Labor Market Analysis

Transitional Kindergarten (TK)



Prepared by Central Valley/Mother Lode Center of Excellence





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<u>COVID-19 Statement:</u> This report includes employment projection data by Lightcast. Lightcast'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

The Central Valley/Mother Lode Center of Excellence developed this report for College of the Sequoias to determine whether there is demand in the local labor market that is not being met by the supply from two-year programs. This report summarizes labor market demand, wages, skills, and postsecondary supply for *Transitional Kindergarten (TK)* occupations, which include:

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

Key Findings

- Occupational Demand Transitional Kindergarten (TK) Occupations have a labor market demand of 3,521 annual job openings in the South Central Valley/Southern Mother Lode (SCV/SML) subregion. Between 2021 and 2026, teaching assistants, except postsecondary are projected to have the most demand with 2,171 annual job openings and a projected growth rate of 17 percent.
- Wages Average entry-level earnings of \$14.15/hour for Transitional Kindergarten (TK)
 Occupations are higher than the living wage in the SCV/SML subregion, which is \$11.91/hour for
 a single adult.¹ Teaching assistants, except postsecondary earn the highest entry-level wage,
 \$14.36/hour.
- Employers and Occupational Titles Employers in the SCV/SML subregion include ATX
 Learning, Community Action Partnership of San Luis Obispo, and Tehachapi Unified School District.
 The most common occupational title in job postings in the subregion is preschool teachers, except special education. The most common job title is nannies.
- **Skills and Certifications** The top baseline skill is communication, the top specialized skill is child development, and the top software skill is Microsoft Excel. The most in-demand certification is a Cardiopulmonary Resuscitation (CPR) Certification.
- **Education** A high school diploma or equivalent is typically required for childcare workers. Some college, no degree is typically required for teaching assistants, except postsecondary. An associate degree is typically required for preschool teachers, except special education.
- Supply and Demand Analysis Based on 280 annual openings (i.e., demand), and 1,598 postsecondary degrees awarded (i.e., supply), an analysis of supply and demand suggests there is an undersupply of 1,923 workers in the SCV/SML subregion. In the CVML region, 2,123 awards were conferred suggesting an undersupply of 3,187 workers.

Recommendation

Based on a comparison of demand and supply, there is an undersupply of trained workers in the SCV/SML subregion and the CVML region. The Center of Excellence recommends that College of the Sequoias work with the regional directors, the college's advisory board, and local industry in the expansion of programs to address the shortage of Transitional Kindergarten (TK) workers.

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/.

Introduction

The Central Valley/Mother Lode Center of Excellence developed this report to provide College of the Sequoias with labor market information for Transitional Kindergarten (TK). 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. Analysis of the program and occupational data related to Transitional Kindergarten (TK) resulted in the identification of applicable occupations, known as *Transitional Kindergarten (TK)* Occupations. The Standard Occupational Classification (SOC) System code and occupational titles used in this report from the Bureau of Labor Statistics and O*NET OnLine are shown below.). There was no data available for Teaching Assistants, Except Postsecondary (SOC 25-9045)

Preschool Teachers, Except Special Education (SOC 25-1011)

- 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 (SOC 39-9011)

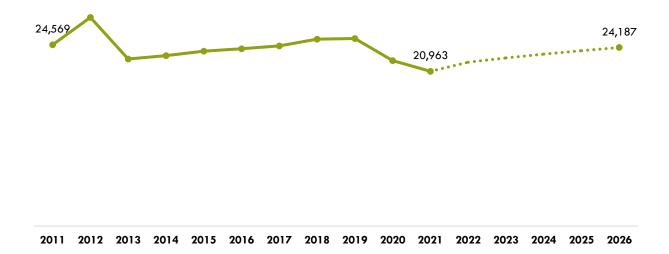
- **Job Description:** Attend to children at schools, businesses, private households, and childcare institutions. Perform a variety of tasks, such as dressing, feeding, bathing, and overseeing play.
- Knowledge: Customer and Personal Service, English Language, Education and Training, Public Safety and Security

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

Occupational Demand

Exhibit 1a shows trends for *Transitional Kindergarten (TK)* Occupations in the SCV/SML subregion. Between 2021 to 2026, the number of jobs for *Transitional Kindergarten (TK)* Occupations is projected to increase by 3,224 jobs, or 15 percent.

