Labor Market Analysis

Early Childhood Education Administration







Prepared by the Central Valley/Mother Lode Center of Excellence

Table of Contents

Summary	
Key findings	3
Introduction	4
Occupational Demand	5
Wages	5
Job Postings	
Salaries	
Education	
Baseline and Specialized Skills	7
Software Skills	8
Certifications	8
Education, Work Experience & Training	8
Supply	
Gap Analysis	9
Conclusion	
Recommendation	10
Appendix A: Methodology & Data Sources	

<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.

If for any reason this document is not accessible or if you have specific needs for readability, please contact us and we will do our utmost to accommodate you with a modified version. To make a request, contact Nora Seronello by phone at (209) 575-6894 or by email seronellon@mjc.edu.

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 early childhood education administration. Two occupations related to early childhood education administration were identified for San Joaquin Delta College:

- 21-2021 Directors, Religious Activities and Education
- 11-9031 Education Administrators, Preschool and Childcare Center/Program

Key findings:

- Occupational demand Nearly 677 workers were employed in jobs related to early childhood education administration in 2019 in the North Central Valley/Northern Mother Lode (NCV/NML) subregion. The largest occupation is directors (religious activities and education) with 398 workers in 2019, a projected growth rate of 3% over the next five years, and 53 annual openings.
- **Wages** Education administrators (preschool and childcare center/program) earn the highest entry-level wages of \$18.29/hour in the subregion and \$16.08/hour in the region.
- **Employers** Employers with the most job postings in the subregion are Stockton Montessori School, Ceres Unified School District, and Child Abuse Prevention Council Capc.
- Occupational titles The most common occupational title in job postings in the subregion is education administrators (preschool and childcare center/program). The most common job title is daycare site director.
- **Skills and certifications** The top baseline skill is writing, the top specialized skill is early childhood education, and the top software skill is Microsoft Excel. The most in-demand certification is a driver's license.
- Education A bachelor's degree is typically required for the two occupations.
- **Supply** Analysis of postsecondary completions in the region shows that on average nine 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 75 trained workers in the subregion and 205 workers in the region. The Center of Excellence recommends that San Joaquin Delta College work with the college's advisory board, and local industry in the expansion or of programs to address the shortage of early childhood education administration workers in the region.

Introduction

The Central Valley/Mother Lode Center of Excellence was asked by San Joaquin Delta College to provide labor market information for early childhood education administration. Review of the Taxonomy of Programs (TOP) and Classification of Instructional Programs (CIP) found the following programs are appropriate for this analysis:

TOP 130580 - Child Development Administration and Management

The geographical focus for this report is the North Central Valley/Northern Mother Lode (NCV/NML) 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 North Central Valley/Northern Mother Lode (NCV/NML) subregion is \$10.27/hour.¹ Analysis of the program and occupational data related to early childhood education administration resulted in the identification of applicable occupations. The Standard Occupational Classification (SOC) System codes and titles used in this report are:

- 21-2021 Directors, Religious Activities and Education
- 11-9031 Education Administrators, Preschool and Childcare Center/Program

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.

Directors, Religious Activities and Education

Job Description: Plan, direct, or coordinate programs designed to promote the religious education or activities of a denominational group. May provide counseling and guidance relative to marital, health, financial, and religious problems.

Knowledge: Philosophy and Theology, Customer and Personal Service, Education and Training, English Language, Administration and Management

Skills: Social Perceptiveness, Speaking, Active Listening, Reading Comprehension, Coordination

Education Administrators, Preschool and Childcare Center/Program

Job Description: Plan, direct, or coordinate the academic and nonacademic activities of preschool and childcare centers or programs.

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

Skills: Active Listening, Coordination, Critical Thinking, Monitoring, Reading Comprehension

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 North Central Valley/Northern Mother Lode subregion employed 677 workers in early childhood education administration occupations in 2019 (Exhibit 1). The largest occupation is directors (religious activities and education) with 398 workers in 2019. This occupation is projected to grow by 3% over the next five years and has the greatest number of projected annual openings, 53.

