



California Early Care and Education Workforce Study

Licensed Child Care Centers
Los Angeles County 2006

By Marcy Whitebook, Laura Sakai, Fran Kipnis, Yuna Lee, Dan Bellm,
Mirella Almaraz, and Paulina Tran

Center for the Study of Child Care Employment,
Institute of Industrial Relations, University of California at Berkeley
California Child Care Resource and Referral Network

**© 2006 Center for the Study of Child Care Employment,
and California Child Care Resource and Referral Network**

All rights reserved.

Design: Yuna Lee

Center for the Study of Child Care Employment
Institute of Industrial Relations
University of California at Berkeley
2521 Channing Way #5555
Berkeley, CA 94720
(510) 643-8293
<http://www.iir.berkeley.edu/cscce/index.html>

California Child Care Resource and Referral Network
111 New Montgomery Street, 7th floor
San Francisco, CA 94105
(415) 882-0234
<http://www.rrnetwork.org>

Acknowledgments

This study was made possible through the generous support of First 5 California, Los Angeles Universal Preschool (LAUP) and the Los Angeles Office of Child Care. The authors also gratefully acknowledge the David and Lucile Packard Foundation for their support of an initial pilot study on which this study was based. Finally, we would like to thank the many child care center directors of Los Angeles County who gave so generously of their time to take part in this study.

Suggested citation

Whitebook, M., Sakai, L., Kipnis, F., Lee, Y., Bellm, D., Almaraz, M., & Tran, P. (2006). *California Early Care and Education Workforce Study: Licensed child care centers. Los Angeles County 2006*. Berkeley, CA: Center for the Study of Child Care Employment, and San Francisco, CA: California Child Care Resource and Referral Network.

Contents

Introduction	1
Purpose of the Study	8
Study Design	10
Survey Population and Study Sample	11
Survey Instrument	11
Data Collection Procedures	14
Survey Completion and Response Rate	15
Findings	17
Who are the teachers, assistant teachers and directors in Los Angeles County's licensed child care centers?	18
Age	18
Ethnic Background	21
Linguistic Background	26
Turnover and Tenure	27
Wages	35
Size of the Teacher, Assistant Teacher and Director Workforce in Los Angeles County Centers Licensed to Serve Infants and/or Preschoolers	39
What are the characteristics of children in Los Angeles County child care centers licensed to serve infants and/or preschoolers?	46
Number of Children Served	46
What is the level of educational attainment and early childhood development- related training among teachers, assistant teachers and directors in Los Angeles County's child care centers?	56
Overall Educational Attainment of Teachers, Assistant Teachers and Directors	57
Degree Attainment Through a Foreign Institution	58
Education, Training and Certification Related to Early Childhood Development	58

How do levels of overall educational attainment, and professional preparation related to early childhood development, vary among teachers, assistant teachers and directors employed in centers licensed to serve infants and/or preschoolers?	63
Overall Educational Attainment, by SPA	64
Overall Educational Attainment and Professional Certification, by Ages of Children Served	72
Overall Educational Attainment, and Early Childhood-Related Training, by Centers' Relationship to Public Funding	72
Overall Educational Attainment, by Teacher and Assistant Teacher Demographic Characteristics	77
How well prepared are center-based teacher staff to care for and educate children who are dual language learners or have special needs?	84
Preparation to Work with Young Children Acquiring a Second Language	84
Preparation to Work with Young Children With Special Needs	86
Discussion	94
1) Who are the teachers, assistant teachers and directors in California's licensed child care centers?	96
2) What are the characteristics of children in Los Angeles County child care centers licensed to serve infants and/or preschoolers?	98
3) What is the level of educational attainment and early childhood development-related training among teachers, assistant teachers, and directors in California's child care centers?	100
4) How do levels of overall educational attainment, and professional preparation related to early childhood development, vary among teachers, assistant teachers and directors employed in centers licensed to serve infants and/or preschoolers?	102
5) How well prepared are teachers to care for and educate children who are dual language learners or have special needs?	105
Appendix A: Additional Tables	107
References	134

Tables

Table 1.1. <i>Comparison of Title 22 and Title 5 Regulations for Child Care Center Staff</i>	5
Table 2.1. <i>Los Angeles County Sample Composition</i>	11
Table 2.2. <i>Sampling and Weighting Plan</i>	14
Table 2.3. <i>Survey Response Rate of County Sample</i>	15
Table 3.1. <i>Estimated Ethnicity of Teachers, Assistant Teachers and Directors: Countywide, and By SPA</i>	22
Table 3.2. <i>Estimated Ethnicity of Teachers, Assistant Teachers and Directors, By Centers' Relationship to Public Subsidy</i>	25
Table 3.3. <i>Los Angeles County Children in Public Kindergarten, 2004-2005: 15 Most Commonly Spoken Languages of English Language Learners</i>	26
Table 3.4. <i>Estimated Percentage of Centers Employing at Least One Teacher, Assistant Teacher or Director with the Capacity to Communicate Fluently in Language Other Than English: Countywide, and By SPA</i>	28
Table 3.5. <i>Estimated Mean Percentage of Employed Teachers and Assistant Teachers with the Capacity to Communicate Fluently in a Language Other Than English, in Centers Employing At Least One Such Staff Person: Countywide, and By SPA</i>	29
Table 3.6. <i>Estimated Percentage of Centers Employing at Least One Teacher, Assistant Teacher or Director with the Capacity to Communicate Fluently in a Language Other Than English: Countywide, By Ages of Children Served, and By Relationship to Public Subsidy</i>	30
Table 3.7. <i>Estimated Mean Percentage of Teachers, Assistant Teachers and Directors with the Capacity to Communicate Fluently in a Language Other Than English, in Centers Employing At Least One Such Person: By Ages of Children Served, and By Relationship to Public Subsidy</i>	30
Table 3.8. <i>Estimated Mean Percentage of Annual Job Turnover Among Teachers, Assistant Teachers and Directors: Countywide, and By SPA</i>	32
Table 3.9. <i>Estimated Mean Percentage of Annual Job Turnover Among Teachers, Assistant Teachers and Directors: Countywide, By Ages of Children Served, and By Relationship to Public Subsidy</i>	33
Table 3.10a. <i>Estimated Percentages of Teachers, Assistant Teachers and Directors With Different Rates of Tenure: Countywide, and By SPA</i>	34
Table 3.10b. <i>Estimated Percentages of Teachers, Assistant Teachers and Directors With Different Rates of Tenure: Countywide, and By SPA</i>	34
Table 3.11. <i>Estimated Percentage of Teachers, Assistant Teachers and Directors With Different Rates of Tenure: Countywide, By Ages of Children Served, and By Centers' Relationship to Public Subsidy</i>	36

Table 3.12. <i>Estimated Mean Hourly Wages Paid to Teachers with BA or Higher Degrees and to Assistant Teachers: Countywide, and By SPA</i>	37
Table 3.13. <i>Estimated Mean Hourly Wages Paid to Teachers with BA or Higher Degrees and to Assistant Teachers: Countywide, By Ages of Children Served, and By Centers' Relationship to Public Subsidy</i>	40
Table 3.14. <i>Estimated Distribution of Assistant Teachers, Teachers and Directors Working with Infants and/or Preschoolers: Countywide</i>	41
Table 3.15. <i>Estimated Number and Percentage of Assistant Teachers, Teachers and Directors Working with Infants and/or Preschoolers: Countywide, and By Ages of Children Served</i>	43
Table 3.16. <i>Estimated Number and Percentage of Assistant Teachers, Teachers and Directors Working with Infants and/or Preschoolers: Countywide, and By Centers' Relationship to Public Subsidy</i>	43
Table 3.17. <i>Estimated Distribution of Assistant Teachers, Teachers and Directors Working with Infants and/or Preschoolers: Countywide, and By Centers' Relationship to Public Subsidy</i>	43
Table 3.18. <i>Estimated Mean Number of Assistant Teachers, Teachers and Directors Employed by Centers: Countywide</i>	45
Table 3.19. <i>Estimated Mean Number of Teachers and Assistant Teachers Employed by Centers: Countywide, and By Centers' Relationship to Public Subsidy</i>	45
Table 3.20. <i>Estimated Number of Children Enrolled in Los Angeles County Child Care Centers Licensed to Serve Infants and/or Preschoolers</i>	46
Table 3.21. <i>Estimated Percentage of Centers Serving at Least One Child in Various Age Groups: Countywide, and by SPA</i>	48
Table 3.22. <i>Estimated Mean Number of Children Served by Age Group: Countywide, and by SPA (Includes only those centers that care for at least one child in that age range)</i>	49
Table 3.23. <i>Estimated Mean Number of Children Served: Countywide, and by SPA</i>	50
Table 3.24. <i>Estimated Percentage of Centers Receiving Public Dollars: Countywide</i>	50
Table 3.25. <i>Estimated Mean Percentage of Subsidized Children Enrolled in Centers Receiving Vouchers: Countywide and By SPA</i>	51
Table 3.26. <i>Estimated Percentage of Centers Serving at Least One Child in Various Age Groups: Countywide, and by Centers' Relationship to Public Subsidy</i>	52
Table 3.27. <i>Estimated Mean Number of Children Served by Age Group: Countywide, and by Centers' Relationship to Public Subsidy (Includes only those centers that care for at least one child in that age group)</i>	52

Table 3.28. <i>Estimated Percentage of Center Auspices: Countywide, By SPA, and By Centers' Relationship to Public Subsidy</i>	54
Table 3.29. <i>Estimated Percentage of Centers that Care for At Least One Child with Special Needs: Countywide, and by Centers' Relationship to Public Subsidy</i>	55
Table 3.30. <i>Estimated Mean Percentage of Children with Special Needs Served: Countywide, and by Centers' Relationship to Public Subsidy (Includes only those centers that care for at least one child with special needs)</i>	55
Table 3.31. <i>Estimated Mean Percentage of Teachers and Assistant Teachers Employed in Centers, By Educational Level: Countywide</i>	59
Table 3.32. <i>Teachers with a Bachelor's Degree or Higher: Countywide and by SPA</i>	70
Table 3.33. <i>Teachers with a Bachelor's Degree or Higher in Early Childhood Education: Countywide and By SPA</i>	71
Table 3.34. <i>Estimated Educational Attainment of Teachers, Assistant Teachers and Directors, By Ages of Enrolled Children: Countywide</i>	73
Table 3.35. <i>Estimated Mean Percentage of Teachers and Assistant Teachers with Child Development Permits, in Centers Employing at Least One Such Teacher: Countywide, and By Centers' Relationship to Public Subsidy</i>	78
Table 3.36. <i>Teachers' Age and Educational Attainment: Countywide</i>	78
Table 3.37. <i>Estimated Percentage of Teachers and Assistant Teachers, By Ethnicity and Educational Attainment: Countywide</i>	79
Table 3.38. <i>Estimated Percentage of Teachers with a Bachelor's Degree or Higher, Associate Degree, or No Degree, By Ethnicity: Countywide and By SPA</i>	80
Table 3.39. <i>Estimated Percentage of Teachers at Different Levels of Educational Attainment Who Speak A Language Other Than English Fluently: Countywide, By Ages of Enrolled Children, By SPA, and By Centers' Relationship to Public Subsidy</i>	83
Table 3.40. <i>Estimated Mean Percentage of Teachers Completing at Least One Hour of Non-Credit Training and/or at Least One College Credit Related to Dual Language Learning Children: Countywide</i>	85
Table 3.41. <i>Estimated Percentage of Centers Employing at Least One Teacher With Non-Credit Training and/or College Credits Related to Dual Language Learning Children: Countywide</i>	85
Table 3.42. <i>Estimated Mean Percentage of Teachers with Associate or Higher Degrees in Centers with and without Teachers with Non-Credit Training and/or College Credits Related to Dual Language Learning Children: Countywide</i>	87
Table 3.43. <i>Estimated Percentage of Centers Employing at Least One Teacher with Non-Credit Training and/or College Credits Related to Children with Special Needs: Countywide</i>	88

Table 3.44. <i>Estimated Mean Percentage of Teachers with Non-Credit Training and/or College Credits Related to Children with Special Needs: Countywide, by Centers' Relationship to Public Subsidy and by SPA</i>	89
Table 3.45. <i>Estimated Mean Percentage of Teachers with AA or Higher Degrees, By Whether Centers Employ Teachers with Non-Credit Training or College Courses Related to Special Needs: Countywide</i>	90
Table 3.46. <i>Estimated Mean Percentage of Teachers with Non-Credit Training Related to Children with Special Needs, by Number of Children with Special Needs Enrolled: Countywide and By SPA</i>	92
Table 3.47. <i>Estimated Mean Percentage of Teachers with College Credits Related to Children with Special Needs, by Number of Children with Special Needs Enrolled: Countywide and By SPA</i>	93

