

Early Childhood

Inland Empire/Desert Region (Riverside and San Bernardino counties combined) Summary

- Employment for the middle-skill early childhood occupational group is expected to decrease by
 3% between 2018 and 2023. Although the overall decrease in the number of jobs 2,450 annual job openings are expected.
- The 75th percentile, experienced-level hourly wages for the early childhood occupational group are **above the MIT Living Wage estimate of \$14.75** for a two-adult household, both working, with one child.
- There was an average of 670 credentials issued annually from regional community college child development/early care and education programs over the last three academic years.

Introduction

Two California Community College programs are closely associated with early childhood care and administration: child development/early care and education (TOP1305.00) and child development administration and management (1305.80). The child development/early care and education program provides students with an understanding of the principles and practices in the care and education of children (Taxonomy of Programs, 2012). While the early care and education program prepares students for hands-on positions involved in the care and education of children, the child development administration and management program prepares students for the management of early care and education programs.

The early childhood occupational group is separated into middle-skill and high-skill occupations to illuminate job opportunities for individuals with varying education levels and previous work experience. The educational supply and employment demand portions of this report focus solely on the middle-skill jobs students are likely to obtain after completing a community college child development/early care and education or child development administration and management program.

The **middle-skill early childhood occupational group** consists of occupations that typically require an associate degree or on-the-job training in addition to a high school diploma. Between 37% and 40% of workers in these middle-skill occupations have completed some college or an associate degree. These occupations are likely to find training in the child development/early care and education program. The occupations included in the middle-skill early childhood occupational group are:

- Childcare Workers
- Preschool Teachers, Except Special Education



The **high-skill early childhood occupation** included in this report typically requires workers to obtain a bachelor's degree in addition to five or fewer years of work experience. Students enrolled in community college child development administration and management programs may gain skills that are transferable to high-skill occupations. The high-skill early childhood occupation included in this report is

• Education Administrators, Preschool and Childcare Center/Program

Job Opportunities

In 2018, there were 17,530 jobs in the middle-skill early childhood occupational group in the Inland Empire/Desert region (IEDR). This group is projected to decrease employment by 3% through 2023, this is due to a decline in jobs for the childcare workers occupation. Despite this, employers in the region will need to hire 2,505 workers annually over the next five years to backfill jobs that workers are permanently vacating (includes occupational transfers and retirements); 2,450 of these annual job openings will be for middle-skill jobs. Exhibit 1 displays five-year projected job growth, and Exhibit 2 displays historical and projected jobs for the early childhood occupational group in the IEDR.

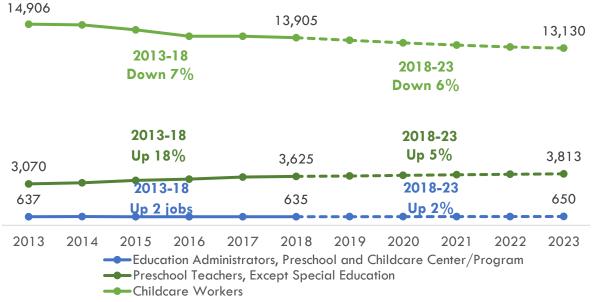
Exhibit 1: Five-year projections for the early childhood occupational group

Group	Occupation	2018 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
	Childcare Workers	13,905	(6%)	10,198	2,040	25%
Middle-Skill	Preschool Teachers, Except Special Education	3,625	5%	2,051	410	17%
Middle-Skill	Total	17,530	(3%)	12,249	2,450	23%
High-Skill	Education Administrators, Preschool and Childcare Center/Program	635	2%	276	55	30%
	Total	18,165	(3%)	12,525	2,505	24%

Source: EMSI 2020.1



Exhibit 2: Historical and projected jobs for the early childhood occupational group, 2013 – 2023



Source: EMSI 2020.1

Job Postings

Real-time labor market information from employer job advertisements is used in this report as a supplemental way to gauge demand for the early childhood occupational group. Exhibit 3 displays the number of job ads posted during the last 12 months along with the local and statewide average time to fill for the early childhood occupational group. Job postings for childcare workers have been limited to positions working in formal educational environments, excluding nannies and babysitters. On average, regional employers fill online job postings for the early childhood occupational group within 58 days. This is three days longer than the statewide average of 55 days, indicating that local employers face similar hiring challenges as other employers in California.

