

CENTER OF EXCELLENCE FOR LABOR MARKET RESEARCH

ORANGE COUNTY



ORANGE COUNTY REGIONAL CONSORTIUM

WORKFORCE DEVELOPMENT ALLIANCE



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<u>Supplemental Appendices</u><sup>1</sup> are available as a companion to this report and include the following:

- Appendix D: Education and Human Development Demand Labor Market Data
- Appendix E: Education and Human Development Supply Community College and Non-Community College Awards

Appendix F: Education and Human Development CIP Codes



# **INTRODUCTION**

This report is the fourth in a series of 12 sector profiles that aim to provide a comprehensive analysis of Orange County's occupational landscape. This series dives into each of the 12 community college sectors, offering historical and projected occupational insights while building upon foundational research established through the <u>Orange County Labor Market Overview</u>.<sup>2</sup> This sector profile focuses on Education and Human Development, which the Orange County Region has ranked fourth out of the 12 sectors based on the Orange County Labor Market Overview and corresponding region-wide survey of community colleges and key partners.

The Education and Human Development sector encompasses a diverse array of careers focused on nurturing individual growth, learning, and success. This sector includes traditional occupations such as School Principals –classified under Education Administrators, Kindergarten through Secondary (11-9032)<sup>A</sup>; Education Administrators, Postsecondary (11-9033)<sup>A</sup>; and Instructional Coordinators (25-9031)<sup>A</sup> which often earn high salaries due to their strategic importance and expertise in respective fields. The professionals in these occupations are responsible for overseeing educational programs, managing school operations, and making critical decisions to enhance learning environments.

In addition to these traditional roles, the sector is rich with opportunities for those dedicated to human development, where individuals design and implement programs that promote personal and professional growth. Human development-related occupations such as



Educational, Guidance, and Career Counselors and Advisors (21-1012)<sup>^</sup>; Training and Development Specialists (13-1151)<sup>^</sup>; and Childcare Workers (39-9011) play a crucial role in this sector, providing essential support and guidance to individuals and families. They often collaborate with educators, healthcare providers, and community organizations to develop resources necessary for comprehensive development. These professionals ensure that the infrastructure and administrative functions are in place to support effective teaching and learning environments.

The Education and Human Development sector is comprised of 35 occupations, 29 of which were highlighted in the Orange County Labor Market Overview. These 35 occupations account for 4% of the total number of occupations in the federal Bureau of Labor Statistics (BLS) Standard Occupational Classification (SOC) system and 2% (2) are on the U.S. News & World Report's 100 Best Jobs of 2024 list.<sup>3</sup>

Occupations are denoted throughout this report in italics, with their corresponding SOC code in parentheses, with below middle-skill occupations denoted with an \*, and above middle-skill occupations denoted with a ^ and occupations that are on the U.S. News & World Report's 2024 100 Best Jobs list denoted by #, such as, Marriage and Family Therapists (21-1013)^#.

By examining key aspects such as occupational trends, major employers, skills, program completions, and opportunities, the OC COE seeks to highlight underlying dynamics and intricacies shaping the Education and Human Development sector in Orange County. Community colleges and regional stakeholders can use this information for strategic planning and data-informed decision making to address workforce needs in this sector.

# EDUCATION AND HUMAN DEVELOPMENT OCCUPATIONAL DATA ANALYSIS

# Orange County's Occupational Landscape

The Education and Human Development sector is comprised of 35 occupations that accounted for 123,597 jobs in 2022, representing 7% of all jobs in Orange County. These jobs are expected to grow by 9% through 2027, resulting in 15,274 projected annual openings.

# Education and Human Development Sector Key Facts ·



123,597 Number of Jobs

in 2022



**11,277** 5-Year Change through 2027





15,274 Annual Openings



**35,010** Establishments



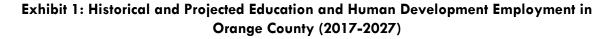
# \$14.00 - \$49.60

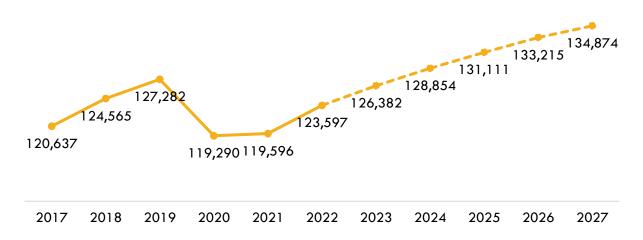
Occupational Entry-Level Wage Range



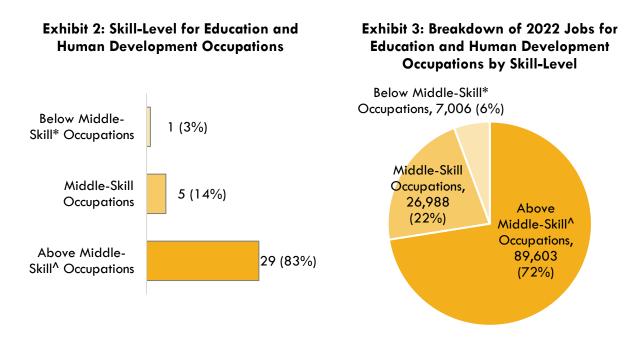
#### **Historical and Projected Employment**

Over a 10-year period, from 2017 projected through 2027, Education and Human Development jobs have been and are projected to continue steadily rising at a consistent pace, except for 2020 due to the COVID-19 pandemic-related economic downturn (Exhibit 1).





The 35 occupations in the Education and Human Development sector include 29 (83%) above middle-skill, 5 (14%) middle-skill, and 1 (3%) below middle-skill occupations (Exhibit 2). In 2022, the 29 above middle-skill occupations accounted for 89,603 jobs, constituting 72% of the total Education and Human Development workforce in Orange County; followed by the 5 middle-skill occupations, with 26,988 jobs, representing 22% of the total workforce (Exhibit 3).



Note: Throughout this report, Below Middle-Skill Occupations are denoted with an \* and Above Middle-Skill Occupations are denoted with a <sup>^</sup>.

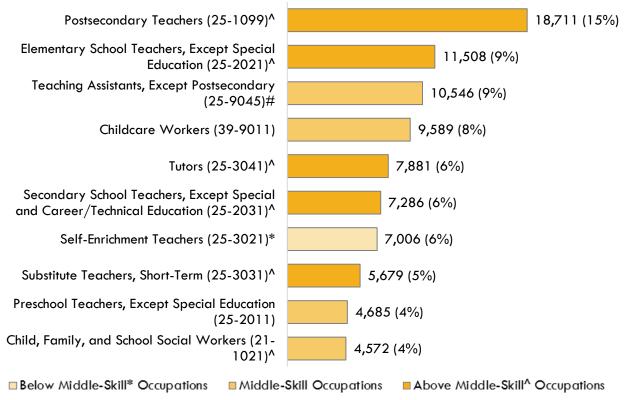
# Trends In Occupational Demand

According to Vanderbilt University, education is undergoing significant changes driven by technological, societal, and economic advancements. Increasing technological integration in classrooms, such as the use of digital textbooks and virtual reality, is enhancing hands-on learning. Personalized learning is becoming more prominent – tailoring educational experiences to individual needs and boosting motivation and retention. Social-emotional learning is gaining importance, focusing on students' emotional well-being and problem-solving abilities. Efforts to expand access to education in marginalized communities and promote informal learning environments are key to fostering equitable and dynamic learning opportunities. The Vanderbilt report also states, "Approaching education policy and practices from the lens of globalization gives educators and students alike the ability to gain a wide range of perspectives regarding other cultures, which leads to increased knowledge and empathy as well as reduced discrimination and racism."<sup>4</sup>

Regionally, the 35 occupations in this sector accounted for nearly 125,000 jobs in 2022 and are estimated to have over 15,000 annual openings through 2027. Jobs in this sector are projected to grow at a faster rate compared to all occupation in Orange County through 2027 and over a third (37%) of the occupations have entry-level wages above the MIT Living Wage for Orange County of \$30.48.<sup>5</sup> Approximately vast majority of Education and Human Development jobs are for above middle-skill occupations.