Exhibit 1a. Occupational projections for *Transitional Kindergarten (TK)* Occupations in the SCV/SML subregion



Between 2021 to 2026, demand for *Transitional Kindergarten (TK)* Occupations in the SCV/SML subregion is 3,521 annual openings (Exhibit 1b). Teaching assistants, except postsecondary are projected to have the most demand with 2,171 annual job openings and a projected growth rate of 17 percent.

Exhibit 1b. Occupational projections for Transitional Kindergarten (TK) Occupations in the SCV/SML subregion

Occupation	2021 Jobs	2026 Jobs	5-Year Change	5-Year % Change	Annual Openings
Teaching Assistants, Except Postsecondary	13,530	1 <i>5,</i> 792	2,262	17%	2,171
Childcare Workers	4,383	4,765	381	9%	877
Preschool Teachers, Except Special Education	3,050	3,630	581	19%	473
TOTAL	20,963	24,187	3,224	15%	3,521

Wages

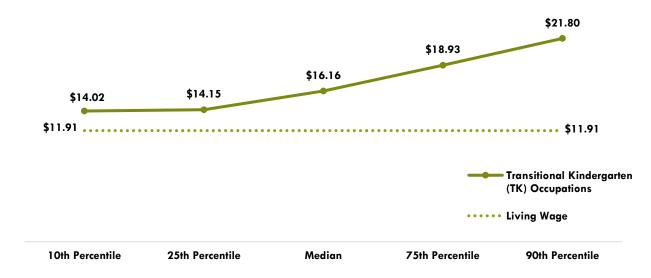
The average living wage for a single adult in the SCV/SML subregion is $$11.91/hour.^2$ Exhibit 2a shows the hourly wages of *Transitional Kindergarten (TK)* Occupations. Teaching assistants, except postsecondary earn the highest entry-level wage, \$14.36/hour in the subregion.³ Please note 10^{th} and 25^{th} percentiles are considered entry-level wages while 75^{th} and 90^{th} are considered experienced wages, either by gained by long-term employment, extra training, etc.

Exhibit 2a. Transitional Kindergarten (TK) Occupations hourly wages in the SCV/SML subregion

Occupation	Pct. 25 Hourly Earnings	Median Hourly Earnings	Pct. 75 Hourly Earnings
Teaching Assistants, Except Postsecondary	\$14.36	\$17.36	\$18.51
Preschool Teachers, Except Special Education	\$14.07	\$16.72	\$20.99
Childcare Workers	\$14.01	\$14.42	\$17.27

Exhibit 2b shows the average hourly wages for *Transitional Kindergarten (TK)* Occupations; the average entry-level wage is more than the average entry-level living wage for the SCV/SML subregion.

Exhibit 2b. Transitional Kindergarten (TK) Occupations average hourly wages in the SCV/SML subregion



² 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/.

³ Entry-level wages are derived from the 25th percentile.

Job Postings

There were 1,218 job postings for *Transitional Kindergarten (TK)* Occupations in the SCV/SML subregion from November 2022 to April 2023.⁴

Top Employers

The top employers with the most job postings are listed in Exhibit 3. The top employers in online job postings were ATX Learning, Community Action Partnership of San Luis Obispo, and Tehachapi Unified School District.

Exhibit 3. Top employers of Transitional Kindergarten (TK) Occupations by number of job postings

Employer
ATX Learning
Community Action Partnership of San Luis Obispo
Tehachapi Unified School District
Right at Home, Fresno
KinderCare
Mammoth Mountain Ski Area
Visalia Unified School District
Stepping Stones
Kern Community College District
Kern High School District

Top Occupational Titles

Exhibit 4 shows the O*NET OnLine occupational titles for *Transitional Kindergarten (TK)* Occupations in the SCV/SML subregion. Common job titles in postings include: Nannies, Baby Sitters, and Special Education Paraprofessionals.

Exhibit 4. Top occupational titles in job postings for Transitional Kindergarten (TK) Occupations

Occupational Title
Preschool Teachers, Except Special Education
Teaching Assistants, Preschool, Elementary, Middle, and Secondary School, Except Special Education
Childcare Workers
Nannies
Teaching Assistants, Special Education
Teaching Assistants, All Other

⁴ 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.

Salaries

Exhibit 5 shows the "Market Salaries" for *Transitional Kindergarten (TK)* Occupations. These are calculated by Lightcast using a machine learning model built from millions of job postings every year. This accounts for adjustments based on location, industry, skills, experience, education, among other variables.