Exhibit 3: Job ads and time to fill for the early childhood occupational group, Feb 2019 – Jan 2020

Group	Occupation	Job Ads	IEDR Average Time to Fill (Days)	California Average Time to Fill (Days)
Middle-	Preschool Teachers, Except Special Education	1,119	59	56
Skill	Childcare Workers	449	59	56
Middle-Skill	Total	1,568	59	56
High-Skill	Education Administrators, Preschool and Childcare Center/Program	110	49	47
Total		1,678	58	55

Source: Burning Glass - Labor Insights



Earnings and Benefits

The MIT Living Wage Calculator measures the wage an individual must earn to support his or herself and their family (Glasmeier, 2019). The average IEDR household had 3.3 residents in 2017 (American Factfinder, 2018). Variations of the hourly and annual earnings necessary to support a three-person household are displayed in Exhibit 4. The entry-level wage for education administrators is above the \$14.75 hourly wage estimate for a two-adult household, both working, with one child; only experienced-level (75th percentile) middle-skill workers can expect to earn a wage above this estimate.

Exhibit 4: Variations in hourly and annual MIT Living Wage estimates for three resident households

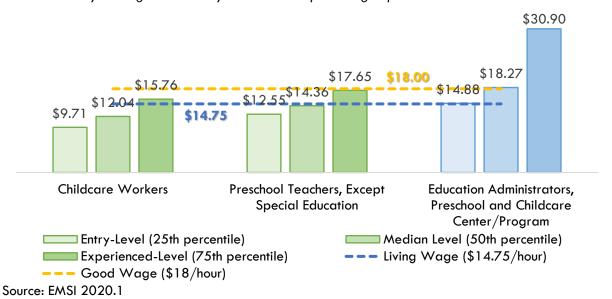
Three Resident Household	Hourly Wage	Annual Wage
2 Adults (Both Working), 1 Child	\$14.75	\$30,700
2 Adults (1 Working), 1 Child	\$24.58	\$51,100
1 Adult, 2 Children	\$32.73	\$68,100

Source: MIT Living Wage Calculator

The median wage (50th percentile) for education administrators is above the \$18.00 per hour (\$37,440 per year) "good job" wage established by the Brookings Institute in their Advancing Opportunity in California's Inland Empire report (Shearer, Shah & Gootman, p. 25). Only the wages of childcare workers and preschool teachers at the 75th percentile earn a wage that exceeds the two adults (both working), one child living wage standard. The middle-skill early childhood occupations generally receive medical insurance in addition to other benefits according to occupational guides developed by the California Labor Market Information Division (Detailed Occupational Guides, 2020). Information on benefit is not available for education administrators. Exhibit 5 displays the hourly earnings for the early childhood occupational group in the IEDR.



Exhibit 5: Hourly earnings for the early childhood occupational group



Employers, Skills, Education, Work Experience, and Certifications

Exhibit 6 displays the employers posting the most job ads for the early childhood occupational group during the last 12 months in the IEDR.

Exhibit 6: Employers posting the most job ads for the early childhood occupational group, Feb 2019 – Jan 2020

Group	Occupation	Employers	
Middle-	Preschool Teachers, Except Special Education (n=1,073)	 KinderCare Learning Centers Learning Care Group The Learning Experience Easterseals Southern California 	 Palm Springs Unified School District Tutor Time Learning Centers Riverside County Office of Education
Skill	Childcare Workers (n=395)	 Think Together Center for Autism and Related Disorders (CARD) Murrieta Valley Unified School District 	 Central School District YMCA Riverside County Office of Education
High- Skill	Education Administrators, Preschool and Childcare Center/Program (n=95)	Think TogetherKinderCare Learning Centers	EnvisionEasterseals Southern California

Source: Burning Glass - Labor Insights



Exhibit 7 displays a sample of specialized and employability skills that employers are seeking when looking for workers to fill positions in the early childhood occupational group. Specialized skills are occupation-specific skills that employers are requesting for industry or job competency. Employability skills are foundational skills that transcend industries and occupations; this category is commonly referred to as "soft skills." Knowing which skills are in-demand may be useful for program development.