#### Jobs

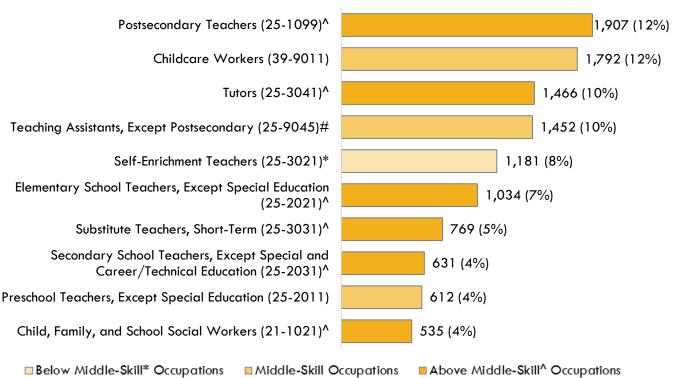
Jobs equate to the number of people currently in an occupation as opposed to unmet demand, which refers to the number of people still needed in an occupation. Comprising 15% of all jobs in the Education and Human Development sector, Postsecondary Teachers (25-1099)<sup>A</sup>, an above middle-skill occupation, ranks first as the sector's occupation with the most jobs. It is followed by Elementary School Teachers, Except Special Education (25-2021)<sup>A</sup> (above middle-skill occupation) and Teaching Assistants, Except Postsecondary (25-9045)<sup>#</sup> (middle-skill occupation), each accounting for 9% of all jobs in the sector. All top 10 Education and Human Development jobs, 2022 are shown in Exhibit 4.



#### Exhibit 4: Top 10 Education and Human Development Jobs, 2022

#### **Annual Openings**

There are more than 15,000 Education and Human Development annual openings, also known as "demand" or "unmet demand", in Orange County. Postsecondary Teachers (25-1099)<sup>^</sup> and Childcare Workers (39-9011) account for the largest percentage of annual openings (12% each) in the sector, followed by Tutors (25-3041)<sup>^</sup> (10%) and Teaching Assistants, Except Postsecondary (25-9045)<sup>#</sup> (10%), as shown along with all Education and Human Development's top 10 annual openings in Exhibit 5.



#### Exhibit 5: Top 10 Annual Openings by Education and Human Development Occupation

Above-middle-skill occupations comprise 65% of all annual openings in the Education and Human Development sector followed by middle-skill occupations (27%). Exhibit 6 shows the annual openings by skill-level.

#### Exhibit 6: Distribution of All Education and Human Development Annual Openings by Skill-Level

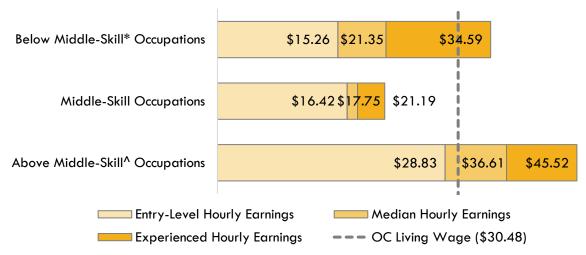


#### Earnings

In Orange County, the MIT Living Wage for one adult is \$30.48 per hour, which is the floor benchmark for wages in the county. Out of the 35 occupations, 37% (13 occupations) have entry-level wages higher than Orange County's living wage. Entry-level wages across all 35 Education and Human Development occupations vary greatly, ranging from \$14.00 to \$49.60 per hour, with Childcare Workers (39-9011) at the lower-end and Education Administrators, Kindergarten through Secondary (11-9032)^ at the upper-end of this range, respectively.

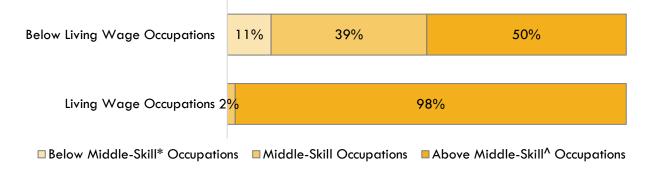
To better understand Education and Human Development sector wages in Orange County, wages are weighted by the number of 2022 jobs. This accounts for wage variation between occupations by normalizing the data based on the number of jobs. It adjusts for situations like a large number of low-wage jobs, a small number of high-wage jobs, or any combination of the two. Exhibit 7 shows the full spectrum of weighted wages (from entry-level to experienced) by skill level for the 35 Education and Human Development occupations, ranging from below middle-skill entry-level wages of \$15.26 to above middle-skill experienced wages of \$45.52.

Exhibit 7: Education and Human Development Occupational Wages by Skill Level, Weighted by 2022 Jobs



Notably, 31% of the annual job openings in this sector have entry-level wages above the living wage; 2% are for middle-skill occupations, 98% are for above middle-skill occupations, and none are for below middle-skill occupations, as shown in Exhibit 8.

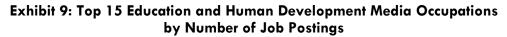
#### Exhibit 8: Comparison of Living Wages by Education and Human Development Annual Openings and Skill Level

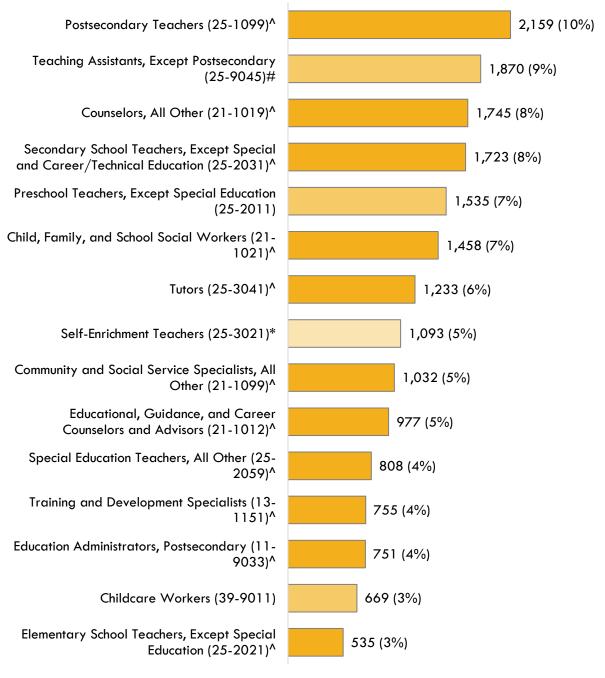


# **JOB POSTINGS INFORMATION**

## Job Postings in Orange County

Over the past 12 months (July 2023 – June 2024), there were 20,598 employer job postings within Orange County for all Education and Human Development occupations. Exhibit 9 shows the 15 occupations with the highest number of job postings, which represents approximately 89% of all job postings within the sector. Most notably, *Postsecondary Teachers (25-1099)*<sup>^</sup> comprise 10% of the job postings.





■ Below Middle-Skill\* Occupations ■ Middle-Skill Occupations ■ Above Middle-Skill^ Occupations

## **Top Employers**

Orange County's Education and Human Development employers are very diverse, as shown in Exhibit 10. Employers with postings for below middle-skill occupations, such as Traveling Music Lessons, Guitar Center Stores, and School of Rock, provide a wide range of jobs related to music, instruments, chess, and voice. Middle-skill employers, such as KinderCare Education, Learning Care Group, Saddleback Valley Unified School District, and Placentia Yorba Linda Unified, offer job opportunities for childcare teachers, infant/toddler teachers, and transitional kindergarten teachers. Above middle-skill employers, such as University of California, Coast Community College District, California State University, offer lecture and assistant professor positions.

| Below Middle-Skill*  | Middle-Skill   | Above Middle-Skill <sup>^</sup>   |  |  |  |
|--|--|---|--|--|--|
| <ol> <li>North Orange County<br/>Community College District</li> <li>South Orange County<br/>Community College District</li> </ol> | <ol> <li>KinderCare Education</li> <li>Learning Care Group</li> <li>Saddleback Valley Unified<br/>School District</li> </ol> | <ol> <li>University of California</li> <li>Coast Community College<br/>District</li> <li>California State University</li> </ol> |  |  |  |
| 3. Rancho Santiago Community<br>College  | <ol> <li>Childtime Learning Centers</li> <li>Placentia Yorba Linda Unified</li> </ol>  | 4. South Orange County<br>Community College District  |  |  |  |
| <ol> <li>Strategic Kids</li> <li>Traveling Music Lessons</li> <li>Irvine School of Music</li> </ol>                                | <ol> <li>6. Strategic Kids</li> <li>7. Endeavor Schools</li> <li>8. Catalyst Kids</li> </ol>                                 | <ol> <li>North Orange County<br/>Community College District</li> <li>ATX Learning</li> </ol>                                    |  |  |  |
| <ol> <li>Guitar Center Stores</li> <li>School of Rock</li> <li>Sounds of Color Studio</li> </ol>                                   | 9. Guidepost Montessori<br>10. YMCA  | <ol> <li>Swing Education</li> <li>Rancho Santiago Community<br/>College</li> </ol>  |  |  |  |
| 10. Fundamental Chess Academy  |  | <ol> <li>Centria Healthcare</li> <li>Newport Mesa Unified School<br/>District</li> </ol>  |  |  |  |

#### Exhibit 10: Top 10 Education and Human Development Regional Employers with the Most Job Postings by Skill Level

## Top Job Titles

Below middle-skill job titles predominantly encompass jobs that focus on creative, physical, and rote learning. For example. jobs such as Dance Instructors, Music Instructors, Music Teachers, and Piano Teachers involve teaching basic- to intermediate-levels of their respective arts, often emphasizing repetitive practice. Similarly, Art Instructors, Art Teachers, and Fine Arts Instructors guide students through foundational art techniques and creative expression, requiring hands-on skills rather than advanced academic knowledge.

