










Early Childhood Education Occupations

Labor Market Analysis: Imperial 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>Proceed with New Program</p> |   |   | <input type="checkbox"/> Bachelor's Degree <input type="checkbox"/> Associate Degree <input type="checkbox"/> Some College or Certificate <input checked="" type="checkbox"/> HS Diploma or Equivalent <input type="checkbox"/> Less than a HS Diploma <input type="checkbox"/> Apprenticeship |
| <p>SUPPORT FOR PROGRAM MODIFICATION?</p>   | <p>NUMBER OF INSTITUTIONS THAT PROVIDE TRAINING</p> <p>MEDIUM</p>  | <p>NUMBER OF ANNUAL JOB OPENINGS</p> <p>HIGH</p>  | |

This brief provides labor market information about *Early Childhood Education Occupations* to assist the San Diego and Imperial Counties Community Colleges with program development and strategic planning. *Early Childhood Education Occupations* include “Childcare Workers,” “Preschool Teachers, Except Special Education,” “Special Education Teachers, Preschool,” and “Teaching Assistants, Preschool, Elementary, Middle, and Secondary School, Except Special Education.” According to available labor market information, *Early Childhood Education Occupations* in Imperial County have a labor market demand of 226 annual job openings (while average demand for a single occupation in Imperial County is 14 annual job openings), and one community college in Imperial County supplies 69 awards for these occupations, suggesting that there is a supply gap in the labor market. Entry-level wages and median wages for these occupations are above the living wage, except for “Childcare Workers.” This brief recommends proceeding with developing a new program or a program modification because 1) a high number of annual job openings exist; 2) a supply gap exists in the region; and 3) entry-level and median earnings are above the living wage for most occupations analyzed. Colleges should note, however, that the percentage of students who complete a related program and earn a living wage is lower than the percentage of students who complete Career Education programs in general across the state.

Introduction

This report provides labor market information in Imperial County for the following occupational codes in the Standard Occupational Classification (SOC)¹ system:

- **Childcare Workers** (SOC 39-9011): Attend to children at schools, businesses, private households, and childcare institutions. Perform a variety of tasks, such as dressing, feeding, bathing, and overseeing play.
- **Preschool Teachers, Except Special Education** (SOC 25-2011): Instruct preschool-aged students, following curricula or lesson plans, in activities designed to promote social, physical, and intellectual growth.
- **Special Education Teachers, Preschool** (SOC 25-2051): Teach academic, social, and life skills to preschool-aged students with learning, emotional, or physical disabilities. Includes teachers who specialize and work with students who are blind or have visual impairments; students who are deaf or have hearing impairments; and students with intellectual disabilities.
- **Teaching Assistants, Preschool, Elementary, Middle, and Secondary School, Except Special Education** (SOC 25-9042): Assist a preschool, elementary, middle, or secondary school teacher with instructional duties. Serve in a position for which a teacher has primary responsibility for the design and implementation of educational programs and services.

For the purpose of this report, these occupations are referred to as *Early Childhood Education Occupations*.

¹ 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, *Early Childhood Education Occupations* are projected to increase by 12 net jobs or one percent (Exhibit 1a). Employers in Imperial County will need to hire 226 workers annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.

