Labor Market Analysis

Child Development - Associate Teacher









Prepared by the Central Valley/Mother Lode Center of Excellence

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<u>COVID-19 Statement:</u> This report includes employment projection data by Emsi. Emsi's projections are modeled on recorded (historical) employment figures and incorporate several underlying assumptions, including the assumption that the economy during the projection period will be at approximately full employment or potential output. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, they may impact the projections. At this time, it is not possible to quantify the impact of COVID-19 on projections of industry and occupational employment. Other measures such as unemployment rates and monthly industry employment estimates will reflect the most recent information on employment and jobs in the state and, in combination with input from local employers, may help validate current and future employment needs as depicted here.

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Summary

Please note the COVID-19 statement on page 2 when considering this report's findings.

This study conducted by the Central Valley/Mother Lode Center of Excellence examines labor market demand, wages, skills, and postsecondary supply for child development associate teacher certificate of achievement. Two occupations related to child development associate teacher certificate of achievement were identified for Porterville College:

- 25-2011, Preschool Teachers, Except Special Education
- 25-9045, Teaching Assistants, Except Postsecondary
- 39-9011, Childcare Workers

Key findings:

- Occupational demand Nearly 28,280 workers were employed in jobs related to child development associate teacher certificate of achievement in 2020 in the South Central Valley/Southern Mother Lode (SCV/SML) subregion. The largest occupation is teaching assistants, except postsecondary with 15,827 workers, it is projected to contract by 1% over the next five years, while still having 1,483 annual openings.
- Wages Preschool teachers, except special education earn the highest entry-level wage, \$13.94/hour in the subregion.
- **Employers** Employers with the most job postings in the subregion are Mammoth Mountain Ski Area, Learning Care, and Fresno Economic Commission.
- Occupational titles The most common occupational title in job postings in the subregion is Preschool Teachers, Except Special Education. The most common job title is Pre-School Teacher.
- **Skills and certifications** The top baseline skill is communication skills, the top specialized skill is teaching, and the top software skill is Microsoft Excel. The most in-demand certification is a first aid cpr aed.
- **Education** A high school diploma or equivalent is typically required for childcare workers. An associate degree is typically required for preschool teacher, except special education. Some college, no degree is typically required for teaching assistants, except postsecondary
- **Supply** Analysis of postsecondary completions shows that on average 2,196 awards were conferred in the Central Valley/Mother Lode region each year.

Based on a comparison of occupational demand and supply, there is an undersupply of 1,376 trained workers in the subregion and an undersupply of 2,465 workers in the region. The Center of Excellence recommends that Porterville College work with the regional directors, the college's advisory board, and local industry in the expansion of programs to address the shortage of child development associate teacher certificate of achievement workers in the region.

Introduction

The Central Valley/Mother Lode Center of Excellence was asked by Porterville College to provide labor market information for child development associate teacher certificate of achievement. The geographical focus for this report is the South Central Valley/Southern Mother Lode (SCV/SML) subregion, but regional demand and supply data has been included for broader applicability and use. The average living wage for a single adult in the SCV/SML subregion is \$11.91/hour.¹ Analysis of the program and occupational data related to child development associate teacher certificate of achievement resulted in the identification of applicable occupations. The Standard Occupational Classification (SOC) System codes and titles used in this report are:

- 25-2011, Preschool Teachers, Except Special Education
- 25-9045, Teaching Assistants, Except Postsecondary
- 39-9011, Childcare Workers

The occupational titles, job descriptions, sample job titles, and knowledge and skills from the Bureau of Labor Statistics and O*NET OnLine are shown below. There was no available O*NET data for Teaching Assistants, Except Postsecondary.

<u>Preschool Teachers, Except Special Education</u>

Job Description: Instruct preschool-aged students, following curricula or lesson plans, in activities designed to promote social, physical, and intellectual growth.

Knowledge: Education and Training, English Language, Public Safety and Security, Customer and Personal Service, Psychology.

