

Program Endorsement Brief: 0802.00/Educational Aide (Teacher Assistant) & 0860.00/Educational Technology

Educational Studies: STEM: Math Concentration

Educational Studies: STEM: Science Concentration

Educational Studies: STEM: Instructional Technology Support Concentration

Educational Studies: General

Orange County Center of Excellence, December 2019

Summary Analysis

The Orange County Center of Excellence for Labor Market Research (COE) prepared this report to provide Los Angeles/Orange County regional labor market supply and demand data related to one middle-skill occupation: Teacher Assistants (SOC code 25-9041) and one emerging occupation: Tutors (SOC code 25-3099.02). Because Tutors is an emerging occupation, traditional labor market information for this occupation is grouped under the broader Teacher and Instructors, All Other (SOC code 25-3099) occupation, which includes several emerging occupations. Therefore, the number of annual job openings for Tutors is overstated in this report. Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.¹ This report is intended to help determine whether there is demand in the local labor market that is not being met by the supply from community college programs that align with relevant occupations.

Based on the available data there appears to be a supply gap for these educational aide occupations in the region. However, the entry-level wages for these occupations are significantly lower than the counties' living wages. Though entry-level wages for these occupations are low, these occupations can serve as pathway occupations to in-demand teaching occupations, such as Elementary School Teachers, that have entry-level wages above the living wage and require additional education and credentials. **Therefore, the COE cautiously endorses this proposed program for the following reasons:**

Demand:

- Over the next five years, there is projected to be **9,860 jobs available annually** in the region due to new job growth and replacements, **which is more than the 47 awards conferred annually** by educational institutions in the region.
 - However, the Teachers and Instructors, All Other (25-3099) SOC code includes a variety of emerging occupations, including tutors. Since the SOC code does not solely represent tutors, **the number of annual job openings is overstated for tutors.**
- The national-level educational attainment data indicates **between 27.4% and 41.1% of workers in the field have completed some college or an associate degree.**

¹ The COE classifies middle-skill jobs as the following:

- All occupations that require an educational requirement of some college, associate degree or apprenticeship;
- All occupations that require a bachelor's degree, but also have more than one-third of their existing labor force with an educational attainment of some college or associate degree; or
- All occupations that require a high school diploma or equivalent or no formal education, but also require short- to long-term on-the-job training where multiple community colleges have existing programs.

- However, the **typical entry-level hourly wages** for educational aide occupations throughout the region are between **\$12.86 and \$14.20, which are significantly lower than the California Family Needs Calculator** (living wage) hourly wage for one adult in the region (\$15.04 in Los Angeles County and \$17.36 in Orange County)².
- **Median wages for educational aide occupations throughout the region are between \$17.36 and \$17.68**, which are at or above the California Family Needs Calculator hourly wage estimate for both counties.
- Over the past 12 months, there were **8,767 online job postings related to these educational aide occupations**. Of those, 29% (2,568) were for positions related to STEM subjects.

Supply:

- **There are 5 educational institutions in the region, all of which are community colleges**, who offer programs related to educational aides, conferring an average of **47 awards annually** between 2015 and 2018.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for these occupations. In Los Angeles/Orange County, the number of jobs related to educational aides is projected to increase by 6% through 2023. There will be more than 9,800 job openings per year through 2023 due to job growth and replacements. It is important to note that the Teachers and Instructors, All Other (25-3099) SOC code includes a variety of emerging occupations, including tutors, adult basic education instructor, and learning services coordinator. Since the SOC code does not solely represent tutors, the data in Exhibit 1 is overstated for tutors.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties³

| Geography | 2018 Jobs | 2023 Jobs | 2018-2023 Change | 2018-2023 % Change | Annual Openings |
|--------------|---------------|---------------|------------------|--------------------|-----------------|
| Los Angeles | 64,203 | 67,343 | 3,140 | 5% | 7,384 |
| Orange | 20,323 | 21,847 | 1,524 | 7% | 2,476 |
| Total | 84,527 | 89,190 | 4,663 | 6% | 9,860 |

Wages— Typical entry-level hourly wages for these educational aide occupations throughout the region are between \$12.45 and \$14.40, respectively.⁴ Entry-level wages for this occupation are significantly lower than the California Family Needs Calculator hourly wage for one adult in the region (\$15.04 in Los Angeles County and \$17.36 in Orange County). Experienced workers can expect to earn between \$21.08 and \$30.87. Regional average wages are above the average statewide wage of \$19.31 for these occupations. Wage information, by county, is included in Appendix A with wages below each county’s respective living wage highlighted in yellow.

² Living wage data was pulled from California Family Needs Calculator on 12/13/19. For more information, visit the California Family Needs Calculator website: <https://insightcced.org/2018-family-needs-calculator/>.

³ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

⁴ Entry-level wage is defined as the twenty-fifth percentile hourly wage. Wages for experienced workers are defined as the seventy-fifth percentile hourly wage.

Job Postings— There were 8,767 online job postings related to these occupations listed in the region over the past 12 months. The highest number of job postings were for SAT tutor, instructional assistant, instructional aide, and teacher’s assistant. The top specialized skills were teaching, tutoring, special education, child development, CPR, and chemistry. The top three employers, by number of job postings, in the region were Varsity Tutors, Superprof, and Saddleback Valley Unified. Of the 8,767 online job postings, 36% listed a minimum education requirement.