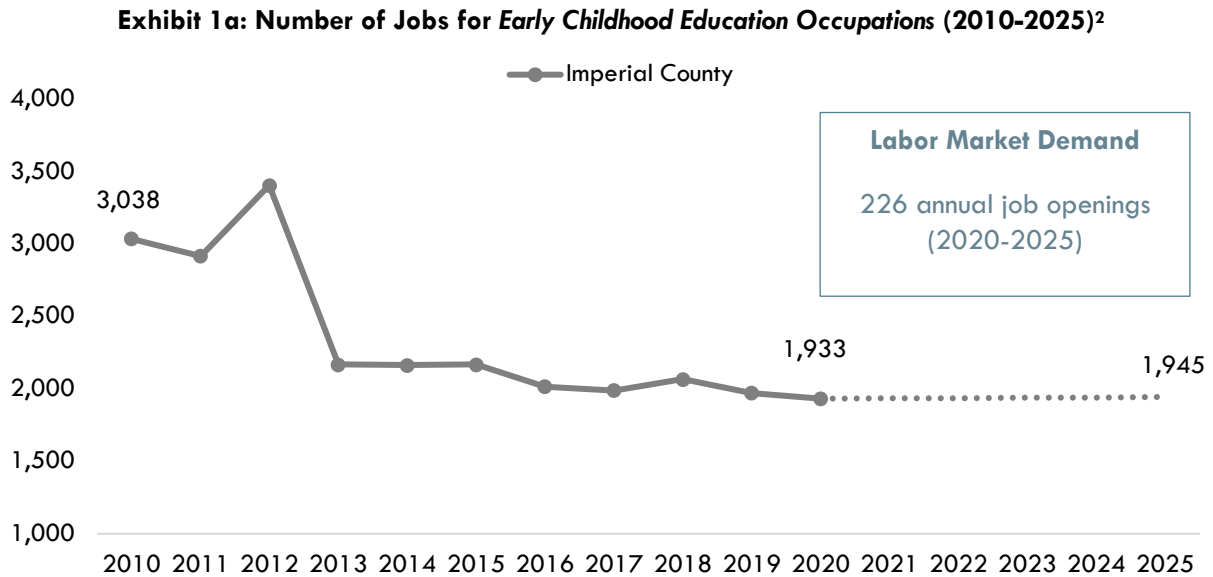


Exhibit 1b disaggregates the projected number of jobs change by occupation. “Childcare Workers” are projected to have the most labor market demand between 2020 and 2025, with 113 annual job openings.

Exhibit 1b: Number of Jobs for Early Childhood Education Occupations in Imperial County (2020-2025)³

| Occupational Title | 2020 Jobs | 2025 Jobs | 2020 - 2025 Net Jobs Change | 2020-2025 % Net Jobs Change | Annual Job Openings (Demand) |
|---|--------------|--------------|-----------------------------|-----------------------------|------------------------------|
| Childcare Workers | 834 | 813 | -21 | -3% | 113 |
| Teaching Assistants, Except Postsecondary and Special Education | 767 | 809 | 42 | 5% | 83 |
| Preschool Teachers, Except Special Education | 322 | 310 | -12 | -4% | 29 |
| Special Education Teachers, Preschool | 10 | 13 | 3 | 21% | 1 |
| Total | 1,933 | 1,945 | 12 | 1% | 226 |

² EMSI 2021.1; QCEW, Non-QCEW, Self-Employed.

³ EMSI 2021.1; QCEW, Non-QCEW, Self-Employed.

Earnings

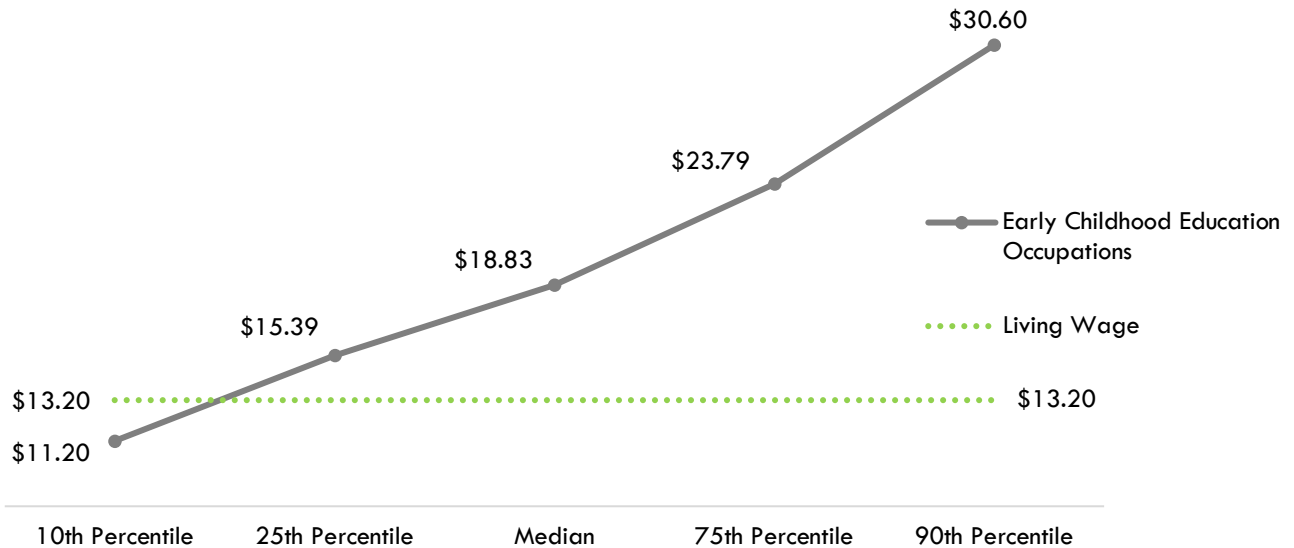
Exhibit 2a disaggregates hourly earnings by occupation. The entry-level hourly earnings for *Early Childhood Education Occupations* range from \$9.68 to \$19.79.