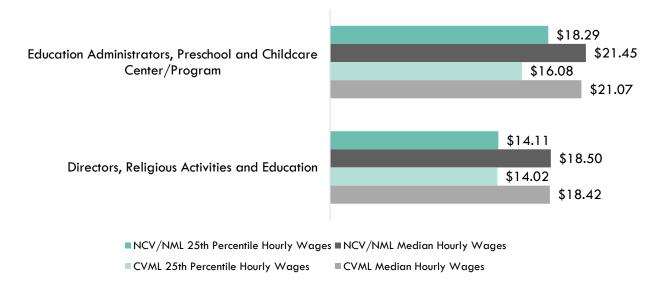
Exhibit 1. Early childhood education administration employment and occupational projections in the NCV/NML subregion

Occupation	2019 Jobs	2024 Jobs	5-Year Change	5-Year % Change	Annual Openings
Directors, Religious Activities and Education	398	408	10	3%	53
Education Administrators, Preschool and Childcare Center/Program	279	274	(5)	(2%)	23
Total	677	682	5	1%	76

√ages

Exhibit 2 compares the entry-level and experienced wages of the early childhood education administration occupations. Education administrators (preschool and childcare center/program) earn the highest entry-level wages of \$18.29/hour in the subregion and \$16.08/hour in the region.

Exhibit 2. Entry-level and experienced wage comparison in the NCV/NML subregion and region



Job Postings

There were 25 job postings for the two occupations in the NCV/NML subregion from November 2019 to April 2020. The employers with the most job postings are listed in Exhibit 3.

Exhibit 3. Top employers of early childhood education administration by number of job postings

Employer	Job Postings	% of Job Postings
Stockton Montessori School	3	13%
Ceres Unified School District	2	9%
Child Abuse Prevention Council Capc	2	9%
Lodi Unified School District	2	9%
Aida Zapata Lomeli	1	4%
Aidas Love Land Daycare	1	4%
Catholic Schools Office	1	4%
Child Abuse Prevention Council	1	4%
Childtime Learning Centers	1	4%
Christian Childcare Center	1	4%

Exhibit 4 shows how job postings for the targeted occupations in the NCV/NML subregion are distributed across two O*NET OnLine occupations. The occupational title education administrators (preschool and childcare center/program) is listed in 23 job postings, followed by directors (religious activities and education), two job postings. Note how postings for education administrators dominate the results. Common job titles in postings include daycare site director, two job postings, education specialist (afterschool), two job postings, program manager (early childhood education), two job postings.

Exhibit 4. Top occupational titles in job postings for early childhood education administration

Occupational Title	Job Postings	% of Job Postings
Education Administrators, Preschool and Childcare		
Center/Program	23	92%
Directors, Religious Activities and Education	2	8%

Salaries

Exhibit 5 shows the "Market Salaries" for early childhood education administration occupations that are calculated by Burning Glass which uses a machine learning model built off of millions of job postings every year, and accounts for adjustments based on locations, industry, skills, experience, education requirements, among other variables.

Exhibit 5. Salaries for early childhood education administration

Market Salary Percentile	Salary Amount
10th Percentile	\$27,752
25th Percentile	\$30,126
50th Percentile	\$38,422
75th Percentile	\$48,626
90th Percentile	\$66,993

Education

Of the 25 job postings, 150 listed an education level preferred for the positions being filled. Of those, 5% requested a bachelor's degree, 4% requested a high school diploma or vocational training, and 3% requested an associate degree (Exhibit 6).

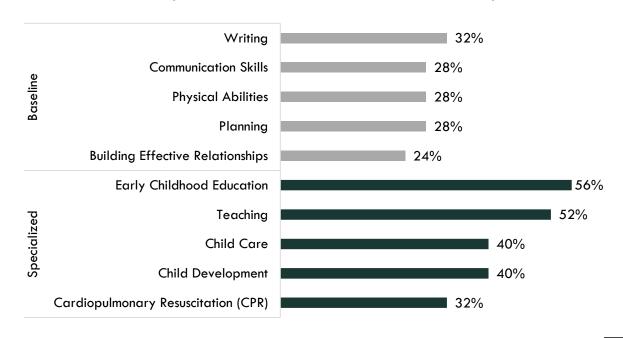
Exhibit 6. Education levels requested in job postings for early childhood education administration

Education level	% of Job Postings
Bachelor's degree	5%
High school or vocational training	4%
Associate degree	3%
Master's degree	2%

Baseline and Specialized Skills

Exhibit 7 depicts the top baseline and specialized skills for the targeted occupations. The three most important baseline skills are writing, 32% of job postings, communication, 28%, and physical abilities, 28%. The top three specialized skills are early childhood education, 56% of job postings, teaching, 52%, and child care, 40%.