Figures

Figure 2.1. <i>Los Angeles County</i>	12
Figure 2.2. <i>SPAs Within Los Angeles County</i>	13
Figure 3.1. <i>Estimated Age Distribution of Teachers and Assistant Teachers Compared to Women in Los Angeles County: Countywide</i>	19
Figure 3.2. <i>Estimated Age Distribution of Teachers: Countywide, and By Ages of Children Served</i>	19
Figure 3.3. <i>Estimated Age Distribution of Teachers: Countywide, and By Centers' Relation to Public Subsidy</i>	20
Figure 3.4. <i>Estimated Age Distribution of Teachers: Countywide, and By SPA</i>	20
Figure 3.5. <i>Estimated Ethnic Distribution of Teachers, Assistant Teachers and Directors Compared to the Los Angeles County Female Adult Population: Countywide</i>	23
Figure 3.6. <i>Estimated Ethnic Distribution of Teachers, Assistant Teachers and Directors Compared to Los Angeles County Public K-12 Teachers and Children 0-5 Years: Countywide</i>	23
Figure 3.7. <i>Estimated Percentage of Teachers, Assistant Teachers and Directors Employed at their Child Care Center for More than Five Years</i>	31
Figure 3.8. <i>Estimated Number and Percentage of Assistant Teachers, Teachers and Director Who Work with Infant and/or Preschool Children: By SPA</i>	42
Figure 3.9. <i>Estimated Educational Attainment of Center Infant and/or Preschool Teachers Compared to the Los Angeles County Adult Female Population</i>	57
Figure 3.10. <i>Estimated Educational Attainment of Center Infant and/or Preschool Teachers, Assistant Teachers and Directors: Countywide</i>	59
Figure 3.11a. <i>Estimated Percentage of Teachers, Assistant Teachers and Directors with a Bachelor's or Higher Degree: Countywide and by SPA</i>	65
Figure 3.11b. <i>Estimated Percentage of Teachers, Assistant Teachers and Directors with a Bachelor's or Higher Degree: Countywide and by SPA</i>	65
Figure 3.12a. <i>Estimated Percentage of Teachers, Assistant Teachers and Directors with an Associate Degree: Countywide and by SPA</i>	66
Figure 3.12b. <i>Estimated Percentage of Teachers, Assistant Teachers and Directors with an Associate Degree: Countywide and by SPA</i>	66
Figure 3.13a. <i>Estimated Percentage of Teachers with a Bachelor's or Higher Degree, Compared to Adult Population: Countywide and by SPA</i>	67
Figure 3.13b. <i>Estimated Percentage of Teachers with a Bachelor's or Higher Degree, Compared to Adult Population: Countywide and by SPA</i>	67

Figure 3.14a. <i>Estimated Percentage of Teachers with an Associate Degree, Compared to Adult Population: Countywide and by SPA</i>	68
Figure 3.14b. <i>Estimated Percentage of Teachers with an Associate Degree, Compared to Adult Population: Countywide and by SPA</i>	68
Figure 3.15. <i>Estimated Educational Attainment of Teachers, By Centers' Relationship to Public Subsidy: Countywide</i>	75
Figure 3.16. <i>Estimated Educational Attainment of Directors By Centers' Relationship to Public Subsidy: Countywide</i>	75
Figure 3.17. <i>Estimated Educational Attainment of Assistant Teachers, By Centers' Relationship to Public Subsidy: Countywide</i>	76
Figure 3.18. <i>Estimated Mean Percentage of Teachers Who Have Completed Non-Credit Training and/or College Credits Related to Dual Language Learning Children, by Centers' Relationship to Public Subsidy</i>	87

Appendix Tables

Table A1. <i>Los Angeles County Sample Composition - SPA 1</i>	108
Table A2. <i>Los Angeles County Sample Composition - SPA 2</i>	108
Table A3. <i>Los Angeles County Sample Composition - SPA 3</i>	108
Table A4. <i>Los Angeles County Sample Composition - SPA 4</i>	108
Table A5. <i>Los Angeles County Sample Composition - SPA 5</i>	108
Table A6. <i>Los Angeles County Sample Composition - SPA 6</i>	108
Table A7. <i>Los Angeles County Sample Composition - SPA 7</i>	109
Table A8. <i>Los Angeles County Sample Composition - SPA 8</i>	109
Table A9. <i>Survey Response Rate - SPA 1</i>	109
Table A10. <i>Survey Response Rate - SPA 2</i>	110
Table A11. <i>Survey Response Rate - SPA 3</i>	110
Table A12. <i>Survey Response Rate - SPA 4</i>	111
Table A13. <i>Survey Response Rate - SPA 5</i>	111
Table A14. <i>Survey Response Rate - SPA 6</i>	112
Table A15. <i>Survey Response Rate - SPA 7</i>	112
Table A16. <i>Survey Response Rate - SPA 8</i>	113
Table A17. <i>Comparison of Survey Respondents and County Population of Centers By Communities Served, By Infant License and By Relationship to Public Subsidy - SPA 1</i>	113
Table A18. <i>Comparison of Survey Respondents and County Population of Centers By Communities Served, By Infant License and By Relationship to Public Subsidy - SPA 2</i>	114
Table A19. <i>Comparison of Survey Respondents and County Population of Centers By Communities Served, By Infant License and By Relationship to Public Subsidy - SPA 3</i>	116
Table A20. <i>Comparison of Survey Respondents and County Population of Centers By Communities Served, By Infant License and By Relationship to Public Subsidy - SPA 4</i>	117
Table A21. <i>Comparison of Survey Respondents and County Population of Centers By Communities Served, By Infant License and By Relationship to Public Subsidy - SPA 5</i>	117
Table A22. <i>Comparison of Survey Respondents and County Population of Centers By Communities Served, By Infant License and By Relationship to Public Subsidy - SPA 6</i>	118

Table A23. <i>Comparison of Survey Respondents and County Population of Centers By Communities Served, By Infant License and By Relationship to Public Subsidy - SPA 7</i>	119
Table A24. <i>Comparison of Survey Respondents and County Population of Centers By Communities Served, By Infant License and By Relationship to Public Subsidy - SPA 8</i>	120
Table A25. <i>Estimated Age Range of Assistant Teachers: Countywide, and By Ages of Children Served</i>	121
Table A26. <i>Estimated Age Range of Assistant Teachers: Countywide, and By Centers' Relationship to Public Subsidy</i>	121
Table A27. <i>Estimated Age Range of Assistant Teachers: Countywide, and by SPA</i>	121
Table A28. <i>Estimated Ethnicity of Teachers, Assistant Teachers and Directors: Countywide, and By Ages of Children Served</i>	122
Table A29. <i>Estimated Distribution of Assistant Teachers, Teachers and Directors Working with Infants and/or Preschoolers: Countywide, and By SPA</i>	123
Table A30. <i>Estimated Percentage of Centers that Care for At Least One Child with Special Needs, By SPA and By Ages of Children Served</i>	124
Table A31. <i>Assistant Teachers' Age and Educational Attainment: Countywide</i>	124
Table A32. <i>Estimated Percentage of Teachers and Assistant Teachers by Age and Educational Attainment, By Ages of Children Enrolled and Centers' Relationship to Public Subsidy and by SPA</i>	125
Table A33. <i>Teachers' and Assistant Teachers' Age and Educational Attainment, By Ages of Children Enrolled and Centers' Relationship to Public Subsidy</i>	128
Table A34. <i>Teachers' Ethnicity and Educational Attainment: Countywide and By SPA</i>	130
Table A35. <i>Assistant Teachers' Ethnicity and Educational Attainment: Countywide and By SPA</i>	131
Table A36. <i>Assistant Teachers with an Associate or Higher Degree, or No Degree, By Ethnicity: Countywide and By SPA</i>	132
Table A37. <i>Estimated Mean Percentage of Teachers with Non-Credit Training and/or College Credits Related to Dual Language Learning Children, by Age of Children Served and SPA</i>	133

Introduction

Reflecting the growth in the number of working families with young children and the importance of early learning, the U.S. has witnessed an explosion of early care and education services in centers and homes over the last 30 years. What was once a relatively small, unnoticed sector of the economy is now viewed as a growing industry with substantial economic impact in terms of widespread use, consumer and public spending, and job creation (National Economic Development and Law Center, 2001). At the same time, researchers in cognitive science, psychology and education, among others, have expanded our understanding of the developmental significance of the early years, underscoring the importance of high-quality early learning settings to ensure that children realize their potential (Shonkoff & Phillips, 2000).

Evidence that the quality of early care and education settings can and does influence children's development during and beyond the preschool years (Gormley, Gayer, Phillips & Dawson, 2004; Henry, Gordon, Henderson & Ponder, 2003; Reynolds, Temple, Robertson & Mann, 2001; Schulman, 2005; Schulman & Barnett, 2005; Schweinhart et al., 2005) has increasingly shifted attention to the early care and education workforce, and the extent to which those who care for young children are adequately prepared to facilitate their learning and well-being.

Creating a skilled and stable early care and education workforce, however, has emerged as a daunting challenge. Reflecting a shortage of resources throughout the industry, employment in the field is characterized by exceptionally low pay, leading to high turnover that, in turn, undermines program quality and children's development (Helburn, 1995;

Whitebook, Howes & Phillips, 1998; Whitebook, Sakai, Gerber & Howes, 2001).

High turnover, coupled with the expansion of services, has led to a high demand for personnel in the field, and has also contributed to maintaining relatively low requirements for working with young children. As a result, employment qualifications in the field do not tend to match the level of skills and understanding truly needed to meet the demands of this work. This gap between professional challenges and regulatory requirements is further exacerbated by changes in the child population – notably the increasing numbers of children from immigrant families who are dual language learners, and the growing numbers of children identified as having special developmental needs. Many students of early childhood education still do not receive training related to serving such children (Whitebook, Bellm, Lee & Sakai, 2005).

The recognition that the workforce is the backbone upon which early care and education services depend has underscored many of the activities undertaken by First 5 commissions at the state and local level. Since the program's inception in 2000, for example, California has spent over \$240 million on the state- and county-level effort known as CARES, which has awarded stipends to over 40,000 ECE practitioners for pursuing further training and education. In addition, many members of the workforce in Los Angeles County have benefited from professional development activities funded through the AB212 program. Increasing attention is also turning to institutions of higher education to assess the resources they will need, in order

to adapt their programs and to support students in meeting more rigorous standards for working with young children (Whitebook, Bellm, Lee & Sakai, 2005).

This report is intended to identify the characteristics of Los Angeles County's current center-based early care and education workforce, both in light of proposed new requirements, and to help assess the size of the task of training the next generation of workers to care for young children.

Licensed Child Care Centers in California

In California, child care provided outside of a home environment is called a child care center. A child care center is usually located in a commercial building, school or church. In a child care center, non-medical care and supervision can be provided for infants (birth to 23 months), preschoolers (two to five years) and school-age children (kindergarten students and older) in a group setting for periods of less than 24 hours.

Almost all child care centers are required to be licensed by the Community Care Licensing Division (CCLD) of the California Department of Social Services. Centers that are exempt from licensing include certain school-age and preschool programs run by Park and Recreation Departments and school districts; informal arrangements in which no money changes hands for care, such as co-ops and play groups; on-site military child care programs; and programs administered by the Department of Corrections.

To receive a license, child care centers must meet the requirements established in the Code of California Regulations Title 22 related to personnel, the facility, and the number and ages of children served.¹

Personnel requirements include the following:

- Child care centers must have qualified directors and qualified teaching staff. Directors and teachers must have 12 units in early childhood education. To be a qualified infant teacher, at least three of the units must be related to

the care of infants. Directors must have three units in administration or staff relations.

- Employees must have a fingerprint clearance from the California Department of Justice and the Federal Bureau of Investigation, and have a Child Abuse Index Clearance.
- All staff must have a TB clearance and a health report.
- At least one person on-site must have 15 hours of health and safety training approved by the Emergency Medical Services Authority. This includes a current CPR and First Aid Certificate.

Requirements for a child care facility include the following:

- 35 square feet of indoor play space per child, 75 square feet of outdoor space per child, and one toilet and one sink for every 15 children.
- Compliance with CCLD health and safety requirements pertaining to storage space, equipment and materials, drinking water, food preparation, storage of dangerous materials, adult/staff restrooms, isolation areas for sick children, and facility temperature.
- Compliance with all other state, federal, and/or local codes and regulations such as zoning, building restrictions, fire, sanitation, and labor requirements.

Number and ages of children served:

- The total number of children who can be served in a facility is called the licensed capacity of the center. The licensed capacity is based on the

¹ For more information about child care center licensing see: <http://cclld.ca.gov>.

physical space of a site (as described above) and the number of staff available to provide care.