Exhibit 2a: Hourly Earnings for *Early Childhood Education Occupations* in Imperial County⁴

| Occupational Title | Entry-Level Hourly Earnings (25 th Percentile) | Median Hourly Earnings | Experienced Hourly Earnings (75 th Percentile) |
|---|---|------------------------|---|
| Special Education Teachers, Preschool | \$19.79 | \$23.42 | \$32.97 |
| Preschool Teachers, Except Special Education | \$17.70 | \$21.67 | \$25.39 |
| Teaching Assistants, Except Postsecondary and Special Education | \$14.39 | \$17.63 | \$21.49 |
| Childcare Workers | \$9.68 | \$12.59 | \$15.29 |

On average, the entry-level hourly earnings for *Early Childhood Education Occupations* are \$15.39; this is more than the living wage for a household of two adults and two school-age children in Imperial County, which is \$13.20 per hour (Exhibit 2b).⁵

Exhibit 2b: Average Hourly Earnings⁶ for *Early Childhood Education Occupations* in Imperial County⁷



⁴ EMSI 2021.1; QCEW, Non-QCEW, Self-Employed.

⁵ "California Family Needs Calculator (formerly the Self-Sufficiency Standard)," Insight: Center for Community Economic Development, last updated 2018. insightccd.org/2018-self-sufficiency-standard.

⁶ 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.

⁷ 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.⁸ There are **seven** TOP codes and **eight** CIP codes related to *Early Childhood Education Occupations* (Exhibit 3).

Exhibit 3: Related TOP and CIP Codes for *Early Childhood Education Occupations*

| TOP or CIP Code | TOP or CIP Program Title |
|-----------------|---|
| TOP 0802.00 | Educational Aide (Teacher Assistant) |
| TOP 0809.00 | Special Education |
| TOP 1305.00 | Child Development/Early Care and Education |
| TOP 1305.20 | Children with Special Needs |
| TOP 1305.40 | Preschool Age Children |
| TOP 1305.50 | The School Age Child |
| TOP 1305.90 | Infants and Toddlers |
| CIP 13.1001 | Special Education and Teaching, General |
| CIP 13.1013 | Education/Teaching of Individuals with Autism |
| CIP 13.1015 | Education/Teaching of Individuals in Early Childhood Special Education Programs |
| CIP 13.1099 | Special Education and Teaching, Other |
| CIP 13.1210 | Early Childhood Education and Teaching |
| CIP 13.1501 | Teacher Assistant/Aide |
| CIP 19.0706 | Child Development |
| CIP 19.0709 | Child Care Provider/Assistant |

⁸ TOP data comes from the California Community Colleges Chancellor's Office MIS Data Mart (datamart.cccco.edu) and CIP data comes from the Integrated Postsecondary Education Data System (nces.ed.gov/ipeds/use-the-data).