Middle-skill job titles such as Preschool Teachers and Child Care Teachers involve nurturing and educating young children, emphasizing basic educational activities and physical care. For instance, Infant/Toddler Teachers and Infant/Toddler/Preschool Teachers specialize in early developmental stages, guiding children through critical growth milestones. Teachers and Early Childhood Teachers also fall within this category, where the primary focus is on developing essential educational and social skills in young children through structured activities and direct interaction.

Above middle-skill job titles incorporate jobs with a higher degree of technical complexity and require advanced education and/or specialized training (e.g., master's degree and/or teaching credentials). These jobs include Counselors, All Other (21-1019)<sup>^</sup>, Child, Family, and School Social Workers (21-1021)<sup>^</sup>, and Postsecondary Teachers (25-1099)<sup>^</sup>.

Top Education and Human Development job titles by skill level are shown in Exhibit 11.

#### Exhibit 11: Top Education and Human Development Job Titles in Orange County by Skill Level

| Below Middle-Skill *   | Middle-Skill   | Above Middle-Skill <sup>^</sup>  |
|--|--|--|
| <ol> <li>Dance Instructors</li> <li>Music Instructors</li> <li>Music Teachers</li> <li>Piano Teachers</li> <li>Art Instructors</li> <li>Art Teachers</li> <li>Fine Arts Instructors</li> <li>Dance Teachers</li> <li>Chess Instructors</li> <li>Vocal Music Instructors</li> </ol> | <ol> <li>Preschool Teachers</li> <li>Child Care Teachers</li> <li>Nannies</li> <li>Infant/Toddler Teachers</li> <li>Preschool Teacher Assistants</li> <li>Teachers</li> <li>Baby Sitters</li> <li>Assistant Teachers</li> <li>Early Childhood Teachers</li> <li>Infant/Toddler/Preschool<br/>Teachers</li> </ol> | <ol> <li>Behavior Technicians</li> <li>Registered Behavior<br/>Technicians</li> <li>Case Managers</li> <li>Board Certified Behavior<br/>Analysts</li> <li>Special Education Teachers</li> <li>Art Faculties</li> <li>Substitute Teachers</li> <li>Math Tutors</li> <li>Social Workers</li> <li>ABA Behavioral Technicians</li> </ol> |

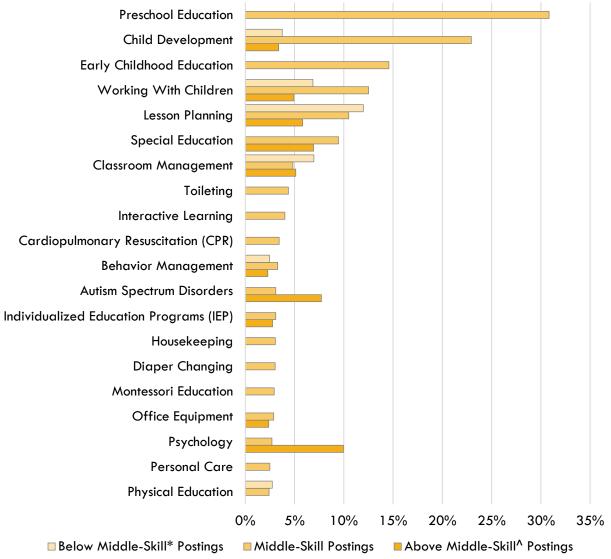


## **Skills in Job Postings**

There are three types of skills listed in job postings: specialized ("technical" or "hard"), common ("soft" or "human"), and computer skills.

#### **Top Specialized Skills**

Among the top 20 specialized skills, only five are common across all three occupational skill levels: child development, working with children, lesson planning, classroom management, and behavior management. Skills such as psychology (10%) and autism spectrum disorders (8%) are predominant in above middle-skill postings, indicating their significance in jobs requiring advanced expertise, such as *Child, Family, and School Social Workers (21-1021)*<sup>A</sup> and *Marriage and Family Therapists (21-1013)*<sup>A</sup>#. Conversely, skills like preschool education (31%) and child development (23%) are prevalent in middle-skill occupations, such as *Preschool Teachers, Except Special Education (25-2011)* and *Teaching Assistants, Except Postsecondary (25-9045)*<sup>#</sup>. Notably, the below middle-skill postings category shows limited data with only six skills: lesson planning (12%), working with children (7%), classroom management (2%). The top 20 specialized skills in Education and Human Development occupations are shown in Exhibit 12.

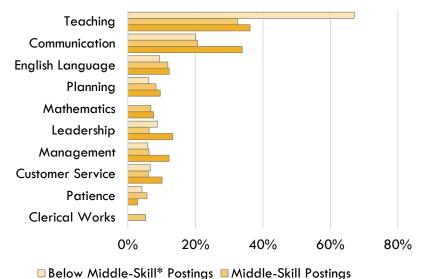


#### Exhibit 12: Top 20 Specialized Skills in Education and Human Development Occupations

#### **Top Common Skills**

Among the top 10 common skills listed in Exhibit 13, there is an emphasis on teaching and communication, which are consistently valued highly across all skill levels. Teaching skills are the most frequently demanded requested skills, peaking at 67% in below middle-skill postings, 32% in middle-skill postings, and 36% in above middle-skill postings, highlighting their crucial role in educational settings. Communication follows, in below middle-skill postings at 20%, middle-skill postings at 21%, and above middle-skill postings at 34%. Above middle-skill postings rank leadership (13%), management (12%), English language (12%), then planning (10%) as their most requested common skills. This trend suggests that higher-level Education and Human Development occupations demand increased supervision and managerial responsibilities.

#### Exhibit 13: Top 10 Common Skills in Education and Human Development Occupations

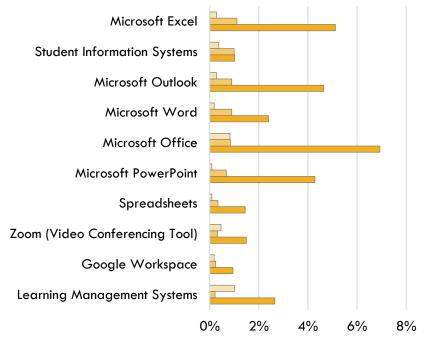


Above Middle-Skill<sup>A</sup> Postings

#### **Top Computer Skills**

Computer skills are not requested nearly as often as the other skills categories within the Education and Human Development sector. Microsoft Office is most frequently mentioned for above middleskill postings (7%), followed by Microsoft Excel and Outlook (5% each). Excel is used for data analysis and administrative tasks, while Outlook facilitates email communication, calendar management, and collaboration. The most requested computer skills in below middle-skill job postings are Microsoft Office (1%) and Learning Management Systems (1%). The top 10 computer skills requested in Education and Human Development occupational job postings are shown in Exhibit 13.

#### Exhibit 14: Top 10 Computer Skills in Education and Human Development Occupation



Below Middle-Skill\* Postings Middle-Skill Postings

Above Middle-Skill<sup>A</sup> Postings

# **KEY OCCUPATIONS DRIVING EMPLOYMENT**

There are 24 Education and Human Development occupations, 69% of the total 35 occupations in the sector that have a significant number of jobs and annual openings and are projected to have high growth through 2027. These 24 occupations are anticipated to drive employment with a projected 16% increase from 2017 to 2027– slightly higher than the growth of all occupations in the Education and Human Development sector, as shown in Exhibit 15.