Exhibit 7: Sample of in-demand skills from employer job ads for the early childhood occupational group, Feb 2019 – Jan 2020

Group	Occupation	Specialized Skills	Employability Skills
Middle-	Preschool Teachers, Except Special Education (n=940)	 Child Development Early Childhood Education Cardiopulmonary Resuscitation (CPR) Lesson Planning 	 Organizational Skills Planning English Creativity Physical Abilities
Skill	Childcare Workers (n=263)	 Cardiopulmonary Resuscitation (CPR) Teaching Behavior Analysis Nurturing 	Communication SkillsEnglishOrganizational SkillsPhysical Abilities
High- Skill	Education Administrators, Preschool and Childcare Center/Program (n=95)	Staff ManagementBudgetingChild DevelopmentFundraising	 Organizational Skills English Teamwork/Collaboration Microsoft Office

Source: Burning Glass - Labor Insights

Exhibit 8 displays the entry-level education typically required to enter each occupation according to the Bureau of Labor Statistics (BLS), educational attainment for incumbent workers with "some college, no degree" and an "associate degree" according to the U.S. Census (2016-17), and the minimum advertised education requirement from employer job ads.



Exhibit 8: Typical entry-level education, educational attainment, and minimum advertised education requirements for the early childhood occupational group. Feb. 2019 – Jan 2020

			Educational Attainment	Minimum Advertised Education Requirement from Job Ads					
Group	Occupation	Typical Entry-Level Education Requirement	(Percentage of incumbent workers with a Community College Credential or Some Postsecondary Coursework)	Number of job postings	High school diploma or vocational training	Associate degree	Bachelor's degree or higher		
Middle-	Preschool Teachers, Except Special Education	Associate degree	40%	697	53%	26%	22%		
Skill Childcare Workers		High school diploma or equivalent	37%	241	88%	3%	9%		
High- Skill	Education Administrators, Preschool and Childcare Center/Program	Bachelor's degree	13%	78	28%	9%	63%		

Source: EMSI 2020.1, Burning Glass - Labor Insights

Exhibit 9 displays the work experience typically required to enter each occupation and the real-time work experience requirements from employer job ads.

Exhibit 9: Work experience required and real-time work experience requirements, Feb 2019 – Jan 2020

		Work	Real-	al-Time Work Experience				
Groups	Occupation	Experience Typically Required	Number of job postings	0 – 2 years	3 – 5 years	6+ years		
Middle-	Preschool Teachers, Except Special Education	None	434	79%	19%	2%		
Skill	Childcare Workers	None	144	94%	3%	3%		
High- Skill	Education Administrators, Preschool and Childcare Center/Program	Less than 5 years	81	37%	62%	1%		

Source: EMSI 2020.1, Burning Glass - Labor Insights

Exhibit 10 displays the certifications required by employers posting job ads for the early childhood occupational group in the IEDR. Of the 777 employer job postings with certification information, 25%



stated their desire for candidates with a child development associate credential. The Council for Professional Recognition is the credentialing agency that administers the Child Development Associate (CDA) National Credentialing program and issues CDA credentials. For more information about CDA requirements, visit the Council for Professional Recognition website (Council for Professional Recognition, 2020).

Exhibit 10: Certifications required by employer job ads for early childhood, Feb 2019 – Jan 2020

Group	Occupation	Certifications
Middle-	Preschool Teachers, Except Special Education (n=575)	First Aid CPR AEDChild Development Associate (CDA)
Skill	Childcare Workers (n=182)	First Aid CPR AED
High-Skill	Education Administrators, Preschool and Childcare Center/Program	First Aid CPR AEDChild Development Associate (CDA)

Source: Burning Glass - Labor Insights

Student Completions and Program Outcomes

Exhibits 11 & 12 display completion data for the California Community College child development/early care and education (1305.00) and child development administration and management (1305.80) programs program between 2015 and 2018, as well as enrollments in the 2016/17 academic year. The student completion and outcome methodology are available on page 14.