According to TOP data, **one** community college supplies the region with awards for these occupations: **Imperial Valley College**. According to CIP data, **no** non-community-college institution supplies the region with awards (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) |
|-----------------|--|--|--|--|
| 1305.00 | Child Development/Early Care and Education | 58 | 0 | 58 |
| | • Imperial Valley | 58 | 0 | |
| 1305.20 | Children with Special Needs | 5 | 0 | 5 |
| | • Imperial Valley | 5 | 0 | |
| 1305.90 | Infants and Toddlers | 6 | 0 | 6 |
| | • Imperial Valley | 6 | 0 | |
| | | | Total | 69 |

Demand vs. Supply

Comparing labor demand (annual openings) with labor supply⁹ suggests that there is a **supply gap** for these occupations in Imperial County, with **226** annual openings and **69** awards. Comparatively, there are **52,696** annual openings in California and **19,133** awards, suggesting that there is also a supply gap across the state¹⁰ (Exhibit 5).

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

| | Demand (Annual Openings) | Supply (Total Annual Average Supply) | Supply Gap or Oversupply |
|------------|---------------------------------------|---|-------------------------------------|
| Imperial | 226 | 69 | 157 |
| California | 52,696 | 19,133 | 33,563 |

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.

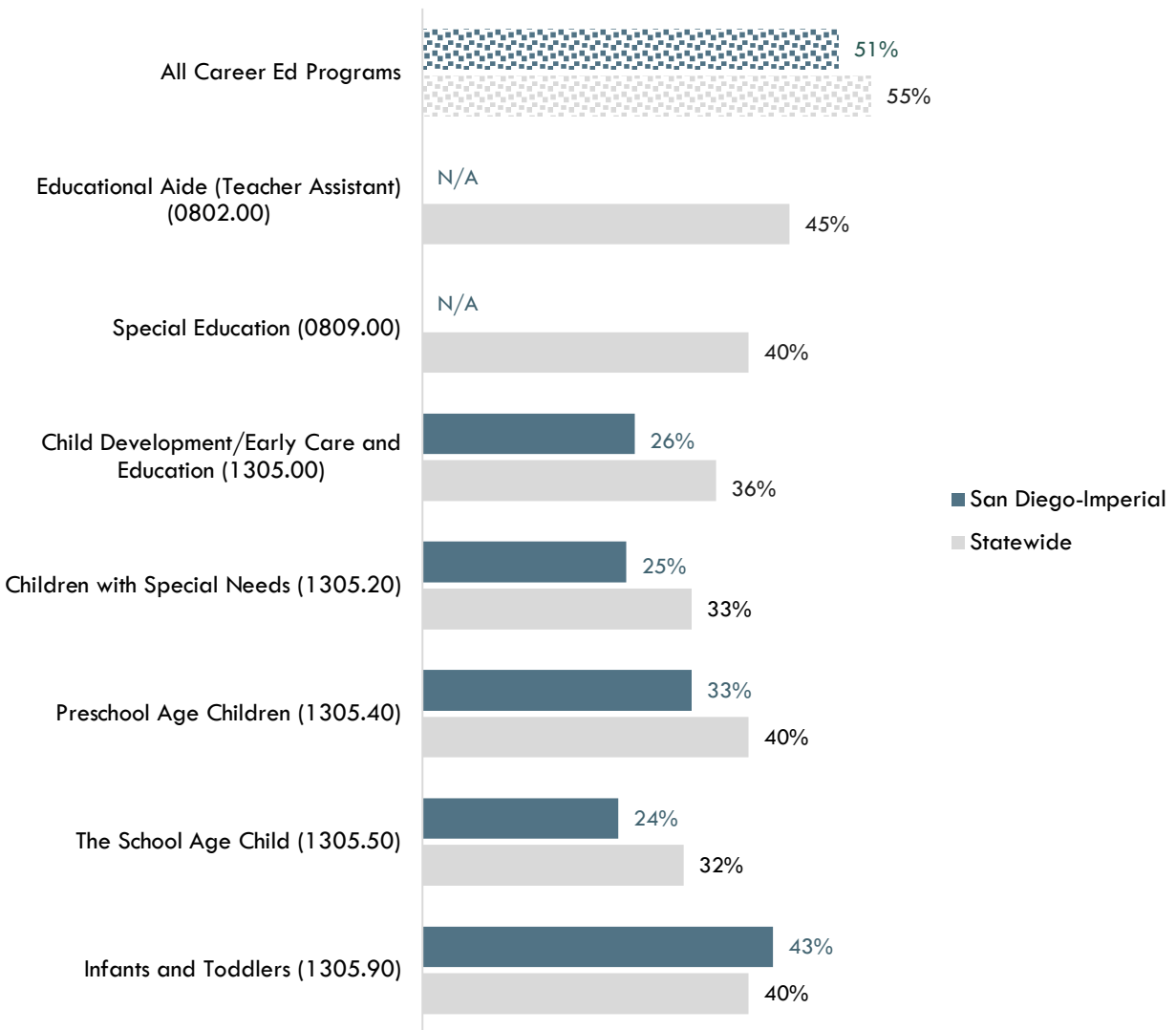
⁹ Labor supply can be found from two different sources: EMSI or the California Community Colleges Chancellor's Office MIS Data Mart. EMSI uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