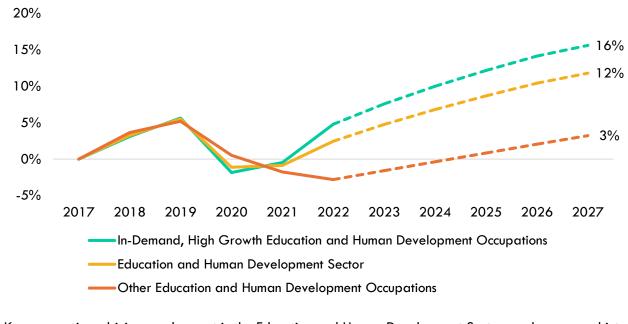


Exhibit 15: Education and Human Development Employment Change, 2017-2027

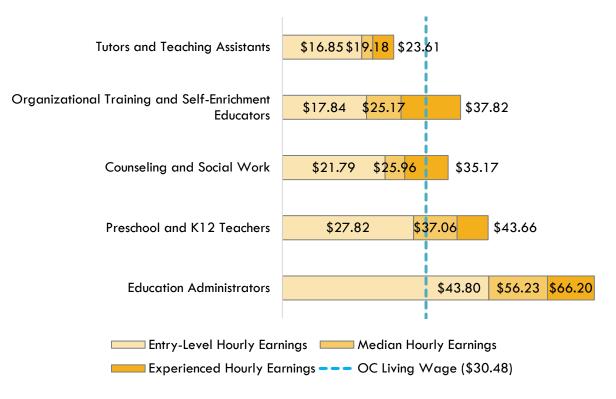
Key occupations driving employment in the Education and Human Development Sector can be grouped into five broad categories:

|                                   | <ul> <li>Educational, Guidance, and Career Counselors and Advisors (21-1012)<sup>^</sup></li> <li>Marriage and Family Therapists (21-1013)<sup>*#</sup></li> </ul> |  |  |  |  |
|-----------------------------------|--|--|--|--|--|
| <b>Counseling and Social Work</b> | <ul> <li>Counselors, All Other (21-1019)<sup>^</sup></li> </ul>  |  |  |  |  |
|                                   | <ul> <li>Child, Family, and School Social Workers (21-1021)<sup>A</sup></li> </ul>   |  |  |  |  |
|                                   | <ul> <li>Community and Social Service Specialists, All Other (21-1099)<sup>A</sup></li> </ul>  |  |  |  |  |
| Education Administrators          | <ul> <li>Education Administrators, Kindergarten through Secondary (11-9032)<sup>^</sup></li> </ul>   |  |  |  |  |
|                                   | <ul> <li>Education Administrators, All Other (11-9039)<sup>^</sup></li> </ul>  |  |  |  |  |
|                                   | Preschool Teachers, Except Special Education (25-2011)   |  |  |  |  |
|                                   | Kindergarten Teachers, Except Special Education (25-2012)  |  |  |  |  |
|                                   | <ul> <li>Elementary School Teachers, Except Special Education (25-2021)<sup>^</sup></li> </ul>   |  |  |  |  |
| Preschool and K12 Teachers        | <ul> <li>Middle School Teachers, Except Special and Career/Technical Education<br/>(25-2022)<sup>^</sup></li> </ul>  |  |  |  |  |
|                                   | <ul> <li>Secondary School Teachers, Except Special and Career/Technical<br/>Education (25-2031)<sup>^</sup></li> </ul>   |  |  |  |  |
|                                   | <ul> <li>Special Education Teachers, Kindergarten and Elementary School<br/>(25-2052)<sup>^</sup></li> </ul>   |  |  |  |  |
|                                   | Special Education Teachers, Secondary School (25-2058) <sup>^</sup>  |  |  |  |  |

|   | <ul> <li>Special Education Teachers, All Other (25-2059)<sup>^</sup></li> </ul>        |  |  |  |
|---|--|--|--|--|
|   | <ul> <li>Substitute Teachers, Short-Term (25-3031)<sup>^</sup></li> </ul>              |  |  |  |
|   | <ul> <li>Teachers and Instructors, All Other (25-3099)<sup>^</sup></li> </ul>          |  |  |  |
| Training and Self-Enrichment                              | <ul> <li>Training and Development Specialists (13-1151)<sup>^</sup></li> </ul>         |  |  |  |
| Educators   | Self-Enrichment Teachers (25-3021)*  |  |  |  |
|   | • Tutors (25-3041) <sup>^</sup>  |  |  |  |
| Tutore Teaching Assistants and                            | <ul> <li>Librarians and Media Collections Specialists (25-4022)<sup>^</sup></li> </ul> |  |  |  |
| Tutors, Teaching Assistants, and<br>Instructional Support | Instructional Coordinators (25-9031) <sup>^</sup>                                      |  |  |  |
|   | Teaching Assistants, Postsecondary (25-9044)   |  |  |  |
|   | <ul> <li>Teaching Assistants, Except Postsecondary (25-9045)<sup>#</sup></li> </ul>    |  |  |  |
| 1   |  |  |  |  |

Wages for these high-growth occupations vary greatly for each group, with the Tutors and Teaching Assistants group of occupations having the lowest entry-level hourly wages (\$16.85) and Education Administrators having the highest (\$43.80). Exhibit 16 shows the wage range for these five groups.

#### Exhibit 16: Wages by Key Education and Human Development Occupation Group, Weighted by 2022 Jobs



These five key occupations groups accounted for 81% of the Education and Human Development sector's online job postings over the past 12 months, as shown in Exhibit 17.

| Key Occupation Group                                      | Number of<br>Postings | % of Total<br>Education and Human<br>Development Postings |
|---|-----------------------|---|
| Preschool and K12 Teachers                                | 6,053                 | 29%   |
| Counseling and Social Work                                | 4,712                 | 23%   |
| Tutors, Teaching Assistants, and<br>Instructional Support | 3,459                 | 17%   |
| Training and Self-Enrichment Educators                    | 1,846                 | 9%  |
| Education Administrators                                  | 532                   | 3%  |
| Total   | 16,602                | 81%   |

#### Exhibit 17: Number of Job Postings by Key Education and Human Development Occupation Group

The skills requested by employers in online job postings for these occupations vary. When considering the top 10 skills for each group, there are 14 skills that overlap for at least two groups, as shown in Exhibit 18. Lesson planning and classroom management – are requested in postings for four groups while special education and child development – are requested in postings for three groups.

| Skill                     | Counseling<br>and Social<br>Work | Education<br>Administrators | Preschool<br>and K12<br>Teachers | Training<br>and Self-<br>Enrichment<br>Educators | Tutors, Teaching<br>Assistants, and<br>Instructional<br>Support |
|---------------------------|----------------------------------|-----------------------------|----------------------------------|--|---|
| Lesson Planning           |                                  | $\checkmark$                | $\checkmark$                     | $\checkmark$                                     | $\boldsymbol{\triangleleft}$                                    |
| Classroom Management      |                                  |                             |                                  |  |   |
| Special Education         |                                  | $\checkmark$                | $\checkmark$                     |  | $\checkmark$  |
| Child Development         |                                  |                             |                                  |  |   |
| Curriculum Development    |                                  |                             |                                  | $\checkmark$                                     |   |
| Office Equipment          |                                  |                             |                                  |  |   |
| Early Childhood Education |                                  |                             | $\square$                        |  |   |
| Project Management        |                                  |                             |                                  |  |   |
| Student Services          |                                  | ${\bf \bigtriangledown}$    | $\square$                        |  |   |
| Psychology                | $\checkmark$                     |                             | $\square$                        |  |   |
| Marketing                 |                                  |                             |                                  | $\checkmark$                                     |   |
| Autism Spectrum Disorders | $\checkmark$                     |                             | $\square$                        |  |   |
| Working With Children     | $\checkmark$                     |                             |                                  |  |   |
| Preschool Education       |                                  |                             |                                  |  |   |
|                           |                                  |                             |                                  |  |   |

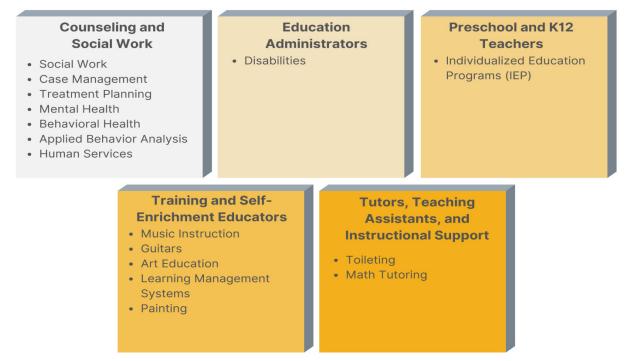
Exhibit 18: Education and Human Development Key Occupations Overlapping Skills Analysis

Additionally, there is significant overlap in skills for three groups: Education Administrators; Preschool and K12 Teachers; and Tutors, Teaching Assistants, and Instructional Support groups, with skills like lesson planning, classroom management, special education, and child development requested in the top 10.