Exhibit 11: Annual average community college credentials and enrollments for the child development/early care and education program

		Certificate					Associo	ate	CCC	ccc	
1305.00 - Child Development/	6<18	12< 18	18< 30	30 <60	60+	Arts Science		Science	Annual Average Credentials,	Enrollments, Academic	
Early Care and Education		Sem	ester U	nits		A.A.	A.S.	Transfer A.S.T.	Academic Years 2015-18	Year 2016-17	
Barstow	-	1*	2	6	-	-	7	5	21	549	
Chaffey	-	-	-	-	-	-	11	25	36	2,169	
Copper Mountain	-	-	-	5	-	1	-	3	10	126	
Crafton Hills	1	-	1	-	-	6	-	2	11	514	
Desert	-	-	-	8	-	1	2	21	32	1 ,77 4	
Moreno Valley	31	-	-	6	-	-	5	5	48	462	
Mt. San Jacinto	-	-	-	8	-	-	20	21	49	2,134	
Norco College	92	-	-	11	-	-	10	10	122	529	
Palo Verde	22	-	-	2	-	-	3	1	27	237	



		Ce	ertifica	te			Associo	ıte	CCC	666
1305.00 - Child Development/	6<18	12< 18	18< 30	30 <60	60+	Arts	Science	Science	Annual Average Credentials,	CCC Enrollments, Academic
Early Care and Education		Sem	ester U	Inits		A.A.	A.S.	Transfer A.S.T.	Academic Years 2015-18	Year 2016-17
Riverside	121	-	-	29	-	-	23	10	182	1,526
San Bernardino	-	-	18	2	5	33	-	14	<i>7</i> 1	2,237
Victor Valley	-	-	28	-	-	-	26	5	59	1,324
Total	267	1*	49	77	5	42	107	122	670	13,581

Source: LaunchBoard, MIS Data Mart *Barstow issued one 12<18 semester unit certificate in 2017-18.

Exhibit 12: Annual average community college credentials and enrollments for the child development administration and management program

			ficate			CCC Annual	ccc
1305.80 – Child Development Administration and	6<18	18<30	30 <60	60+	Associate of Arts (A.A.)	Average Credentials, Academic	Enrollments, Academic Year
Management		Semest	er Units			Years 2015-18	2016-17
Chaffey	-	-	-	-	-	-	200
Desert	-	-	2	-	5	6	-
Moreno Valley	-	-	-	-	-	-	294
Mt. San Jacinto	-	-	-	-	-	-	76
Norco College	-	-	-	-	-	-	420
Palo Verde	1*	-	-	-	-	1*	26
Riverside	-	-	-	-	-	-	1,339
San Bernardino	-	-	-	2	-	2	-
Victor Valley	-	2	-	-	-	2	-
Total	1*	2	2	2	5	11	2,355

Source: LaunchBoard, MIS Data Mart *Palo Verde issued one 6<18 semester unit certificate in 2017-18.

Community college student outcome information based on the selected TOP codes and region is provided in Exhibits 13 & 14.

Exhibit 13: 1305.00 - Child development/early care and education strong workforce program outcomes

Strong Workforce Program Metrics: 1305.00 — Child Development/Early Care and Education Academic Year 2016 -17, unless noted otherwise	Inland Empire/Desert Region	California
Course enrollments	13,581	194,957
Completed 9+ career education units in one year (2017-18)	1,781 (20%)	21,308 (19%)
Economically disadvantaged students	80%	74%



Strong Workforce Program Metrics: 1305.00 — Child Development/Early Care and Education Academic Year 2016 -17, unless noted otherwise	Inland Empire/Desert Region	California
Students who attained a noncredit workforce milestone in a year	-	58%
Students who earned a degree, certificate, or attained apprenticeship (2017-18)	291	5,008
Transferred to a four-year institution (transfers)	292	4,188
Job closely related to the field of study (2015-16)	87%	82%
Median annual earnings (all exiters)	\$20,686	\$23,432
Median change in earnings (all exiters)	37%	37%
Attained a living wage (completers and skills-builders)	35%	32%

Sources: LaunchBoard Community College Pipeline and Strong Workforce Program Metrics

Exhibit 14: 1305.80 – Child development administration and management strong workforce program outcomes