- CCLD issues separate licenses for the different ages of children that can be served: infants, preschoolers, and school-age children. Each age group requires a specific ratio of children to adults:

Infants: 1 adult to 4 children
 Preschoolers: 1 adult to 12 children
 School-age children: 1 adult to 14 children

Additional regulations for child care centers:

In addition to the Title 22 regulations described above, centers contracted with the California Department of Education (CDE) must meet the regulations set by Title 5 of the California Code of Regulations. Head Start centers are also required to meet additional regulations established by the federal Head Start Bureau. Table 1.1 below compares the

educational levels for child care center staff required by Titles 5 and 22. Head Start educational requirements are not included in the chart, as the Head Start staffing structure is unique to that program. Fifty percent of all Head Start teachers nationwide in center-based programs, however, are required to have an AA, BA or advanced degree in early childhood education, or an AA, BA or advanced degree in a field related to early childhood education, in addition to experience teaching preschool children.

According to the 2005 *California Child Care Portfolio*, there were 10,143 child care centers with 639,443 child care spaces (commonly referred to as “slots”) in the state in 2004. Six percent of these slots were licensed for infants, 70 percent for preschoolers and 24 percent for school-age children. Child care centers made up 64 percent of all licensed child care spaces, with family child care homes comprising 36 percent of the capacity (California Child Care Resource and Referral Network, 2005).

Table 1.1. Comparison of Title 22 and Title 5 Regulations for Child Care Center Staff

Position	Title 22	Title 5 (CDE-contracted centers)
Assistant teacher	None	6 units of college-level Child Development (CD)/ Early Care and Education (ECE)
Associate teacher	Not specified	12 units of college-level CD/ECE
Teacher	12 units of college-level CD/ECE 6 months experience	24 units of college-level CD/ECE 16 units of General Education (GE)
Site supervisor	Not specified	AA or 60 units including: 24 units of CD/ECE 16 units GE 8 units administration
Program director	12 units of college-level CD/ECE 3 units administration	BA or higher including: 24 units of CD/ECE 8 units of administration

Los Angeles County

More than one in four Californians reside in Los Angeles County, which includes the City of Los Angeles as well as many other localities, the largest of which are Glendale, Long Beach, Pasadena, Pomona, Santa Clarita, and Torrance. The county anchors Southern California economically as well as culturally. Its economic base focuses on information, professional, and technical services; manufacturing; finance, insurance, and real estate; health services; and retail trade.

In 2004, Los Angeles County's population of 10,103,000 represented a 6.1-percent increase over the 2000 Census (US Census Bureau, 2000a). The county is projected to increase in population by 9.4 percent between 2000 and 2010, with a 1.7-percent increase in the number of children ages 0-4 (California Department of Finance, 2004).

Population estimates for 2005 describe the county as 46.0 percent Hispanic; 31.7 percent White, Non-Hispanic; 10.8 percent Asian; 9.5 percent Black; 1.5 percent Multiethnic; 0.3 percent American Indian; and 0.2 percent Pacific Islander (California Department of Finance, 2005). At the time of the 2000 Census, almost one-half (49.2 percent) of county households were estimated as speaking English, 32.3 percent Spanish, and 10.3 percent an Asian or Pacific

Island language (US Census Bureau, 2000b).

Several demographic measures as well as summary statistics concerning economic well being suggest the breadth of need for early care and education in Los Angeles County:

- Median family income in 1999 was \$46,452 (California Department of Finance, 2003).
- In 1999, 17.9 percent of residents had incomes below the poverty level (California Department of Finance, 2003).
- These figures disguise families' economic stress, which increasingly is driven by high housing costs. The county's 2005 annual fair market rent for a two-bedroom unit was \$13,488 (US Department of Housing and Urban Development, 2005).
- At the time of the 2000 Census, 25.6 percent of children 0-5 years of age lived in poverty² (California Child Care Resource and Referral Network, 2003).
- In 2000, 2,125,915 children under the age of 14 resided in the county, 48.0 percent of whom had both parents or a single head of household in the labor force³ (California Child Care Resource and Referral Network, 2003).
- Among those children were 896,143 children under age six, 44.3 percent

² Data derived from 2000 U.S. Census (universe: population for whom poverty status is determined). Poverty threshold varies by family size and composition. For a family of four, two adults and two children under 18, the 1999 poverty threshold used for the 2000 Census was \$16,895.

³ Data derived from 2000 U.S. Census (custom tabulation). Number of children with either both parents or a single-head-of-household in the labor force (universe: own children in families and subfamilies).

of whom had working parents⁴
(California Child Care Resource and Referral Network, 2003).

- 24.8 percent of children ages 0-5 resided in a single-parent household⁵ (California Child Care Resource and Referral Network, 2003).

In 2004, 229,448 licensed child care slots were available in Los Angeles County; 34.5 percent were in family child care homes and 65.5 percent were in child care centers (California Child Care Resource and Referral Network, 2005).

⁴ Data derived from 2000 U.S. Census (custom tabulation). Number of children with either both parents or a single-head-of-household in the labor force (universe: own children in families and subfamilies).

⁵ Data derived from 2000 U.S. Census (universe: own children).

Purpose of the Study

Recognizing the critical role that early childhood educators play in the lives of California's children and families, First 5 California commissioned in 2004 a statewide and regional study of the early care and education (ECE) workforce in licensed child care centers and licensed family child care homes. The overall goal of the study was to collect information on the current characteristics of this workforce – particularly its educational background, and its potential need and demand for further opportunities for professional development.

The statewide study sample included centers from every county in the state, but there were not sufficient numbers of centers in the sample to generate county-specific reports. Counties were invited, however, to contract for additional local interviews in order to build a representative county sample, and the Los Angeles County Office of Child Care and Los Angeles Universal Preschool agreed to commission a local study of its early care and education workforce, building on the statewide study. An identical procedure was used for statewide and county data collection, although the statewide study interviews were conducted earlier in 2005.

The following description applies to the sample and response rate for the Los Angeles County-commissioned component of the study. For information about the statewide completion and response rate, see the statewide *California Early Care and Education Workforce Study* report at <http://www.ccfca.gov>.

In partnership, the Center for the Study of Child Care Employment (CSCCE) at the University of California at Berkeley,

and the California Child Care Resource and Referral Network (Network), have gathered this information to help Los Angeles County policy makers and planners assess current demand at teacher training institutions; plan for further investments in early childhood teacher preparation; and gain a baseline for measuring progress toward attaining a well-educated ECE workforce whose ethnic and linguistic diversity reflects that of Los Angeles County's children and families.

The present report contains the study's findings for licensed child care centers that have infant and/or preschool licenses. Some of these centers have school-age licenses as well. This study, however, does not include data for centers that have a license to serve school-age children only.

A separate report containing information about licensed family child care homes in Los Angeles County can be found at the First 5 California website, <http://www.ccfca.gov>.

In studying the county's population of licensed child care centers, our primary objectives were to:

- Compile baseline data on the demographics, wages, tenure, and educational characteristics of child care center directors, teachers and assistant teachers;
- Identify the extent to which their educational backgrounds vary with respect to ethnicity, language and age;
- Profile the business and program characteristics of centers, including organizational status and participation in various subsidy programs;
- Profile the children that staff with varying characteristics serve, in terms

- of numbers, ages, subsidy status, and special needs;
- Document the professional preparation of licensed child care center staff to work with children who are dual language learners and/or have special needs;
- Develop a sound estimate of the number of assistant teachers, teachers and directors in licensed child care centers; and
- Identify differences among licensed child care center staff, along the dimensions noted above, between centers with and without public subsidies, and between centers serving and not serving infants.

Study Design

Survey Population and Study Sample

Los Angeles Universal Preschool (LAUP) and the County of Los Angeles Office of Child Care sought information about directors, teachers and assistant teachers employed at licensed child care centers in Los Angeles County as a whole and in the county's eight Service Planning Areas (SPAs). The survey population included all 2,570 licensed child care centers serving infants and/or preschoolers that were listed as of January 2004 with the county's ten state-funded child care resource and referral (R&R) agencies. These data were aggregated, cleaned and verified by the California Child Care Resource and Referral Network (Network) and updated in August 2005. Centers licensed to serve only school-age children were not included in the survey population.

Due to cost and time constraints, we surveyed a stratified random sample of these licensed centers across the county. We targeted a random sample of 100 centers in SPAs 2 through 8. Because there were only 71 centers in SPA 1, we attempted to interview all the centers in that SPA. In all, we targeted interviews with 771 centers in the county. Random sampling is the best way to obtain a sample that is representative of the entire population, and is a process that ensures that each center has an equal chance of being selected for the sample.

The final number of 731 completed interviews included 214 interviews conducted in Los Angeles County as part of the statewide study and 517 interviews conducted during the county study. (See Table 2.1.)

We developed the sampling plan to ensure that there would be enough completed interviews in each of the eight SPAs to provide a reliable profile of each area and to compare the data across regions. As shown in Table 2.2, the numbers of licensed centers in the universe vary considerably by SPA, ranging from 71 in SPA 1 to over 500 in SPAs 2 and 3. In order to generate county population estimates that accurately reflected these variations among the SPAs, we weighted each interview. Data were weighted by SPA, and were based on the proportion of licensed centers contacted for the study to licensed centers in the SPA.

Survey Instrument

The Child Care Center Survey used in this study was the same questionnaire used in the statewide study. It built upon numerous workforce studies conducted by the Center for the Child Care Workforce over the last three decades (Center for the Child Care Workforce, 2001). Specifically, the survey instrument was adapted from the 2001 California Child Care Workforce Study, an eight-county effort funded by the David and Lucile Packard

Table 2.1. *Los Angeles County Sample Composition*

	Los Angeles County licensed centers	Percentage of final sample
Completed interviews: statewide study	214	29.3%
Completed interviews: county study	517	70.7%
Final sample	731	100.0%

Figure 2.1. *Los Angeles County*

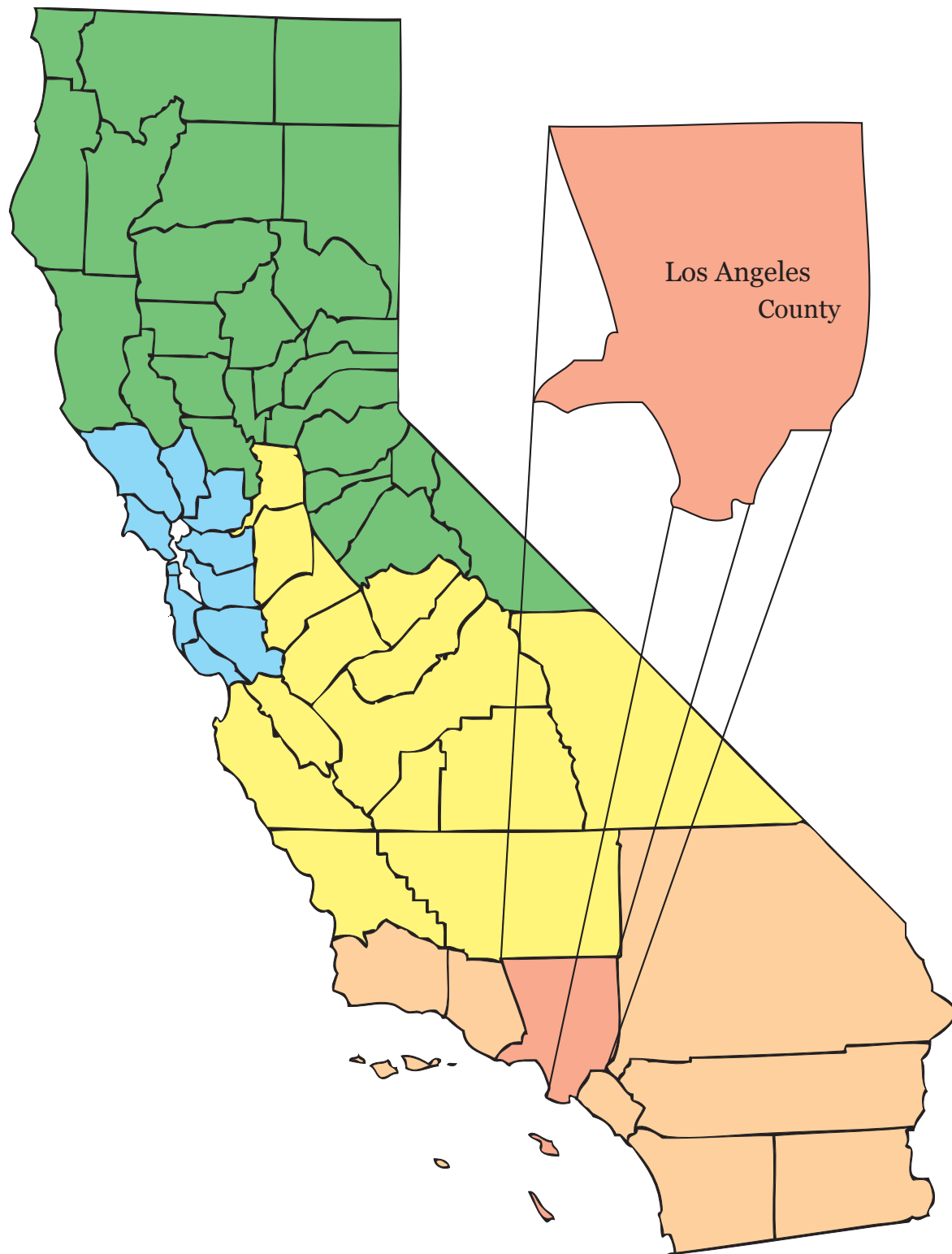


Figure 2.2. SPAs Within Los Angeles County



<http://www.childrensplanningcouncil.org/map.asp>

Table 2.2. *Sampling and Weighting Plan*

SPA	Infant/preschool licensed child care center population	Child care center targeted interviews	Child care center completed interviews	SPA sample weight *
1	71	71	25	2.45
2	510	100	111	4.19
3	514	100	105	3.96
4	298	100	98	2.53
5	197	100	81	2.19
6	317	100	103	2.50
7	245	100	99	2.09
8	414	100	109	3.45

* The weight factor times the number of completed interviews equals the estimated number of eligible centers in our study sample. See below for a discussion of eligible and ineligible centers in our sample.