Despite the significant overlap in these four skills, there are still numerous unique skills requested in online job postings across all the groups, as shown in Exhibit 19.

- Counseling and Social Work skills highlight the need for mental and behavioral health providers in schools.
- Education Administrators share almost all of their top 10 skills with other groups but also require knowledge of or experience working with students with disabilities.
- Preschool and K12 Teachers also share several skills with other groups but have one unique skill: knowledge of Individualized Education Programs (IEP).
- Training and Self Enrichment Educators skills show the variety of teaching opportunities outside of a traditional academic classroom, including music, guitar, and painting.
- Tutors, Teaching Assistants, and Instructional Support share several skills with the other groups, with toileting and math tutoring the only two unique skills.

#### Exhibit 19: Education and Human Development Key Occupations Unique Skills Analysis



The following sections highlight trends, specific occupations, and examine emerging topics and areas for each of the five groups of key occupations driving employment in the Education and Human Development sector.

# Counseling and Social Work

The Counseling and Social Work group of key occupations includes five occupations related to counseling, mental health service provision, and social work. The five occupations in this group are Educational, Guidance, and Career Counselors and Advisors (21-1012)<sup>^</sup>, Marriage and Family Therapists (21-1013)<sup>^</sup>#, Counselors, All Other (21-1019)<sup>^</sup>, Child, Family, and School Social Workers (21-1021)<sup>^</sup>, Community and Social Service Specialists, All Other (21-1099)<sup>^</sup>. All five occupations are above middle-skill.

#### **Student Mental Health**

National reports of a youth mental health crisis have shown that students are facing numerous mental health challenges, many of which were compounded by the COVID-19 pandemic. In 2022, the Biden Administration released new funding to expand mental health services in schools and encouraged governors to also increase investments in the area.<sup>6</sup> A Pew Research Center survey showed that 55% of public schools nationwide provided students with mental health assessments, but only 42% provided treatment for mental health disorders.<sup>7</sup>

Across California, schools do not have enough school therapists, social workers, or psychologists to meet



the growing demand for mental health services. In 2021, the Newsom administration allocated \$4.4 billion to create the Children and Youth Behavioral Health Initiative, which has resulted in 50 different grant awards for organizations in Orange County, many of which are K12 schools, to advance youth mental and behavioral health.<sup>89</sup> Despite these initiatives, there continues to be a shortage of mental health staff at schools.<sup>10</sup>

## **Education Administrators**

There are two occupations, both of which are above middle-skill, in the Education Administrators key occupation group: Education Administrators, Kindergarten through Secondary (11-9032)<sup>^</sup> and Education Administrators, All Other (11-9039)<sup>^</sup>.

## Superintendent Turnover and Retention Challenges

According to multiple studies, turnover for school district superintendents increased during the COVID-19 pandemic. Nationally "between March 2020 and September 2022, 246 (49%) of the 500 largest school districts in the country underwent or were currently undergoing changes."<sup>11</sup> In California, superintendent turnover "grew from 11.7% after the 2019-20 school year, to 20.9% after the 2020-21 school year."<sup>12</sup> The increase in turnover stems from the challenges school districts faced during the height of the COVID-19 pandemic. As schools re-opened, new issues such as mask mandates, the politicization of educational topics such as systemic racism and LGBTQ+ history, and more, further exacerbated superintendent turnover.<sup>13</sup>

School districts have increased pay and benefits to attract qualified candidates and retain current superintendents. An analysis from EdSource shows that in the 2022-23 school year there were at least six school districts in California that waived the requirement for superintendents to hold both a teaching credential and an administrative credential.<sup>14</sup> Because these efforts have been implemented so recently, it is too early to tell if they have had an impact on superintendent recruitment and retention.

# Preschool and K12 Teachers

The Preschool and K12 Teachers key occupation group includes 10 teaching occupations, ranging from preschool teachers to secondary school teachers. This group also includes special education teachers, as well as substitute teachers. The 10 occupations are:

- Preschool Teachers, Except Special Education (25-2011)
- Kindergarten Teachers, Except Special Education (25-2012)
- Elementary School Teachers, Except Special Education (25-2021)^
- Middle School Teachers, Except Special and Career/Technical Education (25-2022)<sup>^</sup>
- Secondary School Teachers, Except Special and Career/Technical Education (25-2031)<sup>^</sup>

- Special Education Teachers, Kindergarten and Elementary School (25-2052)<sup>^</sup>
- Special Education Teachers, Secondary School (25-2058)<sup>^</sup>
- Special Education Teachers, All Other (25-2059)<sup>^</sup>
- Substitute Teachers, Short-Term (25-3031)<sup>^</sup>
- Teachers and Instructors, All Other (25-3099)<sup>^</sup>

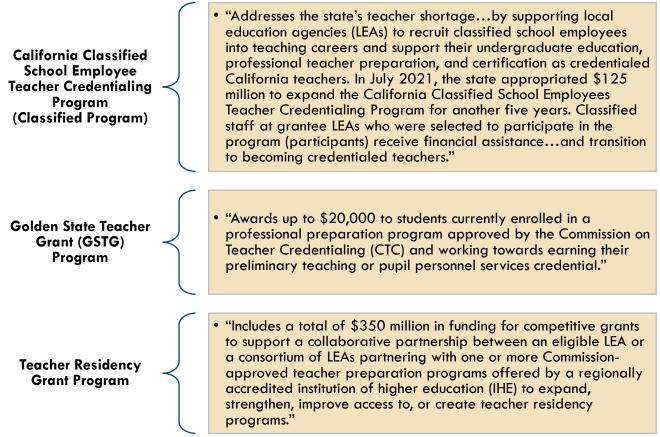
#### **Teacher Shortage**

There have been reports of teacher shortages both nationally and in California for nearly a decade. One study from the Learning Policy Institute found that national demand for teachers increased after the Great Recession, but there was a 35% reduction in national teacher education enrollment during the same period.<sup>15</sup> The COVID-19 pandemic caused additional shortages, with a 26% increase in retirements in the second half of 2020 when compared to the previous year.<sup>16</sup> Results from a 2022 survey of more than 4,600 California teachers showed that 40% of respondents have considered leaving their teaching position, with 57% citing burnout as the primary reason for leaving. An overwhelming majority (88%) said better pay is the "top priority state and local officials should prioritize in order to improve teacher retention."<sup>17</sup> Respondents also said smaller class sizes, stronger discipline polices, better staffing, and more support services as priorities for teacher retention.

According to CalMatters, "since 2015, California has invested \$4.8 billion in teacher recruitment, retention and training efforts, all designed to alleviate a chronic staff shortage that devolved into a crisis during the pandemic."<sup>18</sup> Other efforts include the development of a "Roadmap for Teacher Apprenticeships"<sup>19</sup>; California Volunteers' "#CaliforniansForAll College Corps"<sup>20</sup>; issuing short-term, limited assignment, intern, or emergency credentials<sup>21</sup>, and more. Exhibit 20 highlights three initiatives with significant funding.







#### Transitional Kindergarten Expansion

In 2021, Governor Newsom announced an initiative to expand transitional kindergarten (TK) to all fouryear olds throughout the state, with full implementation, which includes "an estimated 11,000 teachers and 25,000 teacher assistants," needed to expand TK by 2025.<sup>2526</sup> However, staffing issues have caused challenges. Teachers must be fully credentialed and have at least 24 units in early childhood education, childhood development, or a combination of both.<sup>27</sup> The 24-unit requirement "creates an opportunity for paraprofessionals, such as teacher assistants, to consider moving into teaching."<sup>28</sup> Orange County community colleges with early childhood education and child development programs could engage current teachers to help them meet the 24-unit requirement because more TK teachers are needed to meet California's goal of serving more than 300,000 four-year olds through TK by 2025.<sup>29</sup>

## **Training and Self-Enrichment Educators**

There are two occupations in the Training and Self-Enrichment Educators group: Training and Development Specialists (13-1151)<sup>^</sup> and Self-Enrichment Teachers (25-3021)<sup>\*</sup>. These two occupations demonstrate opportunities for teaching and training beyond a traditional classroom setting.