Exhibit 5. Market salaries for Transitional Kindergarten (TK) Occupations

Market Salary	Job Postings
\$31,000-\$34,999	265
\$35,000-\$38,999	199
\$39,000-\$42,999	86
\$43,000-\$46,999	51
\$51,000-\$54,999	28

Education

Of the 1,218 job postings, 1,035 listed a preferred or minimum educational requirement for the position being filled. Among those, 48% requested a high school diploma or GED, 32% requested an associate degree, and 20% requested a bachelor's degree (Exhibit 6).

Exhibit 6. Education levels requested in job postings for Transitional Kindergarten (TK) Occupations

Education Level	Job Postings	% of Job Postings
High school or GED	492	48%
Associate degree	334	32%
Bachelor's degree	202	20%
Master's degree	7	1%

Baseline, Specialized, and Software Skills

Exhibit 7 depicts the top baseline, specialized, and software skills in job postings. The three most important baseline skills are communication, teaching, and writing. The top three specialized skills are child development, preschool education, and early childhood education. The top software skill is Cardiopulmonary Resuscitation (CPR) Certification.

Exhibit 7. In-demand Transitional Kindergarten (TK) Occupations baseline, specialized, and software skills

Baseline Skills	Specialized Skills	Software Skills
Communications	Child Development	Microsoft Excel
Teaching	Preschool Education	Student Information Systems
Writing	Early Childhood Education	Business Software
Planning	Lesson Planning	Zoom (Video Conferencing Tool)
Clerical Works	Special Education	Microsoft PowerPoint

Certifications

Of the 1,218 job postings, 821 contained certification data. Among those, 26% indicated a need for a Cardiopulmonary Resuscitation (CPR) Certification. The next top certification is a First Aid Certification (Exhibit 8).

Exhibit 8. Top Transitional Kindergarten (TK) Occupations certifications requested in job postings

Certifications	% of Job Postings
Cardiopulmonary Resuscitation (CPR) Certification	26%
First Aid Certification	24%
No Child Left Behind Act (NCLB) Standards	12%
Automated External Defibrillator (AED) Certification	1%
American Red Cross (ARC) Certification	1%

Education, Work Experience, & Training

A high school diploma or equivalent is typically required for childcare workers. Some college, no degree is typically required for teaching assistants, except postsecondary. An associate degree is typically required for preschool teachers, except special education. (Exhibit 9).

Exhibit 9. Education, work experience, training, and Current Population Survey Results for Transitional Kindergarten (TK) Occupations⁵

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

⁵ "Labor Force Statistics from the Current Population Survey," Bureau of Labor Statistics, https://www.bls.gov/cps/.

Supply

An analysis of program data from the Integrated Postsecondary Education Data System (IPEDS) for the last three program years shows that, on average, 1,598 awards were conferred in the SCV/SML subregion (Exhibits 10 and 11).

Exhibit 10. TOP and CIP codes for Transitional Kindergarten (TK) Occupations

TOP Titles	CIP Titles
080200 - Educational Aide (Teacher Assistant)	13.1501 - Teacher Assistant/Aide
	13.1210 - Early Childhood Education and Teaching
130500 - Child Development/Early Care and Education	19.0706 - Child Development
	19.0709 - Child Care Provider/Assistant

Exhibit 11. Postsecondary supply for Transitional Kindergarten (TK) Occupations

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 8 < 16 semester units	Total
080200 -	Bakersfield				3		0			3
Educational Aide	Fresno City	0				0				1
(Teacher Assistant)	San Joaquin Delta						0			0
13.1210 - Early Childhood Education and Teaching	Humphreys University-Stockton and Modesto Campuses	8								8
	Bakersfield	23	115				34	231		404
	Cerro Coso	0	16		27	13	26			82
130500 - Child	Clovis	5	21		6	6				37
Development/Early	Columbia	6	3	1	2	0			4	17
Care and Education	Fresno City	18	51	6	28	31			57	191
	Merced	29	40				13			82
	Modesto	52	45	56	23	10	15		76	279
	Modesto	52	45	56	23	10	15		/6	_

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 8 < 16 semester units	Total
	Porterville	31	17				36			84
	Reedley College	24	38	16	61	25			9	173
	San Joaquin Delta		6		1	24	19			49
	San Joaquin Valley College-Madera	2	2		1					5
	Sequoias	40	56		28	21		252		397
	Taft	17	21	10	16	4	2	1	18	90
	West Hills Coalinga	2	5		1	1		96		105
	West Hills Lemoore	17	11		6	4		78		115
SCV/SML TOTAL		193	357	22	133	87	84	657	66	1,598
CVML TOTAL		277	448	90	203	139	146	658	165	2,123

*SCV/SML awards

There is an undersupply of 1,923 Transitional Kindergarten (TK) workers in the SCV/SML subregion and an undersupply of 3,178 workers in the region (Exhibit 12).