Foundation as a pilot for this statewide survey (Whitebook, Kipnis, Sakai, Voisin, & Young, 2002).

Certain changes were made to the 2001 survey to capture specific information requested by First 5 California to assist in its workforce development planning related to the expansion of preschool programs. Prior to data collection, the survey instrument and data collection procedures were approved by the Committee for the Protection of Human Subjects at the University of California at Berkeley, and were then pre-tested in the field.

Telephone interviews were conducted in English with directors of child care centers. The directors answered questions about themselves and about their teaching staff. Approximately two percent of eligible centers (1.8 percent) were unable to complete the interview because of a communication barrier.

For the three groups of child care center staff – directors, teachers and assistant teachers – the questions in the survey addressed:

- *Demographics:* age, ethnicity, and languages spoken in addition to English;
- *Levels of education and training:* highest level of education; type of degree, if any; college credit related to Early Childhood Education; credit and non-credit training related to children with special needs and English language learners; and permits and credentials;
- *Employee characteristics:* staff wages, tenure, and turnover; and
- *Business and program characteristics:* number and ages of children served, including children with special needs; participation in government subsidy programs; public contracts with the California Department of Education or Head Start; and organizational status, including private for-profit, private nonprofit, or public.

Data Collection Procedures

The Network mailed a notification letter, describing the purpose of the survey and encouraging participation, to all the centers likely to be interviewed, based on their order in the random

Table 2.3. *Survey Response Rate of County Sample*

	Los Angeles County number of centers	Percentage of sample	Percentage of eligible
Sample released and dialed	1,757	100.0%	
Ineligible: out of business	32	1.8%	
Presumed ineligible*	219	12.5%	
Eligible	1,506	85.7%	100.0%
County surveys completed	517	29.4%	34.3%
No response, presumed eligible**	297	16.9%	19.7%
Refusals	297	16.9%	19.7%
Multi-site refusals***	47	2.7%	3.1%
Respondent not available/target reached	299	17.0%	19.9%
Communication barrier	31	1.8%	2.1%
Other reasons for non-completion	18	1.0%	1.2%

* Disconnected, wrong number, changed phone number, or no answer.

** Answering machine, voice mail, or busy signal.

*** Answered for some centers in multi-site agency but not all.

sample. The letter was signed by representatives of First 5 California, the Center for the Study of Child Care Employment (CSCCE) and the Network. In addition to the letter, directors received an Interview Worksheet, outlining the survey questions, to help them prepare for the telephone interview. Centers were informed that they would receive a copy of the latest version of First 5's Kit for New Parents as an incentive for completing the interview.

Field Research Corporation, Inc. (FRC), a professional public opinion research firm, conducted the interviews using computer-assisted telephone interviewing (CATI). During the CATI process, the interviewer reads the survey question from a computer screen and enters the survey data directly into the computer. This promotes uniformity of interview technique as well as accuracy and consistency during data input. FRC completed 517 interviews between September 12 and October 14, 2005.

Center directors were contacted during the work day, and whenever they requested it, were called back at an appointed time, including in the evening or during the weekend, to complete the interview. Interviews took an average of 20 minutes to complete. FRC made up to eight attempts to complete an interview with each center director.

Survey Completion and Response Rate

Combining the statewide and county interviews, FRC reached our target in six of the eight SPAs. We fell short in the two SPAs with the fewest centers (SPAs 1 and 5). (See Table 2.2.) FRC dialed 1,757 numbers to complete the 517 county interviews. Of the 1,757 center contacts, 14.3 percent were determined to be ineligible, either because they were out of business or were presumed to be, due to the nature of the unresolved phone number. (See Table 2.3.) Among those eligible, 34.3 percent completed

the survey. To increase the likelihood of interviewing as many directors as possible, the Network attempted to correct all incorrect phone numbers and contact all directors with an answering machine or voice mail to encourage them to participate in the study.

The reasons for not completing a survey among eligible centers included:

- 19.7 percent: Answering machine, voice mail or busy signal prevented successful contact;
- 19.7 percent: Refusal;
- 3.1 percent: Multi-center refusals, in which a director managing multiple sites refused to complete an interview for the particular center, but did complete interviews for other centers;
- 19.9 percent: Respondent was not available to complete the survey during the study period, or the survey was not needed because the target had already been reached in that particular SPA;
- 2.1 percent: Communication barriers we were unable to surmount;
- 1.2 percent: Some other reason.

For a breakdown of response rates by SPAs, see Appendix Tables A9 - A16.

While we were unable to assess whether the centers that participated in the study differed from those that did not participate with respect to all the variables of interest in the study, we compared the county center population to the centers that completed interviews along three important variables. We calculated the extent to which centers participating in our study represented the county overall in terms of 1) geographical distribution, 2) contract status with Head Start or the California Department of Education, and 3) licensed capacity to serve infants.

Overall, as shown in the Appendix tables, our survey approximates the geographical distribution of centers, the percentage of centers with contracts, and the percentage of centers with a license to serve infants.

Findings

Who are the teachers, assistant teachers and directors in Los Angeles County's licensed child care centers?

In Los Angeles County, a teacher in a child care center licensed to serve infants and/or preschoolers is equally likely to be White, Non-Hispanic or Latina. Assistant teachers are more diverse, and more closely reflect the ethnic distribution of children ages birth to five in the county than do teachers or directors. Still, teachers are more ethnically diverse than K-12 teachers. Compared to women in Los Angeles County, teachers and assistant teachers are more likely to be under age 30, and less likely to be over age 50. About one-third of directors, nearly one-half of teachers, and almost three-fifths of assistant teachers are able to speak a language other than English fluently, most typically Spanish.

These demographic profiles vary, however, among the eight SPAs in the county, and by such center characteristics as age group of children served and relationship to public subsidy. Center teaching staff in SPA 6, like the SPA 6 population as a whole, for example, are more likely to be African American than their counterparts in other areas of the county. Centers holding contracts with Head Start or the California Department of Education are more likely to employ teachers who speak a language other than English than are those that receive no public dollars.

The typical teacher and assistant teacher have worked in their present jobs for less than five years, while the typical director has been on the job for more than five years. The highest-paid teachers with a BA earn, on average, between \$10.00 and \$20.00 an hour, depending on the SPA in which they work. The highest-paid assistants can expect to earn about \$9.00 an hour, on average, if they work in a center receiving public dollars through vouchers, and \$11.38 an hour in a center holding a contract with Head Start or CDE.

Age

Directors were asked to report the age range of their teachers and assistant teachers; we did not collect data on the age of directors for this study. Compared to women⁶ in Los Angeles County (19.3 percent), teachers (34.1 percent) and assistant teachers (46.5 percent) were more likely to be younger than 30. (See Figure 3.1.)

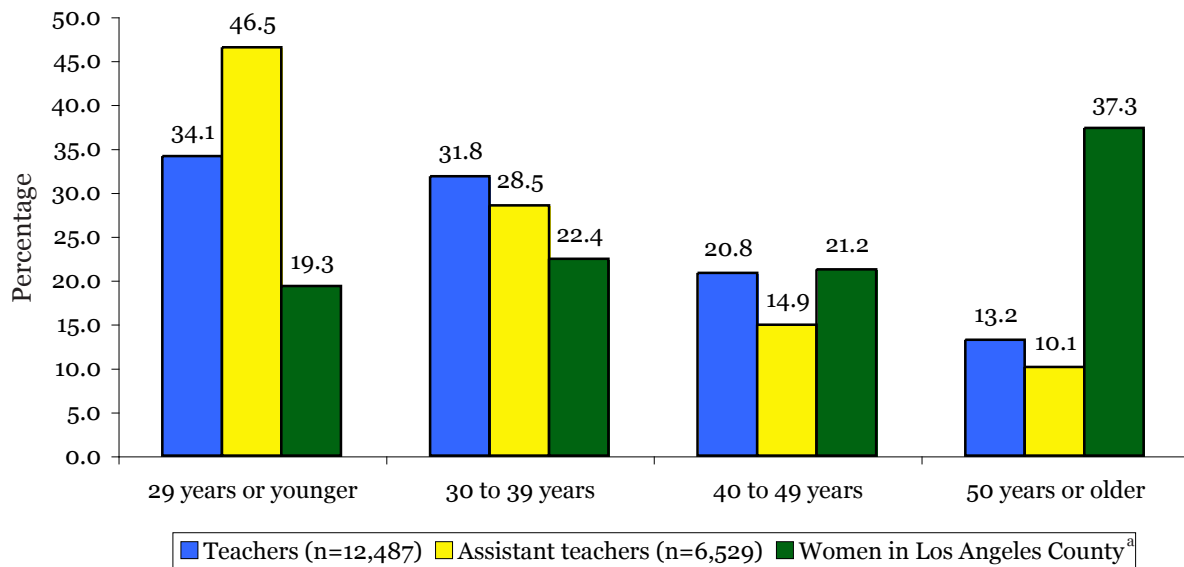
The age distribution of teachers and

assistant teachers differed by whether or not centers enrolled infants as well as preschoolers. (See Figure 3.2.) Centers enrolling infants employed a greater proportion of teachers and assistant teachers under age 30 than centers not serving infants. Only 24.7 percent of teachers in centers without infants were under age 30, compared to 47.6 percent of teachers in centers serving infants as well as preschoolers.

The age distribution of teachers and assistant teachers also varied depending on centers' relationship to public subsidy, as shown in Figure 3.3. Centers receiving public dollars through vouchers reported

⁶ Previous research has established that the early care and education workforce is predominantly female. In the interest of survey length, therefore, directors were not asked about the gender of teaching staff.

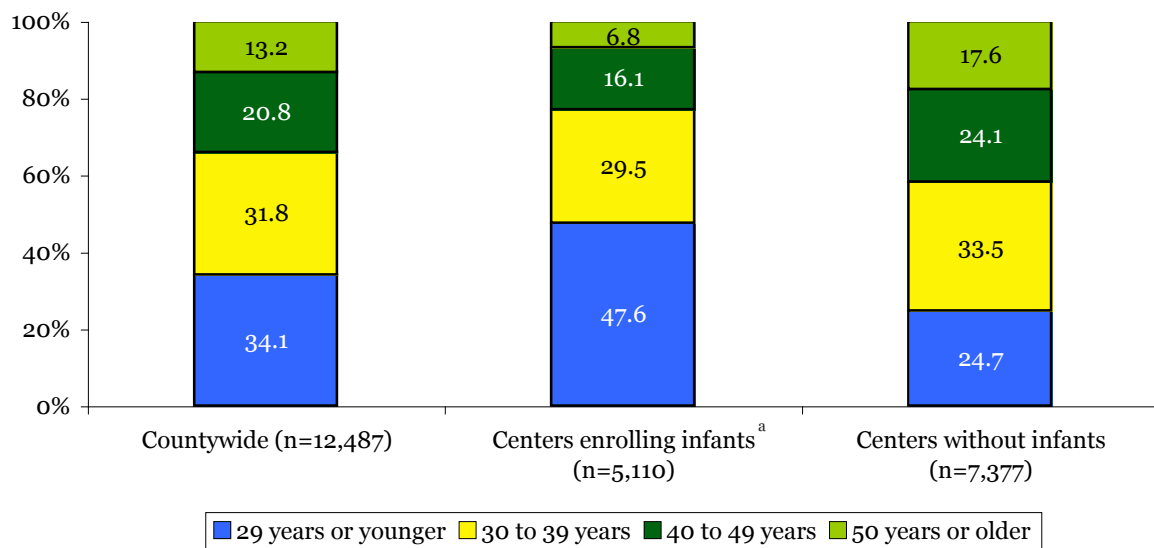
Figure 3.1. *Estimated Age Distribution of Teachers and Assistant Teachers Compared to Women in Los Angeles County: Countywide*



Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^a US Census Bureau (2004).