¹⁰ "Supply and Demand," Centers of Excellence Student Outcomes, coecc.net/Supply-and-Demand.aspx.

Student Outcomes and Regional Comparisons

According to the California Community Colleges LaunchBoard, 24 to 43 percent of students in the San Diego-Imperial region earned a living wage after completing a program related to *Early Childhood Education Occupations*, compared to 32 to 45 percent statewide and 55 percent of students in Career Education programs in general across the state (Exhibit 6a).¹¹

Exhibit 6a: Percentage of Students Who Earned a Living Wage by Program, PY2017-18¹²



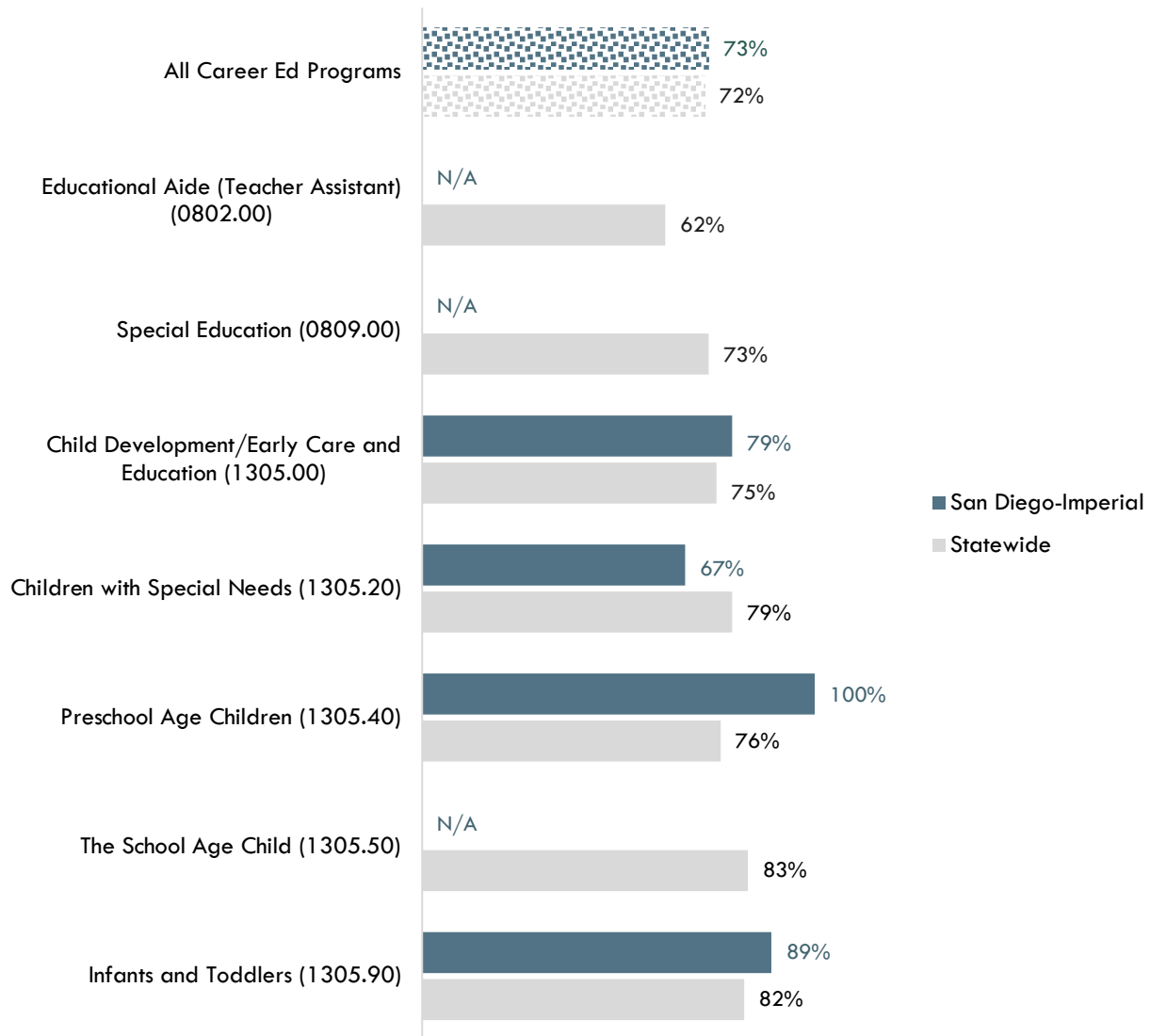
"N/A" indicates insufficient data

¹¹ "California Community Colleges Strong Workforce Program," California Community Colleges, calpassplus.org/LaunchBoard/SWP.aspx.

¹² Among completers and skills builders who exited, the proportion of students who attained a living wage.

According to the California Community Colleges LaunchBoard, 67 to 100 percent of students in the San Diego-Imperial region obtained a job closely related to *Early Childhood Education Occupations*, compared to 62 to 83 percent statewide and 72 percent of students in Career Education programs in general across the state (Exhibit 6b).¹³