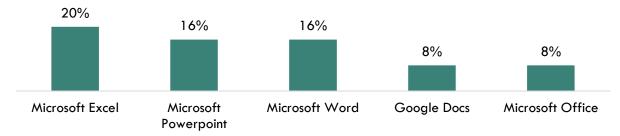
Exhibit 7. In-demand early childhood education administration baseline and specialized skills



Software Skills

Analysis also included the software skills most in demand by employers. Microsoft Excel and Microsoft PowerPoint rank first and second (Exhibit 8).

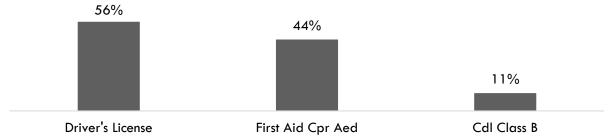
Exhibit 8. In-demand early childhood education administration software skills



Certifications

Of the 25 job postings, only nine contained certification data. Of those, 56% indicated a need for a driver's license. The next top certifications are First Aid/CPR/AED amd CDL Class B (Exhibit 9). (Due to the low number of job postings with certifications listed, the chart below may not be representative of the full sample.)

Exhibit 9. Top early childhood education administration certifications requested in job postings



Education, Work Experience & Training

A bachelor's degree is typically required for the two occupations (Exhibit 10).

Exhibit 10. Education, work experience, training and Current Population Survey results for early childhood education administration occupations²

Occupation	Typical Entry-level Education	Work Experience Required	Typical On-The-Job Training	CPS
Education Administrators, Preschool and Childcare Center/Program	Bachelor's degree	Less than 5 years	None	12.4%
Directors, Religious Activities and Education	Bachelor's degree	Less than 5 years	None	20.3%

² "Labor Force Statistics from the Current Population Survey," Bureau of Labor Statistics, https://www.bls.gov/cps/.

Supply

Analysis of program data from the California Community Colleges Chancellor's Office Data Mart included the TOP code: 130580 - Child Development Administration and Management. Analysis of the last three years of TOP code data shows that, on average, nine awards were conferred in the Central Valley/Mother Lode region each year (Exhibit 11).

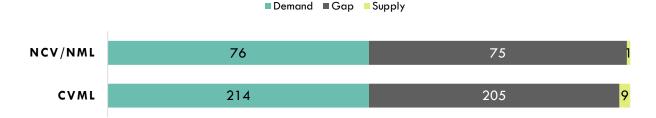
Exhibit 11. Postsecondary supply for early childhood education administration in the region

TOP Title-Code	College	Certificates	Subtotal
100500 (11115)	Cerro Coso	2	2
130580 - Child Development Administration and Management	Modesto	6	6
ana Managemeni	San Joaquin Delta	1	1
Total		8	9

Gap Analysis

There is an undersupply of 75 early childhood education administration workers in the NCV/NML subregion and 205 workers in the region (Exhibit 12).

Exhibit 12. Early childhood education administration workforce annual demand and supply in the NCV/NML 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 early childhood education administration. Across the region, 12 students received a degree/certificate or attained apprenticeship journey status. More than 30% reported a median change in earnings, and 68% attained a living wage.

Exhibit 13. Regional metrics for the TOP code related to early childhood education administration

Metric	Child Development Administration and Management 130580
Students Who Got a Degree or Certificate or Attained Apprenticeship Journey Status	12
Number of Students Who Transferred	10
Job Closely Related to Field of Study	*
Median Change in Earnings	33%
Attained a Living Wage	68%
* denotes data not available.	

Conclusion

The entry-level wages of the two occupations exceed the NCV/NML subregion's average living wage. There were 25 job postings in the past six months for occupations related to early childhood education administration in the subregion. Analysis of skills and certification requirements in job postings indicates:

- The top baseline skill is writing, and the top specialized skill is early childhood education.
- The top software skill is Microsoft Excel.
- The top certification is a driver's license.

There is an undersupply of trained workers, a shortage of 75 in the NCV/NML subregion and 205 in the region.

Recommendation

Based on these findings, it is recommended that San Joaquin Delta College work with the college's advisory board, and local industry in the expansion of programs to address the shortage of early childhood education administration 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.

© 2020 California Community Colleges Chancellor's Office, Centers of Excellence, Economic and Workforce Development Program