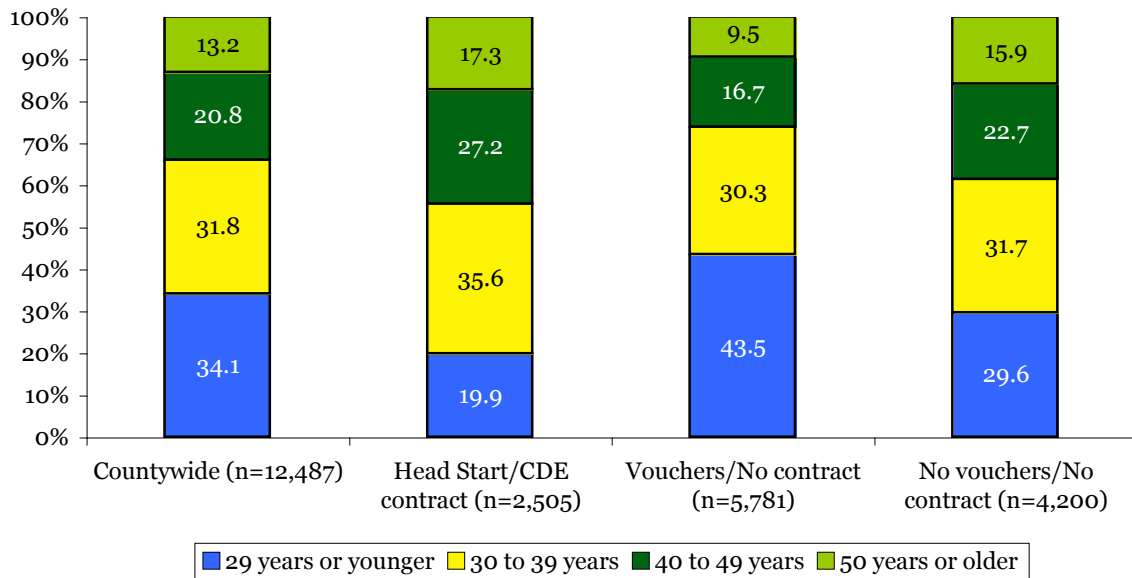
Figure 3.2. *Estimated Age Distribution of Teachers: Countywide, and By Ages of Children Served*



Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

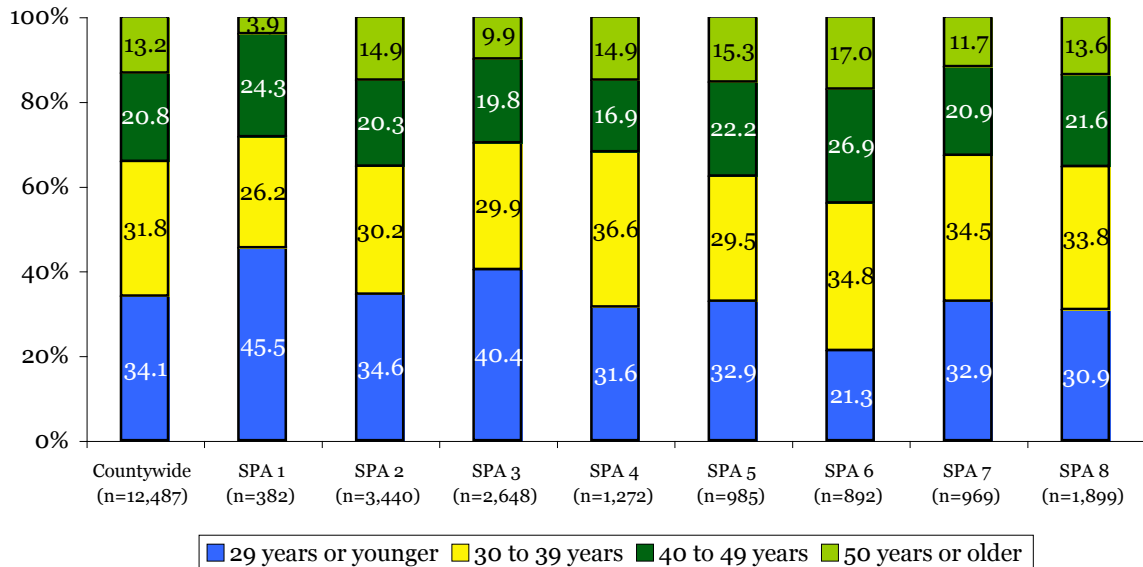
^a Most of these centers also enroll older children.

Figure 3.3. *Estimated Age Distribution of Teachers: Countywide, and By Centers' Relation to Public Subsidy*



Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Figure 3.4. *Estimated Age Distribution of Teachers: Countywide, and By SPA*



Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

a higher proportion of teachers and assistant teachers under age 30, and a lower proportion of teachers and assistant teachers over age 50, than did centers holding a contract with Head Start or CDE, or centers receiving no public dollars.

The age distribution of teachers and assistant teachers also varied across the eight SPAs. (See Figure 3.4.) Teachers in SPAs 1 and 3 were the most likely to be under 30. In addition, assistant teachers in SPA 1 were more likely to be under 30 than their counterparts in the county.

Ethnic Background

We found that slightly more than one-third of child care teachers in Los Angeles County (35.5 percent) were White, Non-Hispanic, and one-third were Latina (36.6 percent). (See Figure 3.5.) Almost two-thirds of teachers were people of color (64.5 percent); African Americans were the third largest group (14.1 percent). Among assistant teachers, Latinas represented a majority (53.2 percent), followed by White, Non-Hispanics (23.1 percent). Almost one-half of directors (49.1 percent) were White, Non-Hispanic, while 19.5 percent were Latina. As shown in Table 3.1, across all job titles, African Americans and Asian/Pacific Islanders were the next largest groups, followed by those identifying themselves as Multiethnic, American Indian/Alaskan Native, or of some other ethnicity.

Table 3.1 shows the estimated ethnic distribution of teachers, assistant teachers and directors across the county, as well as by SPA. Across job titles, directors were the least ethnically diverse group (with the exception of SPA 6), and assistant teachers were the most diverse (with the exception of SPA 8). As shown in Figure

3.5, directors in Los Angeles County child care centers enrolling infants and/or preschoolers were more likely to be White, Non-Hispanic, and less likely to be Latina, that were other adult females in the county. Teachers were equally likely as other adult females in the county to be White, Non-Hispanic, and less likely to be Latina. In contrast, assistant teachers were more likely than other adult females in the county to be Latina, and less likely to be White, Non-Hispanic. Compared to the county's adult female population, African Americans were slightly over-represented, and Asians/Pacific Islanders were under-represented, among teachers, teacher assistants and directors in the center workforce.

Assistant teachers were more diverse, and more closely reflected the ethnic distribution of children ages birth to five in Los Angeles County, than teachers or directors in centers. Child care center teachers, however, were still much more diverse than teachers in Grades K-12 in Los Angeles County public schools. (See Figure 3.6.) More than one-half of public school K-12 teachers (56.9 percent) were White, Non-Hispanic, compared to 35.5 percent of teachers in child care centers, and 19.7 percent of children ages birth to five (California Department of Education, 2005). Child care center teachers were more likely to be Latina (36.6 percent) than were K-12 teachers (22.5 percent), but were less likely to be Latina than children ages birth to five (61.4 percent). The percentage of Latina assistant teachers (53.2 percent) more closely reflected the proportion of Latino children ages birth to five in the county.

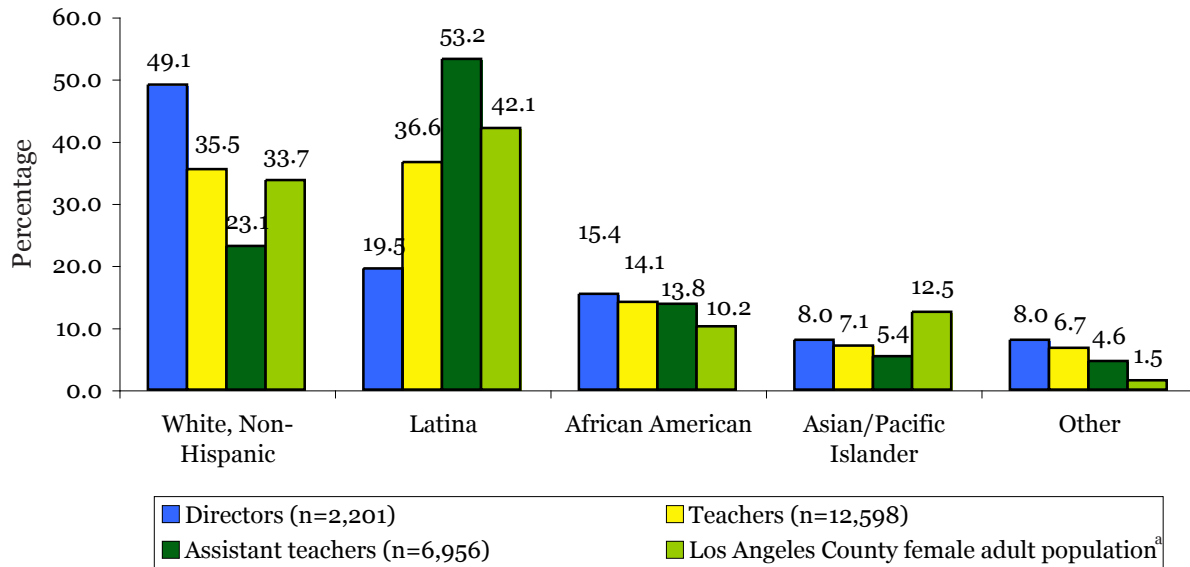
Child care center teachers were more likely than K-12 teachers to be African American (14.1 percent vs. 9.8 percent) or

Table 3.1. *Estimated Ethnicity of Teachers, Assistant Teachers and Directors: Countywide, and By SPA*

		Estimated percentage					Total	Number of staff
		White, Non-Hispanic	Latina	African American	Asian/Pacific Islander	Other		
Teachers	Countywide	35.5	36.6	14.1	7.1	6.7	100.0	12,598
	SPA 1	47.0	29.8	18.5	1.3	3.3	100.0	370
	SPA 2	51.0	28.2	5.1	4.6	11.0	100.0	3,432
	SPA 3	35.6	44.5	4.6	9.5	5.8	100.0	2,593
	SPA 4	13.2	55.5	9.4	14.7	7.1	100.0	1,320
	SPA 5	41.9	25.8	17.4	7.5	7.3	100.0	1,019
	SPA 6	4.3	30.6	60.6	1.9	2.7	100.0	939
	SPA 7	27.9	55.9	6.7	6.7	3.0	100.0	1,004
	SPA 8	36.8	27.7	24.8	6.5	4.3	100.0	1,923
Assistant teachers	Countywide	23.1	53.2	13.8	5.4	4.6	100.0	6,956
	SPA 1	44.8	24.1	22.4	5.2	3.4	100.0	142
	SPA 2	37.3	47.1	6.1	3.1	6.4	100.0	1,370
	SPA 3	24.4	60.0	4.3	7.1	4.3	100.0	1,673
	SPA 4	8.0	65.8	10.1	10.4	5.7	100.0	976
	SPA 5	24.3	37.8	21.7	5.7	10.3	100.0	423
	SPA 6	2.9	50.6	44.3	0.9	1.4	100.0	874
	SPA 7	14.1	69.7	7.1	5.4	3.7	100.0	620
	SPA 8	37.4	39.0	17.3	4.7	1.6	100.0	877
Directors	Countywide	49.1	19.5	15.4	8.0	8.0	100.0	2,201
	SPA 1	61.2	11.5	19.1	0.0	7.6	100.0	64
	SPA 2	68.1	12.6	3.0	8.9	7.4	100.0	566
	SPA 3	43.9	32.5	4.4	11.4	7.9	100.0	452
	SPA 4	33.7	31.6	10.5	15.8	8.5	100.0	240
	SPA 5	68.6	7.9	13.2	1.3	9.2	100.0	166
	SPA 6	3.9	6.5	78.0	2.6	9.1	100.0	192
	SPA 7	44.9	40.4	5.6	7.9	1.1	100.0	186
	SPA 8	51.5	8.2	24.7	4.1	11.3	100.0	335

