Diego County (2010-2020)<sup>15</sup>**



<sup>15</sup> Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2010-2020.

The COE analyzed online job postings to examine the frequency in which employers specified “Online Teaching”<sup>16</sup> or “Work from Home.”<sup>17</sup> Between 2010 and 2020, there was an average of 120 online job postings per year with the keyword “Online Teaching,” and an average of 27 online job postings per year with the filter “Work from Home” (Exhibit 7b). One thing to note is that numerous online job postings indicated that online or remote teaching was temporary due to the COVID-19 pandemic and that in-person offerings were expected to resume in the future.

**Exhibit 7b: Number of Online Job Postings for Online Teaching Occupations with the Keyword “Online Teaching” or the Filter “Work From Home” in San Diego County (2010-2020)**



## Top Employers

Between January 1, 2018 and December 31, 2020, the top five employers in San Diego County for *Online Teaching Occupations* were the [University of California San Diego](#), [General Dynamics](#), [SAIC](#), [Grossmont Union High School District](#), and [General Atomics](#) based on online job postings (Exhibit 8).

**Exhibit 8: Top Employers in San Diego County for Online Teaching Occupations<sup>18</sup>**

Top Employers	
<ul style="list-style-type: none"> <li>• University of California San Diego</li> <li>• General Dynamics</li> <li>• SAIC</li> <li>• Grossmont Union High School District</li> <li>• General Atomics</li> </ul>	<ul style="list-style-type: none"> <li>• Booz Allen Hamilton, Inc.</li> <li>• CACI International</li> <li>• U.S. Government</li> <li>• Vista Unified School District</li> <li>• SOLUTE</li> </ul>

<sup>16</sup> Additional keywords searched included: “Remote Teaching” and “Virtual Teaching.” The keyword “Online Teaching” and the filter “Work from Home” were selected because it was the most comprehensive and accurate in capturing online job postings intended as part of the search.

<sup>17</sup> “Work from Home” indicates whether an employer offers any ‘work from home’ options. Burning Glass makes this determination at the job posting level based on a set of specific keywords within the job ad (such as WFH, telecommute, remote or work remotely).

<sup>18</sup> Burning Glass Technologies, “Labor Insight Real-Time Labor Market Information Tool.” 2018-2020.

## Education, Skills, and Certifications

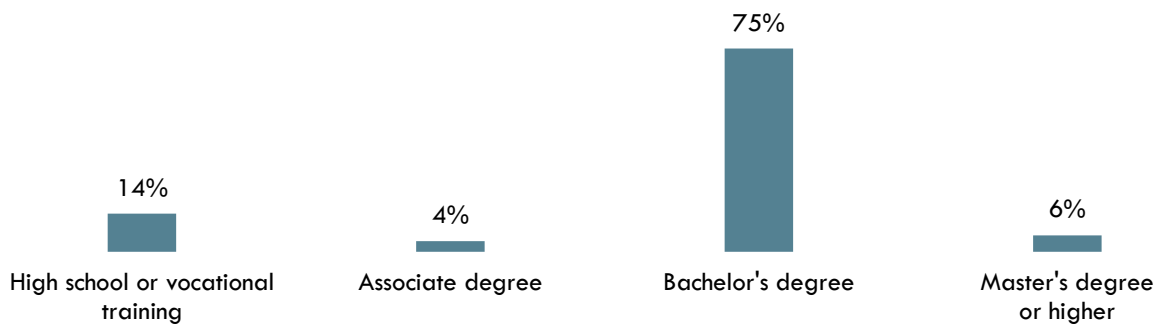
The typical entry-level education for “Instructional Coordinators” is a **master’s degree**, whereas the typical entry-level education for all other occupations is a **bachelor’s degree** (Exhibit 9a).<sup>19</sup>

**Exhibit 9a: National Educational Attainment for Online Teaching Occupations<sup>20</sup>**

Occupational Title	Typical Entry-Level Education
Instructional Coordinators	Master's degree
Adult Basic Education, Adult Secondary Education, and English as a Second Language Instructors	Bachelor's degree
Educational Instruction and Library Workers, All Other	Bachelor's degree
Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's degree
Training and Development Specialists	Bachelor's degree

Based on online job postings between January 1, 2018 and December 31, 2020 in San Diego County, employers posted a **bachelor’s degree** as the educational requirement for *Online Teaching Occupations* (Exhibit 9b).<sup>21</sup>

**Exhibit 9b: Educational Requirements for Online Teaching Occupations in San Diego County<sup>22</sup>**



\*May not add up to 100 percent due to rounding.

<sup>19</sup> EMSI 2021.1; QCEW, Non-QCEW, Self-Employed.

<sup>20</sup> EMSI 2021.1; QCEW, Non-QCEW, Self-Employed.

<sup>21</sup> Burning Glass Technologies, “Labor Insight Real-Time Labor Market Information Tool.” 2018-2020.

<sup>22</sup> “Educational Attainment for Workers 25 Years and Older by Detailed Occupation,” Bureau of Labor Statistics, last modified September 4, 2019. [bls.gov/emp/tables/educational-attainment.htm](https://bls.gov/emp/tables/educational-attainment.htm).

Exhibit 10 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2018 and December 31, 2020.