Skills: Instructing, Speaking, Active Listening, Learning Strategies, Coordination

Childcare Workers

Job Description: Attend to children at schools, businesses, private households, and childcare institutions. Perform a variety of tasks, such as dressing, feeding, bathing, and overseeing play.

Knowledge: Customer and Personal Service, English Language, Education and Training, Public Safety and Security, Psychology

Skills: Monitoring, Service Orientation, Social Perceptiveness, Active Listening, Coordination

<u>Teaching Assistants, Preschool, Elementary, Middle and Secondary School, Except Special Education</u>

Job Description: 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.

¹ The term "living wage" in Center of Excellence reports is calculated by averaging the self-sufficiency wages from the Insight Center's California Family Needs Calculator for each county in the subregion: https://insightcced.org/tools-metrics/self-sufficiency-standard-tool-for-california/.

Occupational Demand

The SCV/SML subregion employed 28,273 workers in child development associate teacher certificate of achievement occupations in 2020 (Exhibit 1). The largest occupation is teaching assistants, except postsecondary with 15,827 workers, it is projected to contract by 1% over the next five years, while still having 7,413 annual openings.

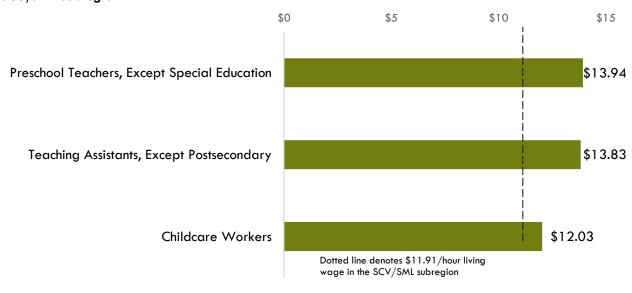
Exhibit 1. Child development associate teacher certificate of achievement employment and occupational projections in the SCV/SML subregion

Occupation	2020 Jobs	2025 Jobs	5-Year Change	5-Year % Change	Annual Openings
Teaching Assistants, Except Postsecondary	15,827	15,671	(156)	(1%)	7,413
Childcare Workers	9,495	9,005	(490)	(5%)	1,308
Preschool Teachers, Except Special Education	2,951	3,176	225	8%	349
TOTAL	28,273	27,852	(421)	(1%)	3,140

Wages

Exhibit 2 shows the entry-level hourly wages of the child development associate teacher certificate of achievement occupations. Preschool teachers, except special education earn the highest entry-level wage, \$13.94/hour in the subregion².

Exhibit 2. Child development associate teacher certificate of achievement entry-level wages in the SCV/SML subregion



² Entry-level wages are derived from the 25th percentile.

Job Postings

There were 591 job postings for the two occupations in the SCV/SML subregion from October 2021 to March 2022.³ The employers with the most job postings are listed in Exhibit 3.

Exhibit 3. Top employers of child development associate teacher certificate of achievement by number of job postings

Employer	Job Postings	% Job Postings
Mammoth Mountain Ski Area	28	7%
Learning Care	12	3%
Fresno Economic Commission	11	3%
Kern Community College District	11	3%
La Petite Academy	11	3%
Community Action Partnership Of San Luis Obispo	10	3%
Fresno County Economic Commission	9	2%
Kindercare	9	2%
Sitter Com	9	2%
Petsitter Com	8	2%

Exhibit 4 shows how job postings for the targeted occupations in the SCV/SML subregion are distributed across three O*NET OnLine occupations. The occupational title Preschool Teachers, Except Special Education is listed in 300 job postings. Note how this occupational title dominates the job posting results. Common job titles in postings include Pre-School Teacher in 57 job postings, Nanny in 31 job postings, and Teacher in 13 job postings.

Exhibit 4. Top occupational titles in job postings for child development associate teacher certificate of achievement

Occupational Title	Job Postings	% of Job Postings
Preschool Teachers, Except Special Education	300	51%
Childcare Workers	172	29%
Nannies	119	20%

Salaries

Exhibit 5 shows the "Market Salaries" for child development associate teacher certificate of achievement occupations. These are calculated by Burning Glass using a machine learning model built off of millions of job postings every year. This accounts for adjustments based on locations, industry, skills, experience, education requirements, among other variables.