#### Self-Employment for Self-Enrichment Educators

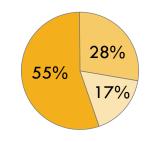
Self-Enrichment Teachers (25-3021) includes a variety of job titles related to instruction for hobbies or recreation, demonstrating wide-range specializations. Examples of these job titles include:

- Art Teacher
- Dancing Instructor
- Driver Trainer
- Flute Teacher
- Knitting Teacher
- Gymnastics Instructor
- Martial Arts Instructor
- Music Teacher

- Public Speaking Teacher
- Snowboard Instructor
- Violin Instructor

Self-Enrichment Teachers (25-3021) are traditionally employed but also include a high percentage of gig workers (28%) and those that are self-employed (17%). Exhibit 21 shows the distribution of employment type for Self-Enrichment Teachers (25-3021) in Orange County. However, the majority (55%) of workers in this occupation are traditionally employed.

#### Exhibit 21: Self-Employment for Self-Enrichment Teachers



Traditionally Employed Gig Work Self-Employed

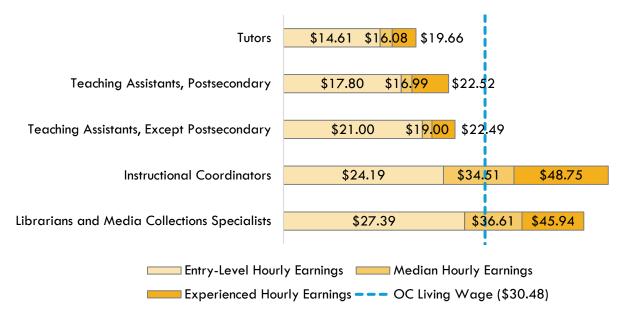
#### Tutors, Teaching Assistants, and Instructional Support

The Tutors, Teaching Assistants, and Instructional Support group includes five occupations: Tutors (25-3041)<sup>^</sup>; Librarians and Media Collections Specialists (25-4022)<sup>^</sup>; Instructional Coordinators (25-9031)<sup>^</sup>; Teaching Assistants, Postsecondary (25-9044); and Teaching Assistants, Except Postsecondary (25-9045)<sup>#</sup>.

#### Low Wages for Paraprofessionals

Wages for education paraprofessionals, which includes teaching assistants, classroom aides, paraeducators, and more, have historically been low. A national study from the National Education Association shows that "education support professionals are earning less than they did 10 years ago, when adjusted for inflation."<sup>30</sup> Exhibit 22 shows the wage range for the five occupations in the Tutors, Teaching Assistants, and Instructional Support group. Notably, entry-level, median, and experienced wages are significantly below the living wage for Tutors (25-3041)<sup>A</sup>; Teaching Assistants, Postsecondary (25-9044); and Teaching Assistants, Except Postsecondary (25-9045)<sup>#</sup>.

#### Exhibit 22: Wages for Tutors, Teaching Assistants, and Instructional Support Group



Though the teacher shortage has received much attention, a paraprofessional shortage is also occurring. Results from a national survey of more than 3,400 paraprofessionals showed that 71% were likely to leave their job in one year due to low pay.<sup>31</sup>

In California, the most recent legislative attempt to increase paraprofessional pay was AB 938 Education Finance: Local Control Funding Formula: Base Grants: Classified and Certificated Staff Salaries in the 2023-24 legislative session. This bill would have raised "educator and classified professional pay in all public schools by 50% over the next 7 years."<sup>32</sup> However, the bill was moved to inactive in September 2023 and there have been no other recent legislative efforts to increase paraprofessional pay.

## Additional Education and Human Development Sector Trends Low Wages for Childcare Workers

Despite the critical role of childcare workers in the early development of children, wages for Childcare Workers (39-9011) have historically been low. In Orange County, wages for Childcare Workers range from \$14 to \$17, which is significantly below the living wage of \$30.48. Workers in these occupations are often women and people of color; in Orange County, 93% of Childcare Workers (39-9011) are women and 55% are Hispanic or Latino, demonstrating the equity issues in low pay for Childcare Workers (39-9011).

One reason for low pay is low public investment – "most advanced countries spend an average of \$14,000 per year for a toddler's childcare, compared with roughly \$500 in the United States."<sup>33</sup> An analysis from the California Budget & Policy Center found that state subsidies and reimbursement rates have not kept up with minimum wage increases and are uneven across California's 58 counties."<sup>34</sup> Lack of public investment also leads to high out-of-pocket costs for childcare, but these high costs do not translate to high wages. A primary reason is that childcare centers have to hire enough workers to maintain a low staff-child ratio and ensure children receive adequate care. Generally, "Day cares have to hire way more people than other low-wage industries, like fast food. In fast food, labor is 25% of the total costs. Estimates for day care - it's...more than 70% of total costs."<sup>35</sup>



# **EDUCATION AND HUMAN DEVELOPMENT SUPPLY**

Orange County's educational institutions provide programs tailored to equip students with skills suited for different levels of occupations within the Education and Human Development sector. The following visuals outline the number of awards conferred by both community colleges and non-community colleges, program observations from COCl<sup>36</sup>, as well as the regional programs and institutions that have conferred the most awards.



1.121

community college awards



non-community college awards



There are 111 unique Education and Human Development programs offered by Orange County community colleges.

- Most programs (62%) are for Certificates of Achievement, followed distantly by Associate (and transfer) degrees (30%) and noncredit awards (8%).
- Orange Coast offers the most Education and Human programs (20), followed by Santa Ana (19) and Saddleback (11).
- The plurality of Education and Human Development programs are listed under the 1305.00 Child Development/Early Care and Education TOP code (36%), followed by 0802.00 Education Aide (Teacher Assistant) (14%) and 1305.40 Preschool Age Children (9%).

# lop Program Awards

## Community College:

Child Development/Early Care and Education: 473 Child and Adolescent Development: 212 Infants and Toddlers: 156 Preschool Age Children: 139 Educational Aide (Teacher Assistant): 81

#### Non-Community College:

Biology/Biological Sciences, General: 1,036 Education, General: 871 Early Childhood and Teaching: 586 Political Science and Government, General: 457 Mathematics, General: 450 Most Awards

#### **Community College:**

Santa Ana: 349 Saddleback: 194 Fullerton: 165 Santiago Canyon: 113 Irvine Valley: 91

#### Non-Community College:

University of California-Irvine: 3,008 California State University-Fullerton: 1,005 University of Massachusetts Global: 1,741 Concordia University-Irvine: 676 Chapman University: 543

# COCI Observations

## **Community College Student Outcomes**

Orange County community college students account for 9% of all Education and Human Development community college students in California. The visuals below show the Strong Workforce Program (SWP) metrics for the Education and Human Development sector in Orange County.<sup>37</sup>





SWP Students (2021-22)



SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status (2021-22)



897 SWP Students Who Transferred to a Four-Year Postsecondary Institution (2019-20)



\$35,532 Median Annual Earnings for SWP Exiting Students (2020-21)



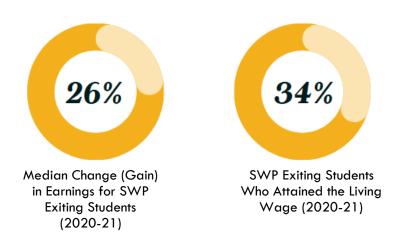
SWP Students Who Earned 9 or More Career Education Units in the District in a single Year (2021-22)



SWP Students Who Completed a Noncredit CTE or Workforce Preparation Course (2021-22)



SWP Students with a Job Closely Related to Their Field of Study (2019-20)



# **DEMOGRAPHICS**

## Ethnicity

Exhibit 23 shows the ethnicity of Orange County community college students enrolled in Education and Human Development programs compared to the overall Orange County population and the three skilllevel occupational groups. Notably, 51% of Education and Human Development students are Hispanic or Latino, which is higher than the population (34%) and workers in above middle-skill occupations (20%). Conversely, 58% of workers in these above middle-skill occupations are white, which is higher than the population (38%) and community college Education and Human Development students (27%).