**Exhibit 10: Top Skills for *Online Teaching Occupations* in San Diego County<sup>23</sup>**

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> <li>• Teaching</li> <li>• Training Programs</li> <li>• Training Materials</li> <li>• Instructional Design</li> <li>• Scheduling</li> <li>• Project Management</li> <li>• Technical Training</li> <li>• Customer Service</li> <li>• Lesson Planning</li> <li>• Learning Management System</li> <li>• Curriculum Development</li> <li>• Needs Assessment</li> <li>• Sales</li> <li>• Budgeting</li> <li>• Training Activities</li> </ul>	<ul style="list-style-type: none"> <li>• Communication Skills</li> <li>• Teamwork / Collaboration</li> <li>• Writing</li> <li>• Planning</li> <li>• Organizational Skills</li> <li>• Research</li> <li>• Problem Solving</li> <li>• English</li> <li>• Creativity</li> <li>• Detail-Oriented</li> <li>• Written Communication</li> <li>• Physical Abilities</li> <li>• Computer Literacy</li> <li>• Presentation Skills</li> <li>• Spanish</li> </ul>	<ul style="list-style-type: none"> <li>• Microsoft Office</li> <li>• Microsoft Excel</li> <li>• Microsoft PowerPoint</li> <li>• Microsoft Word</li> <li>• Adobe Captivate</li> <li>• Adobe Photoshop</li> <li>• Adobe InDesign</li> <li>• Adobe Acrobat</li> <li>• Microsoft SharePoint</li> <li>• Adobe Creative Suite</li> <li>• Salesforce</li> <li>• Word Processing</li> <li>• Microsoft Outlook</li> <li>• Adobe Illustrator</li> <li>• Microsoft Access</li> </ul>

<sup>23</sup> Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

Exhibit 11 lists the top certifications that appeared in online job postings between January 1, 2018 and December 31, 2020.

### **Exhibit 11: Top Certifications for *Online Teaching Occupations* in San Diego County<sup>24</sup>**

#### Top Certifications in Online Job Postings

1. Security Clearance
2. First Aid CPR AED
3. Cross-Cultural Language and Academic Development
4. Certified Teacher
5. CompTIA Security+ Certified
6. IT Infrastructure Library (ITIL) Certification
7. CompTIA CTT+
8. Project Management Certification
9. Microsoft Certified Solutions Associate (MCSA)
10. Administrative Services Credential
11. Basic Life Saving (BLS)
12. Microsoft Certified Trainer (MCT)
13. Teachers of English To Speakers of Other Languages (TESOL)
14. Cisco Certified Network Associate (CCNA)
15. Life Insurance License

Prepared by:

Tina Ngo Bartel, Director ([tngobartel@miracosta.edu](mailto:tngobartel@miracosta.edu))

John Edwards, Research Analyst ([jedwards@miracosta.edu](mailto:jedwards@miracosta.edu))

Priscilla Fernandez, Research Analyst ([pfernandez@miracosta.edu](mailto:pfernandez@miracosta.edu))

San Diego-Imperial Center of Excellence for Labor Market Research



<sup>24</sup> Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

### **Important Disclaimers**

All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. This study examines the most recent data available at the time of the analysis; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and the report findings; however, neither the Centers of Excellence for Labor Market Research (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.

This workforce demand report uses state and federal job projection data that was developed before the economic impact of COVID-19. The COE is monitoring the situation and will provide more information as it becomes available. Please consult with local employers to understand their current employment needs.



## Appendix A: Online Certifications, Estimated Cost, and Provider

The following table lists online certification programs for *Online Teaching Occupations*, and lists the online certification, estimated cost, and provider. Providers with "\*" in the "Estimated Cost" column have no accessible cost available on the provider's website. This is not an exhaustive list of all online certification programs available, but is meant to show a sample of offerings.

Online Certifications	Estimated Cost	Provider
<a href="#">Certificate in Online Teaching and Design</a>	*	Online Network of Educators
<a href="#">Certificate in Online Teaching and Learning</a>	\$5,304	California State University East South Bay
<a href="#">Certificate in Online Teaching Program</a>	\$1,250	National University
<a href="#">Certificate in Virtual Instruction</a>	\$6,200	American College of Education
<a href="#">Designing Virtual Training Certificate</a>	\$1,745	Association for Talent Development
<a href="#">Faculty Preparation: Teaching in Higher Education Online Certificate</a>	\$2,640	Humboldt State University
<a href="#">Master Online Teaching Certificate</a>	\$2,370	University of Illinois Springfield
<a href="#">Post-Master's Certificate in Online Teaching in Higher Education</a>	\$12,740	Walden University
<a href="#">Online Learning Certificate</a>	\$400	Duke University
<a href="#">Online Teaching Certificate Program</a>	*	OLC (Online Learning Consortium) Institute for Professional Development
<a href="#">Online Teaching and Learning Certificate</a>	\$5,376	University of Florida
<a href="#">Teaching Online Certificate</a>	*	Martin Luther College
<a href="#">Teaching Online Certificate</a>	\$1,650	Quality Matters
<a href="#">Teaching Online Certificate</a>	\$1,705	UC San Diego Extension
<a href="#">Technology Integration Certificate</a>	\$4,258	Dominican University of California
<a href="#">Virtual Teacher Specialization</a>	\$399	Coursera