³ Other than occupation titles and job titles, the categories below can be counted one or multiple times per job posting, and across several areas in a single posting. For example, a skill can be counted in two different skill types, and an employer can indicate more than one education level.

Exhibit 5. Salaries for child development associate teacher certificate of achievement occupations

Market Salary Percentile	Salary Amount
10th Percentile	\$23,745
25th Percentile	\$26,190
50th Percentile	\$29,630
75th Percentile	\$39,116
90th Percentile	\$52,908

Education

Of the 591 job postings, 304 listed an education level preferred for the positions being filled. Among those, 65% requested high school or vocational training, 53% requested an associate degree, and 34% requested a bachelor's degree (Exhibit 6). A job posting can indicate more than one education level. Hence, the percentages shown in the chart below may total more than 100%.

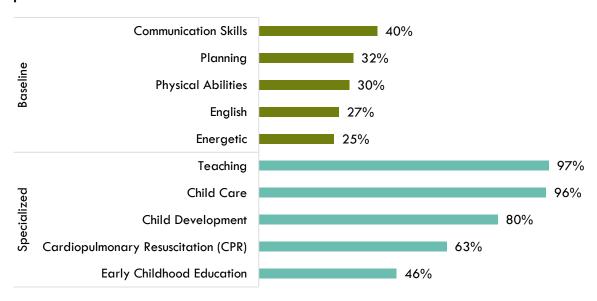
Exhibit 6. Education levels requested in job postings for child development associate teacher certificate of achievement

Education Level	Job Postings	% of Job Postings
High school or vocational training	197	65%
Associate degree	162	53%
Bachelor's degree	102	34%
Master's degree	10	3%

Baseline and Specialized Skills

Exhibit 7 depicts the top baseline and specialized skills for the targeted occupations. The three most important baseline skills are communication skills, 40% of job postings, planning, 32%, and physical abilities, 30%. The top three specialized skills are teaching, 97% of job postings, childcare, 96%, and child development, 80%.

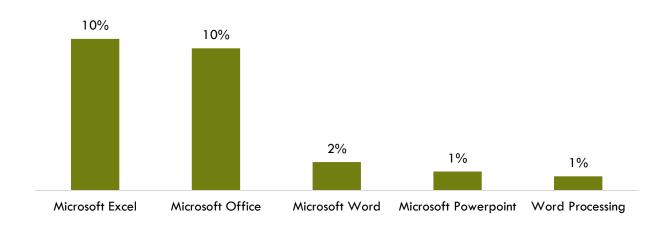
Exhibit 7. In-demand child development associate teacher certificate of achievement baseline and specialized skills



Software Skills

Analysis also included the software skills most in demand by employers. Microsoft Excel and Office were the top two software skills identified in job postings (Exhibit 8).

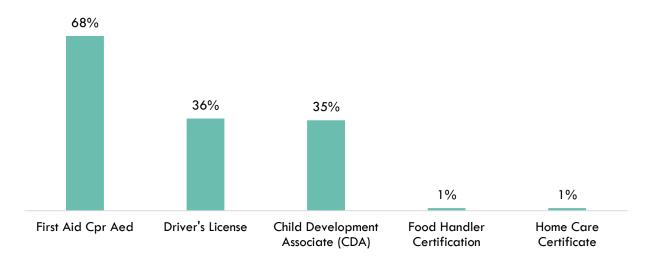
Exhibit 8. In-demand child development associate teacher certificate of achievement software skills



Certifications

Of the 591 job postings, 288 contained certification data. Among those, 68% indicated a need for a first aid cpr aed. The next top certifications are a driver's license and Child Development Associate (CDA) (Exhibit 9).