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

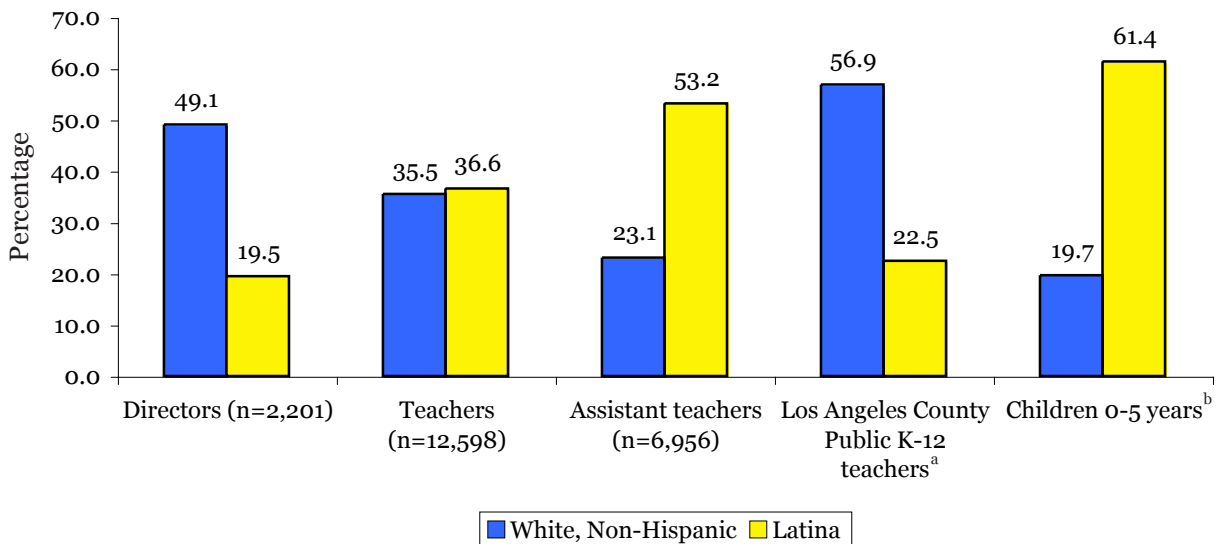
Figure 3.5. *Estimated Ethnic Distribution of Teachers, Assistant Teachers and Directors Compared to the Los Angeles County Female Adult Population: Countywide*



Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^a California Department of Finance (2004a).

Figure 3.6. *Estimated Ethnic Distribution of Teachers, Assistant Teachers and Directors Compared to Los Angeles County Public K-12 Teachers and Children 0-5 Years: Countywide*



Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^a California Department of Education (2004).

^b California Department of Finance (2004a).

self-identified as Multiethnic or of another ethnicity (6.7 percent vs. 1.5 percent), and less likely than K-12 teachers to be Asian/Pacific Islander (7.1 percent vs. 9.3 percent). Child care center teachers were more likely to be African American than were children ages birth to five (14.1 percent vs. 8.1 percent), and less likely to be Multiethnic or of another ethnicity, than were children birth to five (6.7 percent vs. 7.9 percent). Child care center teachers were almost equally likely to be Asian/Pacific Islander as children birth to five (7.1 percent vs. 7.9 percent).

The ethnic composition of staff differed by the ages of children enrolled in centers. Centers serving infants reported a higher percentage of Latina staff than centers serving only older children. In centers serving infants, 26.3 percent of the directors, 42.4 percent of the teachers and 60.1 percent of the assistant teachers were Latina, compared to 16.0 percent of directors, 37.7 percent of teachers and 49.1 percent of assistant teachers in centers serving only older children.

The ethnic composition of staff also differed by whether centers held a Head Start or CDE contract, received vouchers to cover the cost of subsidized children, or received no public dollars. As shown in Table 3.2, contracted programs employed the most diverse pool of teachers, assistant teachers, and directors, followed by programs receiving vouchers to cover the costs of subsidized children. Programs receiving no public funds were least likely to employ teachers, assistant teachers or directors of color.

In addition to looking at the percentage of teachers of various ethnicities among types of programs, it is helpful to consider the percentage of centers of a particular type that employ at

least one teacher from a particular ethnic group. Depending on their relationship to public subsidy, centers may vary not only in the percentage of their teachers of a particular ethnicity, but also in regard to whether they employ, for example, at least one Latina teacher. We found that a similar proportion of contracted programs (75.1 percent, SE=3.2) and voucher programs (78.2 percent, SE=2.4) employed at least one Latina teacher, compared to programs receiving no public dollars (64.2 percent, SE=3.2). Similarly, a greater percentage of contracted programs (47.8 percent, SE=4.8) and programs receiving vouchers (48.7 percent, SE=3.0) employed at least one African American teacher than programs receiving no public dollars (23.3 percent, SE=2.6).

There were also variations among centers serving infants and those serving only older children. A greater percentage of centers serving infants employed at least one Latina (80.9 percent) and/or African American teacher (48.2 percent) than centers serving only older children (69.3 percent employed at least one Latina; 35.9 percent employed at least one African American).

The ethnic composition of center staff differed significantly among the eight SPAs. (See Table 3.1.) To some extent, these differences reflected differences in ethnicity for the adult female population as a whole. SPA 6, for example, had a greater proportion of African American directors, teachers and assistant teachers than the other SPAs. SPAs 3, 4 and 7 had a greater proportion of Latina teachers and assistant teachers than did the other SPAs. More than one-half of teachers (51.0 percent) and 68.1 percent of directors in SPA 2 were White, Non-

Table 3.2. *Estimated Ethnicity of Teachers, Assistant Teachers and Directors, By Centers' Relationship to Public Subsidy*

		Estimated percentage		
		Head Start/ CDE contract	Vouchers/No contract	No vouchers/ No contract
Teachers	White, Non-Hispanic	21.7	33.7	46.9
	Latina	44.5	39.1	28.0
	African American	22.4	14.6	8.1
	Asian/Pacific Islander	6.0	6.9	8.0
	American Indian or Alaskan Native	0.3	0.1	0.3
	Multiethnic	2.5	2.2	4.0
	Other	2.5	3.3	4.6
	<i>Total</i>	100.0	100.0	100.0
	<i>Number of teachers</i>	2,739	5,643	4,217
Assistant teachers	White, Non-Hispanic	13.2	30.3	34.8
	Latina	60.9	45.2	46.2
	African American	18.2	12.3	6.9
	Asian/Pacific Islander	4.1	5.8	7.4
	American Indian or Alaskan Native	0.1	0.3	0.1
	Multiethnic	0.8	3.0	1.0
	Other	2.6	3.0	3.6
	<i>Total</i>	100.0	100.0	100.0
	<i>Number of assistant teachers</i>	3,425	1,703	1,827
Directors	White, Non-Hispanic	35.2	50.3	57.3
	Latina	31.1	19.0	12.2
	African American	20.9	16.9	9.4
	Asian/Pacific Islander	7.5	5.8	11.3
	American Indian or Alaskan Native	0.4	0.9	0.3
	Multiethnic	3.5	4.2	4.8
	Other	1.5	2.9	4.7
	<i>Total</i>	100.0	100.0	100.0
	<i>Number of directors</i>	491	1,009	700

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Hispanic, compared to less than five percent of teachers (4.3 percent) and directors (3.9 percent) in SPA 6, and 13.2 percent of teachers and 33.7 percent of directors in SPA 4.

Linguistic Background

We also found that the population of children served by Los Angeles County's licensed centers was characterized by great linguistic diversity. According to 2004-05 data from the California Department of Education (CDE), 44.5 percent of kindergarteners attending Los Angeles County public schools that year spoke a language other than English and were classified as English Learners. Of the more than 55 different languages spoken by English Learners in Los Angeles County's public kindergarten

classrooms, Table 3.3 lists the 15 most commonly spoken. Directors were asked whether they or any of their teachers or assistant teachers could speak fluently with children and families in a language other than English. If they answered affirmatively, they were asked which language(s) they or their teaching staff would be able to speak fluently with children and families if necessary. Our description of center staff fluency in these other languages is based entirely on directors' assessments. Note that the directors' reports do not permit us to assess whether those who spoke a language other than English also spoke English fluently.

As described below, there was a great deal of language diversity among center staff. Directors emerged as the least, and assistant teachers as the most, linguistically diverse group. About one-third (33.5 percent) of directors, 47.9 percent of teachers, and 58.7 percent of assistants had the capacity to communicate fluently with children and families in a language other than English. Not all centers, however, employed a director, teacher or assistant teacher with this capacity. Most centers (62.2 percent) did not employ a director who could communicate fluently in a language other than English with children and families, but most employed at least one teacher (82.0 percent) or assistant teacher (78.8 percent) who could. When centers employed at least one teacher or assistant with this language capacity, it was likely that the majority of their teachers (61.4 percent, SE=1.2) and assistants (74.4 percent, SE= 1.5) were able to communicate fluently in a language other than English.

Among those who spoke languages

Table 3.3. Los Angeles County Children in Public Kindergarten, 2004-2005: 15 Most Commonly Spoken Languages of English Language Learners

	Percentage
Spanish	89.5%
Cantonese	1.6%
Armenian	1.4%
Korean	1.4%
Vietnamese	1.0%
Filipino (Pilipino or Tagalog)	0.9%
Mandarin (Putonghua)	0.8%
Khmer (Cambodian)	0.4%
Japanese	0.4%
Arabic	0.4%
Farsi (Persian)	0.2%
Russian	0.2%
Urdu	0.1%
Chaozhou (Chaochow)	0.1%
Thai	0.1%
N	54,053

Source: California Department of Education (2006).

other than English fluently with children and families, the most commonly spoken language was Spanish:

- Among directors who spoke a language other than English fluently, 68.3 percent spoke Spanish and 3.5 percent spoke Chinese.
- Among teachers who spoke a language other than English fluently, 76.2 percent spoke Spanish and 3.5 percent spoke Chinese.
- Among assistant teachers who spoke a language other than English fluently, 83.8 percent spoke Spanish and 3.8 percent spoke Chinese.

The language backgrounds of teachers and assistant teachers differed by SPA. (See Table 3.4.) Centers in SPAs 6 and 8 were less likely to employ a teacher who spoke another language besides English than centers in SPAs 2, 3, 4, 5 and 7. Centers in SPA 4 were more likely than centers in all other SPAs, and centers in SPA 8 was less likely than centers in SPAs 4, 6 and 7, to employ at least one assistant teacher who spoke a language other than English fluently. Centers in SPA 4 were more likely to employ a director who spoke a language other than English than centers in SPAs 1, 5, 6 and 8. Centers in SPAs 2 and 7 were more likely than centers in SPAs 6 and 8, and centers in SPA 8 were less likely than centers in SPA 3, to employ a director who spoke a language other than English.

As shown in Table 3.5, among centers that employed at least one teacher who spoke a language other than English fluently, the percentage of such teachers, assistant teachers and directors varied among the SPAs. For example, centers in SPAs 4 and 7 employed the highest percentage of teachers who spoke a

language other than English.

The linguistic background of teachers, assistant teachers and directors also varied among centers serving particular groups of children. As shown in Tables 3.6 and 3.7, centers serving infants were significantly more likely than centers not serving infants to employ at least one teacher who spoke a language other than English fluently. However, among centers that employed at least one teacher able to communicate in a language other than or in addition to English, centers serving the different age groups did not vary in the percentages of such teachers employed. There were no significant language differences among directors and assistants in centers serving children of different ages.

As shown in Tables 3.6 and 3.7, centers holding contracts with Head Start or CDE were more likely than centers receiving no public funds to employ at least one teacher, and more likely than centers receiving vouchers or receiving no public funds, to employ an assistant teacher who spoke a language other than English fluently. There were no differences among these centers in the likelihood of employing a director who spoke a language other than English. Among centers that employed at least one director or teacher with the capacity to communicate in a language other than English, contracted centers employed a greater percentage of teachers than other centers, and a greater percentage of directors than centers receiving vouchers.

Turnover and Tenure

Center staff stability has been linked to overall program quality, the ability of a program to improve its quality, and children's social and verbal development

Table 3.4. *Estimated Percentage of Centers Employing at Least One Teacher, Assistant Teacher or Director with the Capacity to Communicate Fluently in Language Other Than English: Countywide, and By SPA*

	Estimated percentage (SE)		
	Teachers*	Assistant teachers**	Directors***
Countywide	82.0 (1.42)	78.8 (1.84)	37.8 (2.05)
<i>Number of centers</i>	2,173	1,538	1,751
SPA 1	87.5 (6.40)	69.2 (13.32)	20.0 (9.18)
<i>Number of centers</i>	58	32	49
SPA 2	87.2 (3.22)	80.3 (4.76)	44.3 (5.07)
<i>Number of centers</i>	457	298	406
SPA 3	89.2 (3.09)	79.2 (4.65)	42.4 (5.39)
<i>Number of centers</i>	405	305	337
SPA 4	94.9 (2.26)	98.7 (1.33)	59.7 (5.82)
<i>Number of centers</i>	246	190	182
SPA 5	85.2 (3.97)	77.2 (5.61)	26.7 (5.76)
<i>Number of centers</i>	177	124	131
SPA 6	64.4 (4.79)	81.1 (4.58)	21.9 (4.88)
<i>Number of centers</i>	252	185	182
SPA 7	85.6 (3.59)	83.6 (4.37)	48.7 (5.70)
<i>Number of centers</i>	202	152	163
SPA 8	67.0 (4.53)	58.9 (5.80)	21.8 (4.46)
<i>Number of centers</i>	376	252	301

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

* $p < .001$, SPAs 6,8 < SPAs 2,3,4,5,7.