Of the 8,767 online job postings, 2,568 were related to STEM positions. The highest number of STEM job postings were for SAT tutor, instructional assistant, chemistry tutor, math tutor, and physics tutor. The top specialized skills were teaching, tutoring, chemistry, physics, and special education. The top three employers, by number of job postings, in the region were Varsity Tutors, Superprof, and Saddleback Valley Unified. Of the 2,568 STEM postings, 50% listed a minimum education requirement.

Educational Attainment—The Bureau of Labor Statistics (BLS) lists some college, no degree as the typical entry-level education for Teacher Assistants and a bachelor’s degree for Teachers and Instructors, All Other. The national-level educational attainment data indicates between 27.4% and 41.1% of workers in the field have completed some college or an associate degree. Of the 36% of job postings listing a minimum education requirement in Los Angeles/Orange County, 81% (2,533) requested a high school diploma or vocational training and 19% (586) requested an associate degree.

Community College Supply—Exhibit 2, on the following page, shows the three-year average number of awards conferred by community colleges in the related TOP codes: Educational Aide (Teacher Assistant) (0802.00) and Educational Technology (0806.00). Cumulatively, the five community colleges in the region with educational aide and technology programs have conferred an average of 47 awards annually over the past three years. The college with the most completions was Mt. San Antonio. Over the past 12 months, there were two other related program recommendation requests from regional community colleges. Between 2013 and 2016, there were zero non-community college institutions that conferred awards in related training programs.

Exhibit 2: Regional community college awards (certificates and degrees), 2015-2018

| TOP Code | Program | College | 2015-16 Awards | 2016-17 Awards | 2017-18 Awards | 3-Year Award Average |
|----------|--------------------------------------|-------------------------|----------------|----------------|----------------|----------------------|
| 0802.00 | Educational Aide (Teacher Assistant) | Mt. San Antonio | 24 | 28 | 23 | 25 |
| | | LA Total | 24 | 28 | 23 | 25 |
| | | Fullerton | 2 | 11 | 7 | 7 |
| | | Santa Ana | 3 | 2 | 31 | 12 |
| | | Santiago Canyon | | 4 | 4 | 4 |
| | | OC Total | 5 | 17 | 42 | 21 |
| | | Subtotal/Average | 29 | 45 | 65 | 46 |
| 0860.00 | Educational Technology | Cerritos | - | 1 | - | 1 |
| | | Subtotal/Average | - | 1 | - | 1 |
| | | Total/Average | 29 | 46 | 65 | 47 |

Appendix A: Occupational demand and wage data by county

Exhibit 3. Los Angeles County

| Occupation (SOC) | 2018 Jobs | 2023 Jobs | 5-Yr Change | 5-Yr % Change | Annual Openings | Entry-Level Hourly Earnings (25 th Percentile) | Median Hourly Earnings | Experienced Hourly Earnings (75 th Percentile) |
|---|---------------|---------------|--------------|---------------|-----------------|---|------------------------|---|
| Teachers and Instructors, All Other (25-3099) | 19,894 | 20,949 | 1,055 | 5% | 2,407 | \$13.02 | \$17.91 | \$31.99 |
| Teacher Assistants (25-9041) | 44,310 | 46,394 | 2,084 | 5% | 4,977 | \$14.15 | \$17.27 | \$20.68 |
| Total | 64,203 | 67,343 | 3,140 | 5% | 7,384 | | | |

Exhibit 4. Orange County

| Occupation (SOC) | 2018 Jobs | 2023 Jobs | 5-Yr Change | 5-Yr % Change | Annual Openings | Entry-Level Hourly Earnings (25 th Percentile) | Median Hourly Earnings | Experienced Hourly Earnings (75 th Percentile) |
|---|---------------|---------------|--------------|---------------|-----------------|---|------------------------|---|
| Teachers and Instructors, All Other (25-3099) | 7,517 | 8,290 | 773 | 10% | 999 | \$12.45 | \$17.19 | \$30.87 |
| Teacher Assistants (25-9041) | 12,806 | 13,557 | 751 | 6% | 1,478 | \$14.40 | \$17.60 | \$21.08 |
| Total | 20,323 | 21,847 | 1,524 | 7% | 2,476 | | | |

Exhibit 5. Los Angeles and Orange Counties

| Occupation (SOC) | 2018 Jobs | 2023 Jobs | 5-Yr Change | 5-Yr % Change | Annual Openings | Entry-Level Hourly Earnings (25 th Percentile) | Median Hourly Earnings | Experienced Hourly Earnings (75 th Percentile) |
|---|---------------|---------------|--------------|---------------|-----------------|---|------------------------|---|
| Teachers and Instructors, All Other (25-3099) | 27,411 | 29,239 | 1,828 | 7% | 3,405 | \$12.86 | \$17.68 | \$31.55 |
| Teacher Assistants (25-9041) | 57,115 | 59,951 | 2,836 | 5% | 6,455 | \$14.20 | \$17.36 | \$20.77 |
| Total | 84,527 | 89,190 | 4,663 | 6% | 9,860 | | | |

Appendix B: Sources

- O*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (EMSI)
- Bureau of Labor Statistics (BLS)
- Employment Development Department, Labor Market Information Division, OES
- Employment Development Department, Unemployment Insurance Dataset
- Living Insight Center for Community Economic Development
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- California Family Needs Calculator, Insight Center for Community Economic Development
- Chancellor's Office Curriculum Inventory (COCI 2.0)

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