Exhibit 9. Top child development associate teacher certificate of achievement certifications requested in job postings



Education, Work Experience & Training

A high school diploma or equivalent is typically required for childcare workers. An associate degree is typically required for preschool teacher, except special education. Some college, no degree is typically required for teaching assistants, except postsecondary (Exhibit 10).

Exhibit 10. Education, work experience, training, and Current Population Survey results for child development associate teacher certificate of achievement occupations⁴

Occupation	Typical Entry-level Education	Work Experience Required	Typical On-The-Job Training	CPS
Preschool Teachers, Except Special Education	Associate degree	None	None	31.6%
Childcare Workers	High school diploma or equivalent	None	Short-term	35.1%
Teaching Assistants, Except Postsecondary	Some college, no degree	None	None	38.6%

⁴ "Labor Force Statistics from the Current Population Survey," Bureau of Labor Statistics, https://www.bls.gov/cps/.

Supply

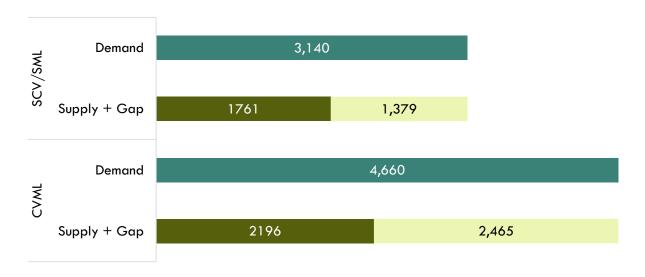
Analysis of program data from the Integrated Postsecondary Education Data System (IPEDS) included the TOP and CIP codes and titles: 080200 - Educational Aide (Teacher Assistant), 13.1210 - Early Childhood Education and Teaching, and 130500 - Child Development/Early Care and Education. Analysis of the last three years of data shows that, on average, 3,336 awards were conferred in the Central Valley/Mother Lode region each year (Exhibit 11).

Exhibit 11. Postsecondary supply for child development associate teacher certificate of achievement occupations in the region

TOP/CIP Code- Title	College	Associate Degree	Associate for Transfer Degree	Certificate 12 < 18 Semester Units	Certificate 16 < 30 Semester Units	Certificate 18 < 30 Semester Units	Certificate 30 < 60 Semester Units	Certificate 6 < 18 Semester Units	Certificate 60+ Semester Units	Certificate 8 < 16 Semester Units	Subtotal
080200 - Educational Aide (Teacher Assistant)	Fresno City	1				1					2
13.1210 - Early Childhood Education and Teaching	Humphreys University-Stockton and Modesto Campuses	9									9
	Bakersfield	30	89				38	272			428
	Cerro Coso	1	11		16	24	18				71
	Clovis	5	18		4	10					38
	Columbia	6	2	4	2	1				2	16
	Fresno City	16	44	10	15	71				5	162
	Merced	25	34				10				69
130500 - Child	Modesto Junior	47	36	104	13	23	16			46	284
Development/Early Care and Education	Porterville	31	12				22				65
	Reedley College	24	38	36	52	71				8	230
	San Joaquin Delta		4		0	41	12				57
	Sequoias	38	52		18	39		292			440
	Taft	21	17	21	8	8	1	20		11	106
	West Hills Coalinga	5	4			4		71			84
	West Hills Lemoore	19	9		2	10		95			134
TOTAL		545	1161	175	145	325	156	750	7	72	3,336

There is an undersupply of 1,374 child development associate teacher certificate of achievement workers in the SCV/SML subregion and an undersupply of 2,465 workers in the region (Exhibit 12).

Exhibit 12. Child development associate teacher certificate of achievement workforce demand (annual job openings), postsecondary supply of students (awards), and additional students needed to fill gap in the SCV/SML subregion and region



Student Outcomes

Exhibit 13 summarizes employment and wage outcomes from the California Community College Chancellor's Cal-PASS Plus LaunchBoard for the TOP code related to child development associate teacher certificate of achievement. Of note, 715 students received a degree or certificate or attained apprenticeship journey status; 834 students transferred; 74% of students obtained a job closely related to their field of study; 19% had a median change in earnings; and 53% of students attained a living wage.