** $p < .001$, SPA 4 > all other SPAs, SPAs 4,6,7, > SPA 8.

*** $p < .001$, SPA 4 > SPAs 1,5,6,8. SPAs 2,7 > SPAs 6,8. SPA 3 > SPA 8

Table 3.5 Estimated Mean Percentage of Employed Teachers and Assistant Teachers with the Capacity to Communicate Fluently in a Language Other Than English, in Centers Employing At Least One Such Staff Person: Countywide, and By SPA

	Estimated percentage (SE)	
	Teachers*	Assistant teachers**
Countywide	61.4 (1.24)	74.4 (1.49)
<i>Number of centers</i>	1,782	1,212
SPA 1	41.3 (5.71)	42.6 (10.80)
<i>Number of centers</i>	51	22
SPA 2	59.2 (3.23)	75.1 (3.75)
<i>Number of centers</i>	398	239
SPA 3	62.2 (3.21)	74.7 (3.69)
<i>Number of centers</i>	361	242
SPA 4	79.7 (2.30)	82.8 (3.10)
<i>Number of centers</i>	233	187
SPA 5	57.6 (3.30)	74.1 (4.25)
<i>Number of centers</i>	151	96
SPA 6	53.7 (3.30)	63.5 (3.82)
<i>Number of centers</i>	162	150
SPA 7	72.7 (3.29)	82.9 (3.16)
<i>Number of centers</i>	173	127
SPA 8	50.8 (2.99)	70.8 (5.02)
<i>Number of centers</i>	252	148

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

*p < .05, SPA 4 > SPAs 1,2,3,5,6,8. SPA 7 > SPAs 1,2,5,6,8. SPAs 2,3 > SPA 1.

**p < .05, SPA 1 < SPAs 2,3,4,5,7, SPAs 4,7 > SPA 6.

Table 3.6. Estimated Percentage of Centers Employing at Least One Teacher, Assistant Teacher or Director with the Capacity to Communicate Fluently in a Language Other Than English: Countywide, By Ages of Children Served, and By Relationship to Public Subsidy

	Estimated percentage (SE)					
	Countywide	Centers enrolling infants ^a	Centers without infants	Head Start/CDE contract	Vouchers/No contract	No vouchers/No contract
Teachers*	82.0 (1.42)	86.7 (2.53)	80.2 (1.73)	87.4 (2.50)	83.7 (2.13)	76.0 (2.80)
<i>Number of centers</i>	2,174	600	1,574	539	884	751
Assistant teachers**	78.8 (1.84)	80.4 (3.59)	78.2 (2.18)	93.7 (1.99)	71.9 (3.33)	72.4 (3.73)
<i>Number of centers</i>	1,538	422	1,116	475	589	474
Directors	37.8 (2.05)	43.7 (3.92)	35.1 (2.42)	42.6 (4.21)	39.7 (3.17)	31.6 (3.53)
<i>Number of centers</i>	1,751	545	1,206	410	780	561

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^aMost of these centers also enroll older children.

* $p < .01$, Centers enrolling infants > centers without infants. Head Start/CDE contract > no contract/no voucher.

** $p < .01$, Head Start/CDE contract > all others.

Table 3.7. Estimated Mean Percentage of Teachers, Assistant Teachers and Directors with the Capacity to Communicate Fluently in a Language Other Than English, in Centers Employing At Least One Such Person: By Ages of Children Served, and By Relationship to Public Subsidy

	Estimated percentage (SE)				
	Centers enrolling infants ^a	Centers without infants	Head Start/CDE contract	Vouchers/No contract	No vouchers/No contract
Teachers*	60.8 (2.32)	61.7 (1.49)	70.7 (2.30)	57.1 (1.89)	59.5 (2.34)
<i>Number of centers</i>	520	1,262	471	739	571
Assistant teachers	75.1 (2.76)	74.1 (1.77)	72.4 (2.45)	75.0 (2.45)	76.2 (7.62)
<i>Number of centers</i>	339	872	445	234	343
Directors**	83.3 (3.04)	91.2 (1.84)	95.7 (2.19)	85.2 (2.67)	86.7 (3.08)
<i>Number of centers</i>	235	423	172	309	177

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^aMost of these centers also enroll older children.

* $p < .05$, Head Start/CDE contract > all others.

** $p < .05$, Head Start/CDE contract > No contract/voucher.

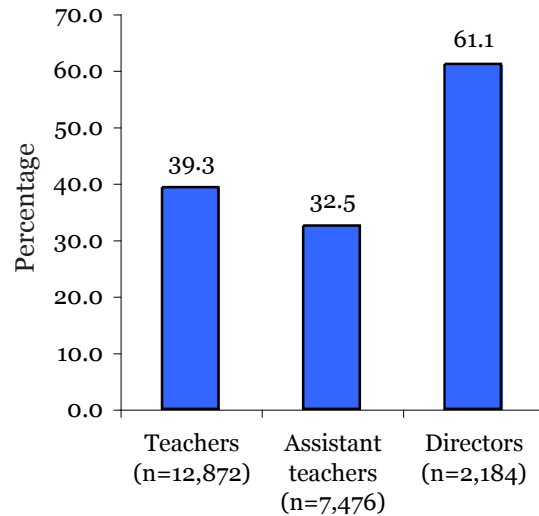
(Whitebook, Howes & Phillips, 1998; Whitebook & Sakai, 2004). Turnover rates provide one important index of center workforce stability; namely, how much change in staffing a center has undergone in the previous year. Information on tenure offers a longer-term perspective on the level of staff stability over time within centers.

In order to determine rates of turnover, we asked directors to report the number of teachers, assistant teachers and directors who had left or stopped working at their centers for any reason, including leaves of absence, over the last 12 months.⁷ On average, 23.1 percent (SE=1.4) of teachers and 23.5 percent (SE=1.9) of assistant teachers were reported to have done so.

The range of turnover rates varied considerably among centers. About one-half of centers reported no turnover in the previous 12 months among teachers (46.2 percent) or assistant teachers (56.9 percent), whereas approximately one-quarter of centers reported turnover rates greater than 30 percent among teachers and among assistant teachers. About 10 percent of centers reported that two-thirds or more of teachers and 75 percent or more of assistant teachers had left or stopped working at their centers during the previous 12 months.

Director turnover (15.6 percent, SE=1.6) was lower than turnover among teaching staff. The overwhelming majority of centers (83.5 percent) reported no director turnover in the previous 12

Figure 3.7. *Estimated Percentage of Teachers, Assistant Teachers and Directors Employed at their Child Care Center for More than Five Years*



Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

months.

As shown in Table 3.8, turnover varied little across SPAs for all job titles. As shown in Table 3.9, there were no variations in turnover rates by ages of children served or by centers' subsidy status.

To measure rates of tenure, we asked directors to report how many teachers, assistant teachers and directors at their centers had been employed for less than one year, from one to five years, or more than five years. (See Tables 3.10a and 3.10b.)

Among various positions within centers, directors were the most stable group of employees, followed by teachers and assistant teachers. (See Figure 3.7.) Approximately three-fifths of directors (61.1 percent) had been employed for more than five years at their centers,

⁷ Turnover discussed in this report refers to job turnover: the number of staff who leave employment at their centers over a fixed period of time. This study did not collect information about position turnover (changes of role while maintaining employment at the same center) or occupational turnover (departure from the child care field).

Table 3.8. *Estimated Mean Percentage of Annual Job Turnover Among Teachers, Assistant Teachers and Directors: Countywide, and By SPA*

	Estimated mean percentage (SE)		
	Teachers	Assistant teachers	Directors
Countywide	23.1 (1.44)	23.5 (1.86)	15.6 (1.62)
<i>Number of centers</i>	2,168	1,552	1,746
SPA 1	26.0 (5.50)	36.5 (15.67)	35.0 (9.67)
<i>Number of centers</i>	61	34	49
SPA 2	21.2 (3.90)	20.7 (4.36)	12.9 (3.13)
<i>Number of centers</i>	453	310	406
SPA 3	21.2 (2.52)	22.9 (3.55)	14.7 (4.00)
<i>Number of centers</i>	404	305	337
SPA 4	23.3 (3.74)	18.8 (3.57)	17.1 (4.42)
<i>Number of centers</i>	245	195	177
SPA 5	16.8 (2.33)	26.6 (6.00)	16.1 (5.28)
<i>Number of centers</i>	175	127	131
SPA 6	27.3 (5.16)	21.8 (4.39)	17.4 (4.86)
<i>Number of centers</i>	252	182	180
SPA 7	26.2 (3.88)	21.2 (4.65)	12.0 (4.43)
<i>Number of centers</i>	205	157	165
SPA 8	25.7 (3.98)	31.3 (6.94)	16.7 (4.60)
<i>Number of centers</i>	373	242	300

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Table 3.9. *Estimated Mean Percentage of Annual Job Turnover Among Teachers, Assistant Teachers and Directors: Countywide, By Ages of Children Served, and By Relationship to Public Subsidy*

	Estimated mean percentage (SE)					
	Countywide	Centers enrolling infants ^a	Centers without infants	Head Start/CDE contract	Vouchers/ No contract	No vouchers/ No contract
Teachers	23.1 (1.44)	25.5 (2.68)	22.2 (1.71)	20.0 (2.41)	27.9 (2.51)	19.8 (2.36)
<i>Number of centers</i>	2,168	589	1,580	541	873	754
Assistant teachers	23.5 (1.86)	28.8 (4.13)	21.7 (2.04)	20.4 (2.98)	27.8 (3.30)	21.5 (3.30)
<i>Number of centers</i>	1,552	411	1,141	488	579	484
Directors	15.6 (1.62)	19.0 (2.96)	14.0 (1.92)	20.5 (3.59)	16.5 (2.55)	10.6 (2.38)
<i>Number of centers</i>	1,746	543	1,203	410	777	559

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^a Most of these centers also enroll older children.

Table 3.10a. *Estimated Percentages of Teachers, Assistant Teachers and Directors With Different Rates of Tenure: Countywide, and By SPA*

		Estimated percentage				
		Countywide	SPA 1	SPA 2	SPA 3	SPA 4
Teachers	< 1 year	15.8	18.1	15.2	14.6	17.9
	1-5 years	44.9	50.3	44.6	46.1	45.3
	> 5 years	39.3	31.5	40.2	39.3	36.8
Number of teachers		12,872	365	3,478	2,775	1,312
Assistant teachers	< 1 year	21.9	32.2	27.3	20.1	15.8
	1-5 years	45.6	61.0	50.7	36.9	46.6
	> 5 years	32.5	6.8	22.0	43.1	37.6
Number of assistant teachers		7,465	145	1,563	1,740	1,102
Directors	< 1 year	10.7	15.4	8.1	10.5	19.1
	1-5 years	28.2	34.6	30.9	21.1	25.0
	> 5 years	61.1	50.0	61.0	68.4	56.0
Number of directors		2,184	637	570	452	212

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Table 3.10b. *Estimated Percentages of Teachers, Assistant Teachers and Directors With Different Rates of Tenure: Countywide, and By SPA*

		Estimated percentage				
		Countywide	SPA 5	SPA 6	SPA 7	SPA 8
Teachers	< 1 year	15.8	15.2	17.7	17.2	15.5
	1-5 years	44.9	39.7	47.0	40.7	46.3
	> 5 years	39.3	45.1	35.4	42.1	38.1
Number of teachers		12,872	1,054	946	1,006	1,937
Assistant teachers	< 1 year	21.9	23.7	25.1	20.5	18.8
	1-5 years	45.6	40.5	42.5	57.7	46.9
	> 5 years	32.5	35.8	32.5	21.8	34.3
Number of assistant teachers		7,465	471	846	662	936
Directors	< 1 year	10.7	3.9	15.2	6.7	12.4
	1-5 years	28.2	19.4	44.4	35.9	24.7
	> 5 years	61.1	76.5	40.6	57.2	62.9
Number of directors		2,184	169	197	186	335

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

compared to 39.3 percent of teachers and 32.5 percent of assistant teachers. Only 39.6 percent of centers (SE=2.2) reported employing at least one assistant teacher for five years or more.