Exhibit 6b: Percentage of Students in a Job Closely Related to Field of Study by Program, PY2016-17¹⁴



"N/A" indicates insufficient data

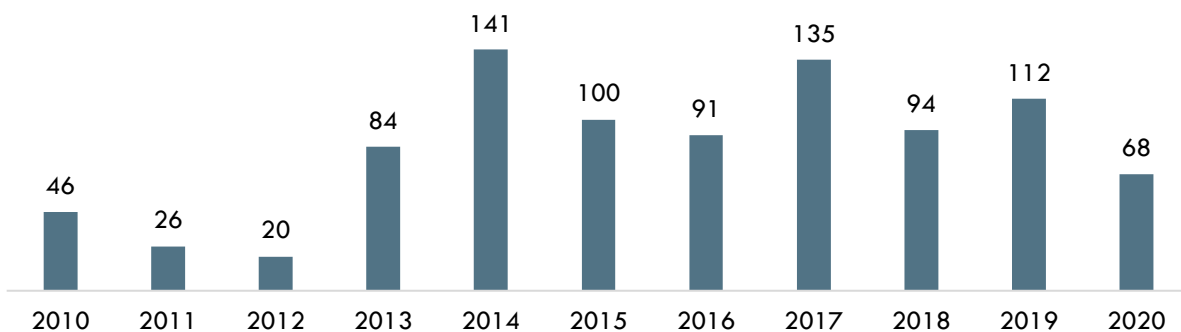
¹³ "California Community Colleges Strong Workforce Program," California Community Colleges, calpassplus.org/LaunchBoard/SWP.aspx.

¹⁴ Most recent year with available data is Program Year 2016-17. Percentage of Students in a Job Closely Related to Field of Study: Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

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 83 online job postings per year for *Early Childhood Education Occupations* in Imperial County (Exhibit 7). Please note that online job postings do **not** equal labor market demand; demand is represented by annual job openings (see Exhibit 1 b). Employers may post a position multiple times for various reasons, such as increasing the pool of applicants, for example.