Exhibit 13. Regional metrics for the TOP code related to child development associate teacher certificate of achievement

Metric	Child Development/Early Care and Education	Educational Aide (Teacher Assistant)
	130500	080200
Students Who Got a Degree or Certificate or Attained Apprenticeship Journey Status	715	*
Number of Students Who Transferred	834	112
Job Closely Related to Field of Study	74%	*
Median Change in Earnings	19%	93%
Attained a Living Wage	53%	53%
* denotes data not available.		

Conclusion

The entry-level wages of the two occupations exceed the SCV/SML subregion's average living wage. There were 591 job postings in the past six months for occupations related to child development associate teacher certificate of achievement in the subregion. Analysis of skills and certification requirements in job postings indicates:

- The top baseline skill is communication skills, and the top specialized skill is teaching.
- The top software skill is Microsoft Excel.
- The top certification is a first aid cpr aed.

There is an oversupply of 1,379 trained workers in the SCV/SML subregion and an undersupply of 2,465 trained workers in the region. Even with an oversupply of workers at the subregional level, these programs remain in need. Additionally, this is a high-churn occupation.

Recommendation

Based on these findings, it is recommended that Porterville College work with the regional directors, the college's advisory board, and local industry in the expansion of programs to address the shortage of child development associate teacher certificate of achievement workers in the region.

Appendix A: Methodology & Data Sources

Data Sources

Labor market and educational supply data compiled in this report derive from a variety of sources. Data were drawn from external sources, including the Economic Modeling Specialists, Inc., the California Community Colleges Chancellor's Office Management Information Systems Data Mart and the National Center for Educational Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS). Below is the summary of the data sources found in this study.

Data Type	Source
Labor Market Information/Population Estimates and Projections/Educational Attainment	Economic Modeling Specialists, Intl. (EMSI). EMSI occupational employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level EMSI earnings by industry: economicmodeling.com.
Typical Education Level and On-the-job Training	Bureau of Labor Statistics (BLS) uses a system to assign categories for entry-level education and typical on-the-job training to each occupation for which BLS publishes projections data: https://www.bls.gov/emp/tables/educational-attainment.htm.
Labor Force, Employment and Unemployment Estimates	California Employment Development Department, Labor Market Information Division: labormarketinfo.edd.ca.gov.
Job Posting and Skills Data	Burning Glass: burning-glass.com/.
Additional Education Requirements/ Employer Preferences	The O*NET Job Zone database includes over 900 occupations as well as information on skills, abilities, knowledge, work activities and interests associated with specific occupations: onetonline.org.

Key Terms and Concepts

Annual Job Openings: Annual openings are calculated by dividing the number of years in the projection period by total job openings.

Education Attainment Level: The highest education attainment level of workers age 25 years or older.

Employment Estimate: The total number of workers currently employed.

Employment Projections: Projections of employment are calculated by a proprietary Economic Modeling Specialists, Intl. (EMSI) formula that includes historical employment and economic indicators along with national, state and local trends.

Living Wage: The cost of living in a specific community or region for one adult and no children. The cost increases with the addition of children.

Occupation: An occupation is a grouping of job titles that have a similar set of activities or tasks that employees perform.

Percent Change: Rate of growth or decline in the occupation for the projected period; this does not factor in replacement openings.

Replacements: Estimate of job openings resulting from workers retiring or otherwise permanently leaving an occupation. Workers entering an occupation often need training. These replacement needs, added to job openings due to growth, may be used to assess the minimum number of workers who will need to be trained for an occupation.

Total Job Openings (New + Replacements): Sum of projected growth (new jobs) and replacement needs. When an occupation is expected to lose jobs, or retain the current employment level, number of openings will equal replacements.

Typical Education Requirement: represents the typical education level most workers need to enter an occupation.

Typical On-The-Job Training: indicates the typical on-the-job training needed to attain competency in the skills needed in the occupation.

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