Strong Workforce Program Metrics: 1305.80 – Child Development Administration and Management Academic Year 2016 -17, unless noted otherwise	Inland Empire/Desert Region	California
Course enrollments	2,355	5,580
Completed 9+ career education units in one year (2017-18)	485 (20%)	1,335 (26%)
Economically disadvantaged students	72%	72%
Students who earned a degree, certificate, or attained apprenticeship (2017-18)	-	136
Transferred to a four-year institution (transfers)	85	178
Job closely related to the field of study (2015-16)	100%	95%
Median annual earnings (all exiters)	\$19,872	\$27,904
Median change in earnings (all exiters)	33%	27%
Attained a living wage (completers and skills-builders)	32%	41%

Sources: LaunchBoard Community College Pipeline and Strong Workforce Program Metrics

Recommendation

Community college child development/early care and education programs train students for the *childcare* worker and preschool teacher middle-skill occupations. These occupations are expected to have 2,450 annual job opening for over the next five years. Wages for these occupations exceed the regional living wage standard for a family of two adults, both working, with one child at the 75th percentile-level; above \$14.75 per hour. The community colleges should partner with local employers that hire these jobs to



understand the knowledge, skills, and abilities that will allow a student to achieve the living wage shortly after accepting employment in this field. The social need for quality early care and education services despite offering low wages should not be discounted (Whitebrook).

The high-skill education administrators, preschool and childcare center/program occupation is expected to have 55 annual job openings and earns a living wage at the 25th percentile-level. This occupation typically requires a bachelor's degree and five or fewer years of work experience. Community colleges have an opportunity to develop this program further, but with the understanding that their student may need to transfer to a four-year educational institution and gain work experience before entering this occupation.

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References

American FactFinder. U.S. Census Bureau, 2013-17 American Community Survey 5-Year Estimates. (2018). Retrieved October 1, 2019. Retrieved from

https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS 17 5YR CP04 &prodType=table

Burning Glass Technologies. (2020). Labor Insights/Jobs. Retrieved from https://www.burning-glass.com/

California Community Colleges Chancellor's Office. LaunchBoard. (2020). California Community Colleges LaunchBoard. Retrieved from https://www.calpassplus.org/Launchboard/Home.aspx

California Community Colleges Chancellor's Office. LaunchBoard. (2020a). Strong Workforce Program Metrics Data Element Dictionary. Pg. 3. Retrieved from https://www.calpassplus.org/MediaLibrary/calpassplus/launchboard/Documents/SWP-DED.PDF

California Community Colleges Chancellor's Office. (2020). Chancellor's Office Curriculum Inventory (COCI), version 3.0. Retrieved from https://coci2.ccctechcenter.org/programs

California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart. (2020). Data Mart. Retrieved from https://datamart.ccco.edu/datamart.aspx

California Community Colleges Chancellor's Office, Curriculum and Instructional Unit, Academic Affairs Division. (2012). Taxonomy of Programs, 6th Edition, Corrected Version. Retrieved from https://www.cccco.edu/-/media/CCCCO-Website/About-Us/Divisions/Digital-Innovation-and-Infrastructure/Research/Files/TOPmanual6200909corrected12513.ashx?la=en&hash=94C709CA83C0380828415579395A5F536736C7C1

Council for Professional Recognition. (2020). Steps to Earn your Preschool CDA Credential. Retrieved from https://www.cdacouncil.org/credentials/apply-for-cda/preschool

Economic Modeling Specialists International (EMSI). (2020). *Datarun 2020.1*. Retrieved from https://www.economicmodeling.com/

Glasmeier, A. Massachusetts Institute of Technology (MIT). (2020). Retrieved from https://livingwage.mit.edu/metros/40140

Labor Market Information Division. Employment Development Department of California. (2020). *Detailed Occupational Guides*. Retrieved from https://www.labormarketinfo.edd.ca.gov/OccGuides/Search.aspx

National Center for O*NET Development. (2020). O*NET OnLine. Retrieved from https://www.onetonline.org/

Shearer, C., Shah, I., Gootman, M. (2019, February). Metropolitan Policy Program at Brookings. Advancing Opportunity in California's Inland Empire. *Defining Opportunity*. (pg. 25). Retrieved from https://www.brookings.edu/wp-content/uploads/2019/02/Full-Report Opportunity-Industries Inland-California Final Shearer-Shah-Gootman.pdf