Exhibit 12. Transitional Kindergarten (TK) Occupations workforce demand (annual job openings), postsecondary awards (supply), and additional students needed to fill gap in the SCV/SML subregion and region



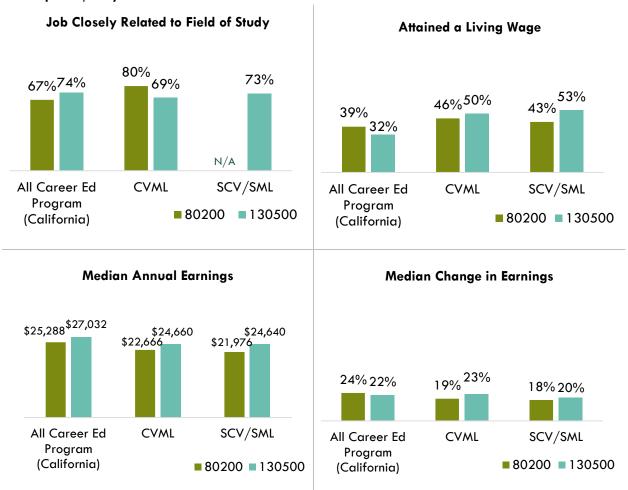
Student Outcomes

Exhibits 13a - 13b summarize outcomes from California Community College Chancellor's LaunchBoard for TOP codes related to *Transitional Kindergarten (TK)* Occupations. Data was not available for the subregion for students that obtained a job closely related to their field of study or attained a living wage.

Exhibit 13a. Metrics for TOP 080200 - Educational Aide (Teacher Assistant) and 130500 - Child Development/Early Care and Education

Metric	080200 - Educational Aide (Teacher Assistant)	130500 - Child Development/Early Care and Education
Students Who Got a Degree or Certificate or Attained Apprenticeship Journey Status	*	729
Number of Students Who Transferred	119	958
*denotes data not available in table and charts		

Exhibit 13b. Metrics for TOP 080200 - Educational Aide (Teacher Assistant) and 130500 - Child Development/Early Care and Education



Recommendation

This report suggests there is a shortage of 1,923 workers in the SCV/SML subregion and a shortage of 3,187 workers in the CVML region for *Transitional Kindergarten (TK)* Occupations. Based on these findings, it is recommended that College of the Sequoias work with the regional directors, the college's advisory board, and local industry in the expansion of programs to address the shortage of Transitional Kindergarten (TK) workers in the region.

Appendix: 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. (Lightcast). Lightcast occupational employment data are based on final Lightcast industry data and final Lightcast 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 Lightcast 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.
LaunchBoard	Chancellor's LaunchBoard. https://www.calpassplus.org/LaunchBoard/SWP.aspx
Labor Force, Employment and Unemployment Estimates	California Employment Development Department, Labor Market Information Division: labormarketinfo.edd.ca.gov.
Job Posting and Skills Data	Lightcast.
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: one tonline.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. (LIGHTCAST) formula that includes historical employment and economic indicators along with national, state and local trends.

LaunchBoard (Attained the Living Wage): Among SWP students who exited college and did not transfer to any postsecondary institution, the proportion who attained the district county living wage for a single adult measured immediately following academic year of exit

LaunchBoard (**Median Annual Earnings**): Among SWP students who exited the community college system and who did not transfer to any postsecondary institution, median earnings following the academic year of exit.

LaunchBoard (Median Change in Earnings): Among SWP students who exited and who did not transfer to any postsecondary institution, median change in earnings between the second quarter prior to the beginning of the academic year of entry and the second quarter after the end of the academic year of exit from the last college attended.

LaunchBoard (Job Closely Related to Field of Study): Among SWP students who responded to the CTE Outcomes Survey and did not transfer to any postsecondary institution, the proportion who reported that they are working in a job very closely or closely related to their field of study.

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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