Exhibit 7: Number of Online Job Postings for *Early Childhood Education Occupations* in Imperial County (2010-2020)¹⁵



Top Employers

Between January 1, 2018 and December 31, 2020, the top five employers in Imperial County for *Early Childhood Education Occupations* were Imperial Unified School District, Imperial County Office of Education, El Centro Elementary School District, San Pasqual Valley Unified School District and Volunteers of America based on online job postings (Exhibit 8).

Exhibit 8: Top Employers for *Early Childhood Education Occupations* in Imperial County¹⁶

| Top Employers | |
|--|--|
| <ul style="list-style-type: none"> Imperial Unified School District Imperial County Office of Education El Centro Elementary School District San Pasqual Valley Unified School District Volunteers of America | <ul style="list-style-type: none"> Meadows Union Elementary Brawley Elementary School District Brawley Union High School District Calipatria Unified Central Union High School District |

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

¹⁶ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

Education, Skills, and Certifications

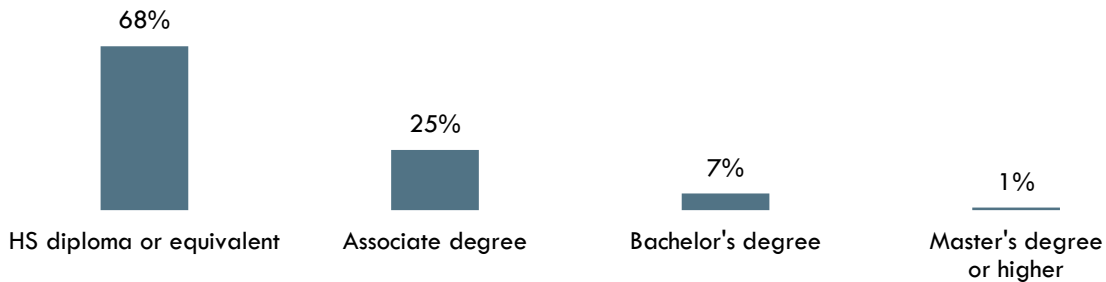
Early Childhood Education Occupations have a national educational attainment ranging from a [high school diploma or equivalent](#) to a [bachelor's degree](#) (Exhibit 9a).

Exhibit 9a: National Educational Attainment for *Early Childhood Education Occupations*¹⁷

| Occupational Title | Typical Entry-Level Education |
|---|-----------------------------------|
| Special Education Teachers, Preschool | Bachelor's degree |
| Preschool Teachers, Except Special Education | Associate degree |
| Teaching Assistants, Except Postsecondary and Special Education | Some college, no degree |
| Childcare Workers | High school diploma or equivalent |

Based on online job postings between January 1, 2018 and December 31, 2020 in Imperial County, employers posted a [high school diploma or vocational training](#) as the educational requirement for *Early Childhood Education Occupations* (Exhibit 9b).¹⁸

Exhibit 9b: Educational Requirements for *Early Childhood Education Occupations* in Imperial County¹⁹



*may not total 100 percent due to rounding

¹⁷ EMSI 2021.1; QCEW, Non-QCEW, Self-Employed.

¹⁸ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

¹⁹ "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.

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 Early Childhood Education Occupations in Imperial County²⁰

| Specialized Skills | Soft Skills | Software Skills |
|---|---|---|
| <ul style="list-style-type: none"> • Teaching • Cardiopulmonary Resuscitation (CPR) • Special Education • Child Development • Lesson Planning • Scheduling • Criminal Justice • Clerical Duties • Special Needs Children • Ventilation • Record Keeping • Lifting Ability • Copying • Toileting • Child Care | <ul style="list-style-type: none"> • English • Bilingual • Physical Abilities • Writing • Communication Skills • Spanish • Problem Solving • Building Effective Relationships • Computer Literacy • Organizational Skills • Planning • Written Communication • Presentation Skills • Creativity • Research | <ul style="list-style-type: none"> • Google Docs |

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 Early Childhood Education Occupations in Imperial County²¹

| Top Certifications in Online Job Postings |
|--|
| <ol style="list-style-type: none"> 1. First Aid CPR AED 2. Child Development Associate (CDA) 3. Registered Behavior Technician 4. DEA Certificate 5. Food Handler Certification |

²⁰ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

²¹ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

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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.