#### Exhibit 23: Education and Human Development Sector Demographics by Ethnicity



Asian Black or African American Hispanic or Latino White Other Race/Ethnicity Masked or Unknown

#### Skill Level Data

| Below Middle-Skill* Occupations             | 21% 2 <mark>% 19%</mark> | 53% | 5% |
|---|--------------------------|-----|----|
| Middle-Skill Occupations                    | 16%1 <mark>% 41%</mark>  | 37% | 4% |
| Above Middle-Skill <sup>A</sup> Occupations | 17% 2 <mark>% 20%</mark> | 58% | 4% |

# Age Group

Exhibit 24 shows the age of Orange County community college students enrolled in Education and Human Development programs compared to the overall Orange County population and the three skill-level occupational groups. Nearly three-fourths (72%) of workers in the above middle-skill occupations are 35 and older, which is higher than the population (55%) and community college Education and Human Development students (21%). The plurality of middle-skill (32%) and below middle-skill (32%) workers are 50 and older.

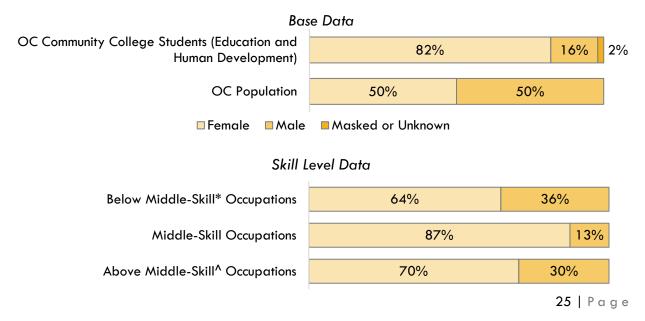
#### Exhibit 24: Education and Human Development Sector Demographics by Age Group

| Bas  | e Data                 |           |           |           |                 |
|--|------------------------|-----------|-----------|-----------|-----------------|
| OC Community College Students (Education and<br>Human Development) | 24%                    | 32%       |           | 23% 15% 6 | <mark>5%</mark> |
| OC Population  | 24%                    | 7% 14%    | 20%       | 35%       |                 |
| □ 19 or less □ 20 to 24 □ 25                                       | to 34 🔲 35             | 5 to 49 🔳 | 50 and ol | der       |                 |
| Skill L  | evel Data              |           |           |           |                 |
| Below Middle-Skill* Occupations                                    | 7% 11%                 | 22%       | 29%       | 32%       |                 |
| Middle-Skill Occupations   | 5% 14%                 | 26%       | 23%       | 32%       |                 |
| Above Middle-Skill <sup>^</sup> Occupations 29                     | % 6 <mark>% 21%</mark> | 34        | %         | 38%       |                 |

#### Sex

Exhibit 25 shows the sex of Orange County community college students enrolled in Education and Human Development programs compared to the overall Orange County population and the three skill-level occupational groups. Though the population is split evenly, 82% of Education and Human Development students and between 64% and 87% of workers in these occupations are women.

#### Exhibit 25: Education and Human Development Sector Demographics by Sex



# **PUBLIC POLICY AND FUNDING OPPORTUNITIES**

#### **Public Policy**

Education policy, though largely mandated by state powers, encapsulates an expansive mélange of legislations, regulations, and funding sources across all levels of government. This section provides a brief overview of foundational and/or current legislative or judicial actions impacting federal and state education policy. Additionally, included is a brief list of potential funding opportunities pertaining to the Education and Human Development sector.

#### Federal Laws and Regulations

At the federal level, the 1950's, 1960's, and 1970's played a pivotal role in the transformation of the American education system and paved the way for many of today's policy and funding structures. Notably, the 1960's included the enactment of three significant legislative acts related to education: the Vocational Education Act (VEA) of 1963, the Elementary and Secondary Education Act (ESEA) of 1965, and the Higher Education Act (HEA) of 1965. While laws directly impacting vocational education date back to the 1900's,<sup>38</sup> the VEA of 1963 was the first of its kind to allocate federal funds towards the construction of vocational schools,<sup>39</sup> and it included provisions on work-study and occupational training while also providing grants for states to use towards sustaining, bettering, and developing vocational-technical programs.<sup>40</sup>

Unlike the VEA, the ESEA and HEA primarily focused on primary, secondary, and post-secondary

education. While these two pieces of legislation comprehensively addressed various educational and funding issues, they included several key provisions: commissioning federal aid programs for individuals pursuing postsecondary education, offering support and services to disadvantaged students in higher education, providing funds for scholarships and textbooks, and giving state agencies grants to improve primary and secondary education.<sup>4142</sup> Following their initial enactment, these laws have undergone various amendments and reauthorizations across the years. With respect to the ESESA, for example, the Every Student Succeeds Act (ESSA) of 2015 reauthorized the ESEA with bipartisan support and included provisions on advancing equity, maintaining and



further investing in high-quality preschool, and mandating "– for the first time – that all students in America be taught to high academic standard that will prepare them to succeed in college and careers."<sup>43</sup>

More recently, judicial actions have impacted millions of Americans with federal student loans. Earlier this year, the country's student loan debt stood at \$1.753 trillion, \$1.620 trillion of which are federal student loans impacting 42.8 million borrowers.<sup>44</sup> In their efforts to address federal student loan concerns and improve conditions for borrowers, the Biden-Harris Administration, in August 2023, launched a new income driven repayment (IDR) plan called the Saving on a Valuable Education (SAVE) plan, which was regarded as "the most affordable repayment plan ever created" and was anticipated to benefit over 20 million student loan borrowers.<sup>45</sup> On August 9<sup>th</sup>, 2024, a federal appeals court issued an injunction, replacing a previous administrative stay, preventing the implementation of parts of the SAVE program.<sup>46</sup> As of this week, the Biden Administration has filed an appeal, formally requesting the Supreme Court intervene in the case.<sup>47</sup> Further details are expected to develop as this case continues through the judiciary.

#### Existing State Laws, Licensing, and Regulations

Although the federal government influences education through guidance, regulation, and funding, states and local entities primarily control how education is financed, taught, and managed within their respective jurisdictions. For example, in California, the state Education Code directs much of this. Currently, California Common Core State Standards, specifications decided upon by the State Board of Education, determine what students are expected to know and able to do per subject area and per grade, from kindergarten through secondary education.<sup>48</sup>

Postsecondary public education in California is comprised of three branches, each of which has their own governing and policy-making structures. Oversight of private postsecondary institutions is provided by the Bureau for Private Postsecondary Education within the Department of Consumer Affairs as mandated by the California Private Postsecondary Education Act of 2009.<sup>49</sup>



Within educational institutions across California, there has been an ongoing teacher shortage straining labor force resources in the sector. Per the California Department of Education, the 2021-22 school year witnessed a 16% decline in new teacher credential issuance and 10,000 teacher vacancies.<sup>50</sup> Tackling the teacher shortage, the state legislature has passed several bills addressing the issue. For example, signed into law on June 29, 2024, and made effective immediately, Senate Bill 153: Education Finance: Education Omnibus Budget Trailer Bill eases access for individuals with at least a bachelor's degree to enter most teacher preparation programs by no longer requiring they verify competency in math, reading, or writing by alternative means.<sup>51 52</sup> While the California Golden State Pathways Program Grant Act of 2022 allocates "funds to school districts to promote careers in high-growth occupations like teaching"<sup>53</sup> so students may "advance seamlessly from high school to college and career and provide the workforce needed for economic growth."<sup>54</sup>

#### Pending State Laws, Licensing, and Regulations

Pending state actions and initiatives also seek to address current teacher workforce shortages, strategic planning, and school infrastructure. In effort to further address the sector's workforce shortage, Senate Bill 1263, if passed, would remove the California Teaching Performance Assessment (CaITPA), one of the exams required to pass prior to receiving teaching credentials in California and which tasks examinees with proving their competency through recordings of instruction and written reflections.<sup>55</sup>

California's Master Plan for Career Education was launched in August 2023 "to promote equitable access to high-paying jobs by addressing structural barriers and strengthening education and training programs".<sup>56</sup> Since its launch, 10 number of convenings to gather stakeholder input have been held around the state. The Master Plan for Career Education is expected to be released for public comment and recommendations by the end of 2024. With respect to infrastructure, on June 30, 2024, the legislature announced a \$10 billion bond measure, which requires voter approval in November. If passed, the bond would finance infrastructural repairs and upgrades at thousands of buildings across K-12 and community college institutions.<sup>57</sup>

# **Funding Opportunities**

Several federal and state financial initiatives are available for further investment into the Education and Human Development sector. While not an exhaustive list, the following provides a sample of available sector-specific funding opportunities:

- **Promise Neighborhoods (PN) Program:** This program, authorized by the Elementary and Secondary Education Act of 1965 as amended and managed under the U.S. Department of Education, aims "to significantly improve the academic and developmental outcomes of children living in the most distressed communities of the United States".<sup>58</sup>
- Transitioning Gang-Involved Youth to Higher Education (TGIY) Program: This program provides funding to organizations working with and assisting gang-involved youth pursue higher education and acquire credentials or certification.<sup>59</sup>
- **Consolidated Application (ConAPP):** Used by the California Department of Education (CDE), this application is used to allocated federal categorical funds from programs, like Title I, Part A, to local agencies and entities (e.g., districts, county offices, and direct funded charter schools) across California.<sup>60</sup>
- School Grants for Teachers, Administrators, Librarians, and/or Nonprofits Serving Students: Several private organizations and businesses provide funding opportunities to help finance education programs, classroom resources, and professional development opportunities. Some of these funding opportunities are the NEA Learning & Leadership Grants, the Dollar General Summer Literacy Grant, and the American Association of Educators Classroom Grant.<sup>61</sup>

# **APPENDIX A: METHODOLOGY**

# Traditional Labor Market Data Methodology

The COE analyzed traditional labor market demand information, which includes job counts, projections, wages, typical education requirements, for the Education and Human Development sector. Traditional labor market demand data was sourced from Lightcast (Datarun 2023.4), a labor market analytics firm that aggregates data from public statistical agencies including the Bureau of Labor Statistics, Census Bureau, and the California Employment Development Department. Living wage data was sourced from the Insight Center California Family Needs Calculator.<sup>62</sup> The traditional labor market demand data analyzed in this report includes:

- 2022 Jobs: the number of jobs by industry and occupation in 2022.
- 2027 Jobs: the projected number of jobs by industry and occupation in 2027. Projections are based on the assumption that past trends will continue into the future, including the assumption that the economy, during the projection period, will be at approximately full employment. Projections do not consider potential recessions or labor shocks, such as natural disasters or pandemics, and are intended to capture structural change in the economy over time.
- Change: the projected change in the number of jobs, expressed as an actual number and a percentage.
- Average Annual Openings (Demand): the projected number of annual job openings. This figure is the sum of job growth and replacement jobs. Job growth is the result of job creation while replacement jobs are the result of retirements and workers leaving the filled, creating the need to hire a replacement.
- Hourly Wages:
  - Entry-level (25<sup>th</sup> percentile): the typical entry-level wages for an occupation; 25% of workers earn less than this amount and 75% earn more.
  - **Median:** the median wages for an occupation; 50% of workers earn less than this amount and 50% earn more.
  - **Experienced (75th percentile):** the typical experienced-level wages for an occupation; 75% of workers earn less than this amount and 25% earn more.
- Typical Entry-Level Education: represents the typical education level needed to enter an occupation.
- Educational Attainment: the percentage of workers employed in an occupation by their highest level of education attained.

Demographic data for the Orange County population comes from the Census Bureau's American Community Survey (5-Year Estimates, 2018-2022). Demographic data for occupations was sourced via IPUMS USA and student demographic data was sourced from the LaunchBoard Community College Pipeline (2020-21 Academic Year).<sup>6364</sup>

The COE also analyzed labor market supply data that is calculated using the number of awards conferred in related training programs at community college and non-community college institutions over the past three years of available data. Community college data is sourced from the California Community College Chancellor's Office Data Mart<sup>65</sup> and includes the years 2020-2023; non-community college data is sourced from the Integrated Postsecondary Education Data System and includes the years 2019-2022.<sup>66</sup>

## Job Postings Analysis Methodology

In addition to traditional labor market information, the COE analyzed real-time labor market information using online job postings data sourced from Lightcast (Datarun 2024.1). The job postings data in this report covers the last 12 months of available data (July 2023 – June 2024). This data is derived from online job postings that are parsed and classified into industry and occupational groups using natural language processing (NLP) to determine the related company, industry, occupation, and other information for each job postings. Online job postings do not equate to labor market demand or replace traditional labor market data. They should only be considered a supplement to traditional LMI.

# **APPENDIX B: SECTOR OCCUPATIONS AND TOP CODES**

| SOC     | Occupation   | TOP<br>Code | Program Name                                    |
|---------|--|-------------|---|
| 25-3021 | Self-Enrichment Teachers*  | 0802.00     | Educational Aide (Teacher Assistant)            |
| 25-2011 | Preschool Teachers, Except Special Education   | 0802.10     | Educational Aide (Teacher Assistant), Bilingual |
| 25-2012 | Kindergarten Teachers, Except Special Education  | 0809.00     | Special Education                               |
| 25-9044 | Teaching Assistants, Postsecondary   | 0835.60     | Coaching^                                       |
| 25-9045 | Teaching Assistants, Except Postsecondary#   | 0836.00     | Recreation^                                     |
| 39-9011 | Childcare Workers  | 0836.10     | Recreation Assistant^                           |
| 11-9031 | Education and Childcare Administrators, Preschool and Daycare^                                     | 0850.10     | Sign Language Interpreting^                     |
| 11-9032 | Education Administrators, Kindergarten through<br>Secondary^                                       | 0860.00     | Educational Technology                          |
| 11-9033 | Education Administrators, Postsecondary^   | 0899.00     | Other Education                                 |
| 11-9039 | Education Administrators, All Other^   | 1305.00     | Child Development/Early Care and Education      |
| 13-1151 | Training and Development Specialists^  | 1305.10     | Child and Adolescent Development                |
| 21-1012 | Educational, Guidance, and Career Counselors and Advisors^   | 1305.20     | Children with Special Needs                     |
| 21-1013 | Marriage and Family Therapists^#   | 1305.40     | Preschool Age Children                          |
| 21-1019 | Counselors, All Other^   | 1305.50     | The School Age Child                            |
| 21-1021 | Child, Family, and School Social Workers^  | 1305.60     | Parenting and Family Education                  |
| 21-1099 | Community and Social Service Specialists, All Other <sup>A</sup>                                   | 1305.70     | Foster and Kinship Care                         |
| 25-1099 | Postsecondary Teachers^  | 1305.80     | Child Development Administration and Management |
| 25-2021 | Elementary School Teachers, Except Special Education^  | 1305.90     | Infants and Toddlers                            |
| 25-2022 | Middle School Teachers, Except Special and<br>Career/Technical Education^                          | 1308.00     | Family Studies                                  |
| 25-2023 | Career/Technical Education Teachers, Middle School^  |             |   |
| 25-2031 | Secondary School Teachers, Except Special and<br>Career/Technical Education^                       |             |   |
| 25-2032 | Career/Technical Education Teachers, Secondary School <sup>A</sup>                                 |             |   |
| 25-2051 | Special Education Teachers, Preschool <sup>A</sup>   |             |   |
| 25-2052 | Special Education Teachers, Kindergarten and Elementary<br>School <sup>A</sup>                     |             |   |
| 25-2057 | Special Education Teachers, Middle School  |             |   |
| 25-2058 | Special Education Teachers, Secondary School   |             |   |
| 25-2059 | Special Education Teachers, All Other^   |             |   |
| 25-3011 | Adult Basic Education, Adult Secondary Education, and<br>English as a Second Language Instructors^ |             |   |
| 25-3031 | Substitute Teachers, Short-Term^   |             |   |
| 25-3041 | Tutors^  |             |   |
| 25-3099 | Teachers and Instructors, All Other <sup>A</sup>   | <b>E</b>    | Below Middle-Skill* Occupations                 |
| 25-4022 | Librarians and Media Collections Specialists^  |             |   |
| 25-9031 | Instructional Coordinators^  | - /         | Widdle-Skill Occupations                        |
| 25-9099 | Educational Instruction and Library Workers, All Other <sup>^</sup>                                | <b>—</b> A  | Above Middle-Skill <sup>^</sup> Occupations     |
| 29-1129 | Therapists, All Other <sup>A</sup>   |             |   |

Note: Four (4) programs are denoted with a caret (<sup>^</sup>). These were removed from the Education and Human Development Sector Profile even though the Chancellor's Office considers them Education and Human Development programs. In the last Community College Chancellor's Office <u>TOP code inventory</u>, Coaching (0835.60) and Sign Language Interpreting (0850.10) appear in Other Sector; Recreation (0836.00) and Recreation Assistant (0836.10) appear in Retail, Hospitality, and Tourism.

# **APPENDIX C: END NOTES**

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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.

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