Whitebook, M. (1999). Child Care Workers: High Demand, Low Wages. The Annals of the American Academy of Political and Social Science, 563, 146-161. Retrieved February 12, 2020, from www.jstor.org/stable/1048945



Appendix: Occupation definitions, sample job titles, five-year projections for early childhood occupations

Occupation Definitions (SOC) code), Education and Training Requirement, Community College **Educational Attainment**

High-Skill

Education Administrators, Preschool and Childcare Center/Program (11-9031)

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

Sample job titles: Administrator, Childcare Director, Early Head Start Director, Education Coordinator, Education Director, Education Site Manager, Preschool Director, Preschool Program Director, Principal, Site Coordinator

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 13%

Middle-Skill

Preschool Teachers, Except Special Education (25-2011)

Instruct preschool-aged children in activities designed to promote social, physical, and intellectual growth needed for primary school in preschool, day care center, or other child development facility. May be required to hold State certification.

Sample job titles: Child Development Teacher, Early Childhood Teacher, Group Teacher, Infant Teacher, Montessori Preschool Teacher, Nursery Teacher, Pre-Kindergarten Teacher (Pre-K Teacher), Preschool Teacher, Teacher, Toddler Teacher

Entry-Level Educational Requirement: Associate degree

Training Requirement: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 40%



Childcare Workers (39-9011)

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

Sample job titles: Assistant Teacher, Caregiver, Child Care Worker, Child Caregiver, Childcare Provider, Childcare Worker, Daycare Teacher, Daycare Worker, Infant Teacher, Toddler Teacher

Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: Less than one month on-the-job training

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 37%



Appendix: Student Completions and Program Outcome Methodology

Exhibits 11 & 12 display the average annual regional California Community College (CCC) credentials conferred during the three academic years between 2015 and 2018, from the California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart, along with the enrollments from the most recent year available on LaunchBoard. Credentials are the combined total of associate degrees and certificates issued during the timeframe, divided by three in this case to calculate an annual average. This is done to minimize the effect of atypical variation that might be present in a single year. Enrollments are the count of enrollments in courses assigned to the TOP code in the selected year.

Community college student outcome information is from LaunchBoard and based on the selected TOP code and region. These metrics are based on records submitted to the California Community Colleges

Chancellor's Office Management Information Systems (MIS) by community colleges, which come from self-reported student information from CCC Apply and the National Student Clearinghouse. Employment and earnings metrics are sourced from records provided by California's Employment Development

Department's Unemployment Insurance database. When available, outcomes for completers are reported to demonstrate the impact that earning a degree or certificate can have on employment and earnings. For more information on the types of students included for each metric, please see the web link for LaunchBoard's Strong Workforce Program Metrics Data Element Dictionary in the References section (LaunchBoard, 2020a). Finally, employment in a job closely related to the field of study comes from self-reported student responses on the CTE Employment Outcomes Survey (CTEOS), administered by Santa Rosa Junior College (LaunchBoard, 2020).



Table 1: 2018 to 2023 job growth, wages, education, training, and work experience required for the early childhood occupational group, IEDR. Middle-skill occupations appear in green and the high-skill occupation appears in blue.

Occupation (SOC)	2018 Jobs	5-Yr Change (New Jobs)	5-Yr % Change (New Jobs)	Annual Openings (New + Replaceme nt Jobs)	Entry-Experienced Hourly Wage (25 th to 75 th percentile)	Median Hourly Wage (50 th percentile)	Average Annual Earnings	Typical Entry- Level Education & On-The-Job Training Required	Work Experience Required
Childcare Workers (39-9011)	13,905	(775)	(6%)	2,040	\$9.71 to \$15.76	\$12.04	\$28,600	High school diploma or equivalent & 1 month	None
Preschool Teachers, Except Special Education (25-2011)	3,625	188	5%	410	\$12.55 to \$17.65	\$14.36	\$32,500	Associate degree & none	None
Middle-Skill Total	17,530	(587)	(3%)	2,450	-	-	-	-	-
Education Administrators, Preschool and Childcare Center/Program (11-9031)	635	15	2%	55	\$14.88 to \$30.90	\$18.27	\$48,800	Bachelor's degree & None	Less than 5 years
Total	18,165	(572)	(3%)	2,505	- -	-	-	•	-

Source: EMSI 2020.1