Tenure for teachers, assistant teachers and directors also varied by SPA and by center characteristics. Tables 3.10a and 3.10b display variation in tenure among the SPAs. Staffing among directors and teachers was less stable, as measured by tenure, in centers serving infants and preschoolers than in centers not serving infants. (See Table 3.11.) Turnover and tenure differed among centers with varying relationships to public subsidy; teachers and assistant teachers working in centers receiving vouchers were less stable than those working in centers with Head Start or CDE contracts or in centers receiving no public funds. (See Tables 3.9 and 3.11.) Directors of centers with Head Start or CDE contracts had higher turnover rates and were less likely than their counterparts in other centers to have been on the job for more than five years. (See Tables 3.9 and 3.11.)

Wages

We sought to document the current compensation of teachers and assistant teachers working in Los Angeles County child care centers licensed to serve infants and/or preschoolers. Because of the length of the survey, we focused our investigation on two categories of teaching staff: teachers with BA or higher degrees, and assistant teachers. We did not collect information about benefits such as health coverage or retirement plans.

We asked directors to provide hourly wages for their highest- and lowest-paid teachers with a BA or higher degree. Our intention was to document the pay rates

of those teachers with the highest level of education. By asking for the lowest rate of pay, we were able to capture what is likely to be paid at a center to a new teacher with a BA or higher degree. By asking for the highest rate of pay, we were able to gain a sense of the pay ladder available to more tenured teachers with degrees. We also asked directors to provide hourly wages for their highest-paid assistant teachers. We assumed that this amount would reflect the wages of those assistants who had been at the center for some period of time, rather than new recruits.

Table 3.12 provides average highest and lowest hourly wages paid to teachers with BA or higher degrees, by the eight SPAs. The lowest wages (\$9.37) were, on average, over \$10.00 an hour less than the highest wages (\$20.19). Across SPAs, centers in SPA 1 paid lower wages than other areas of the county. The highest-paid assistant teachers in the county earned, on average, \$10.30 per hour, with those in SPA 5 earning the most, and those in SPA 1 earning the least.

In addition to average wages, we examined the distribution of wages among highest- and lowest-paid teachers with BA or higher degrees, and among assistant teachers. One-quarter of centers paid their highest-paid degreed teachers \$12.00 per hour or less (about \$24,960 per year), and about one-quarter of centers paid their assistant teachers \$8.00 per hour or less (or \$16,640 per year). Only about 10 percent of centers paid their highest-paid teachers \$23.00 per hour or more (or \$47,840 per year), and only 10 percent of centers paid their highest-paid assistant teachers \$14.00 per hour or more (or \$29,120 per year).

We also examined whether centers serving different groups of children varied

Table 3.11. *Estimated Percentage of Teachers, Assistant Teachers and Directors With Different Rates of Tenure: Countywide, By Ages of Children Served, and By Centers' Relationship to Public Subsidy*

		Estimated percentage					
		County-wide	Centers enrolling infants ^a	Centers without infants	Head Start/CDE contract	Vouchers/No contract	No vouchers/No contract
Teachers	< 1 year	15.8	17.5	14.6	12.4	17.3	15.8
	1-5 years	44.9	51.8	40.0	43.6	49.6	38.9
	> 5 years	39.3	30.7	45.4	43.9	33.1	45.3
Number of teachers		12,872	5,333	7,465	2,638	6,006	4,229
Assistant teachers	< 1 year	21.9	25.5	19.8	17.7	30.8	21.3
	1-5 years	45.6	44.1	46.6	44.1	47.7	47.5
	> 5 years	32.5	30.5	33.7	38.2	22.5	31.2
Number of assistant teachers		7,465	2,763	4,702	3,681	1,854	1,929
Directors	< 1 year	10.7	10.2	11.0	18.2	8.9	8.5
	1-5 years	28.2	34.3	25.2	33.2	28.7	24.2
	> 5 years	61.1	55.5	63.9	48.5	62.4	67.4
Number of directors		2,184	726	1,458	464	1,021	700

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^a Most of these centers also enroll older children.

Table 3.12. *Estimated Mean Hourly Wages Paid to Teachers with BA or Higher Degrees and to Assistant Teachers: Countywide, and By SPA*

	Estimated mean hourly wage (SE)	Number of centers
Teachers with BA or higher degree, highest wage*	SPA 1 (0.51)	10
	SPA 2 (0.98)	214
	SPA 3 (0.62)	186
	SPA 4 (1.45)	124
	SPA 5 (1.12)	103
	SPA 6 (1.02)	70
	SPA 7 (2.17)	61
	SPA 8 (1.41)	173
	Countywide (0.46)	940
Teachers with BA or higher degree, lowest wage**	SPA 1 (0.47)	7
	SPA 2 (0.71)	210
	SPA 3 (0.56)	198
	SPA 4 (0.94)	121
	SPA 5 (0.79)	101
	SPA 6 (0.85)	70
	SPA 7 (0.97)	61
	SPA 8 (0.84)	183
	Countywide (0.31)	951

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

* $p < .05$, SPA 1 < all other SPAs. SPA 2, 3 < SPA 5.

** $p < .05$, SPA 1 < all other SPAs. SPA 3 < SPAs 5,6.

*** $p < .05$, SPA 1 < all other SPAs. SPA 5 > SPAs 2,3,7.

Table 3.12. Estimated Mean Hourly Wages Paid to Teachers with BA or Higher Degrees and to Assistant Teachers: Countywide, and By SPA

		Estimated mean hourly wage (SE)	Number of centers
All assistants, highest wage***	SPA 1	7.90 (0.34)	32
	SPA 2	10.10 (0.30)	256
	SPA 3	9.69 (0.26)	258
	SPA 4	10.49 (0.32)	152
	SPA 5	11.50 (0.33)	99
	SPA 6	10.17 (0.36)	125
	SPA 7	9.49 (0.25)	129
	SPA 8	9.89 (0.38)	183
	Countywide	10.03 (0.12)	1,233

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

* $p < .05$, SPA 1 < all other SPAs. SPA 2, 3 < SPA 5.

** $p < .05$, SPA 1 < all other SPAs. SPA 3 < SPAs 5,6.

*** $p < .05$, SPA 1 < all other SPAs. SPA 5 > SPAs 2,3,7.

in their pay rates. (See Table 3.13.) We found that in centers serving both infants and preschoolers, the lowest-paid teachers with BA or higher degrees earned less on average than their counterparts in centers that did not serve infants. Contracted programs paid higher assistant teacher wages, as well as higher average wages to their highest- and lowest-paid teachers with BA or higher degrees. Centers receiving public dollars through vouchers paid, on average, the lowest wages.

Size of the Teacher, Assistant Teacher and Director Workforce in Los Angeles County Centers Licensed to Serve Infants and/or Preschoolers

Directors were first asked to report the overall number of teachers, assistant teachers and directors employed in their centers, and then to report how many teachers and assistant teachers worked in classrooms with infants and/or preschool children, and how many worked in classrooms with school-age children (if any were enrolled in their centers).⁸ The following section provides information about:

- the overall number of teachers and assistant teachers working in classrooms with children in centers licensed to serve infants and/or preschoolers;
- the average number of teachers and assistant teachers working in such centers;

- the overall number of directors working in centers licensed to serve infants and/or preschoolers; and
- the average number of directors working in such centers.

The weighted estimates provided below are based on 85.7 percent of the centers licensed to serve infants and/or preschoolers across the county. Between the times when our sample was drawn and when data were collected, 14.3 percent of centers initially included in our population were no longer in business. Assuming that at least some of the closed centers were replaced by new centers, it is likely that the estimate provided here slightly undercounts the total members of the teacher, assistant teacher and director workforce.

Overall Number of Teachers, Assistant Teachers and Directors Employed in Centers Licensed to Serve Infants and/or Preschoolers

As shown in Table 3.14, the teacher, assistant teacher and director workforce in Los Angeles County centers licensed to care for infants and/or preschoolers comprised 23,029 members. An estimate of the total workforce in these centers would also include teachers and assistants working with school-age children, and would increase the estimate by approximately eight percent. Because many centers also employ cooks, custodians, social workers, family support workers, educational coordinators and office staff (Brandon et al., 2002), the total early care and education workforce for centers licensed to serve infants and/or preschoolers may approach or even exceed 31,000 members. The proportion of teachers, assistant teachers and directors employed within each SPA were

⁸ Assistant teachers and teachers working with school-age children constituted approximately eight percent of the teaching staff workforce at these centers. We do not provide estimates of the countywide numbers of school-age teachers and assistant teachers employed in these programs, because we recognize that these staff constitute only a small portion of the teaching staff working in programs to serve school-age children, most of which do not serve younger children and many of which are exempt from licensing.

Table 3.13. *Estimated Mean Hourly Wages Paid to Teachers with BA or Higher Degrees and to Assistant Teachers: Countywide, By Ages of Children Served, and By Centers' Relationship to Public Subsidy*

		Estimated Mean hourly wage (SE)	Number of centers
Teachers with BA or higher degree, highest wage*	Head Start/CDE contract	21.89 (1.64)	193
	Vouchers/No contract	13.73 (0.36)	361
	No vouchers/No contract	16.79 (0.51)	385
	Centers enrolling infants ^a	15.24 (0.65)	307
	Centers without infants	17.34 (0.60)	633
	Countywide	16.66 (0.46)	940
Teachers with BA or higher degree, lowest wage**	Head Start/CDE contract	17.57 (1.14)	189
	Vouchers/No contract	11.72 (0.26)	375
	No vouchers/No contract	13.44 (0.32)	387
	Centers enrolling infants ^a	12.19 (0.35)	305
	Centers without infants	14.24 (0.41)	646
	Countywide	13.58 (0.31)	951

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^aMost of these centers also enroll older children.

* $p < .05$, Head Start/CDE contract > all others. No vouchers/No contract > Vouchers/No contract.

** $p < .05$, Centers enrolling infants < centers without infants. Head Start/CDE contract > all others. No vouchers/No contract > Vouchers/No contract.

*** $p < .05$, Head Start/CDE contract > all others. No vouchers/No contract > Vouchers/No contract.

Table 3.13. *Estimated Mean Hourly Wages Paid to Teachers with BA or Higher Degrees and to Assistant Teachers: Countywide, By Ages of Children Served, and By Centers' Relationship to Public Subsidy*

		Estimated Mean hourly wage (SE)	Number of centers
All assistants, highest wage***	Head Start/CDE contract	11.38 (0.26)	306
	Vouchers/No contract	9.03 (0.14)	508
	No vouchers/No contract	10.26 (0.21)	419
	Centers enrolling infants ^a	9.70 (0.21)	370
	Centers without infants	10.17 (0.15)	862
	Countywide	10.03 (0.12)	1,233

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^aMost of these centers also enroll older children.

* $p < .05$, Head Start/CDE contract > all others. No vouchers/No contract > Vouchers/No contract.

** $p < .05$, Centers enrolling infants < centers without infants. Head Start/CDE contract > all others. No vouchers/No contract > Vouchers/No contract.

*** $p < .05$, Head Start/CDE contract > all others. No vouchers/No contract > Vouchers/No contract.

Table 3.14. *Estimated Distribution of Assistant Teachers, Teachers and Directors Working with Infants and/or Preschoolers: Countywide*

		Assistant teachers	Teachers	Directors	Total
Countywide	Total number	7,690	13,155	2,184	23,029
	Percentage	33.4	57.1	9.5	100.0

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

similar to the proportions for the county as a whole.

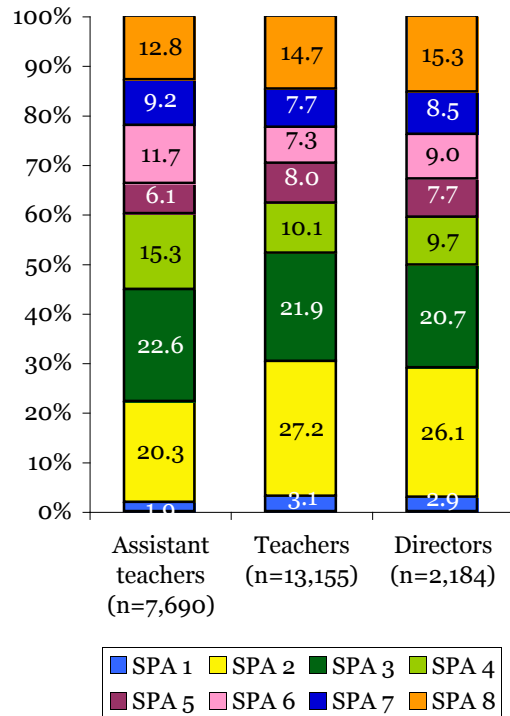
As shown in Figure 3.8, the distribution of teachers, assistant teachers and directors varied across the SPAs, as would be expected, given variations in overall population density. For example, less than five percent of all assistant teachers, teachers and directors were employed in SPA 1.

As shown in Table 3.15, centers enrolling infants as well as preschoolers employed 38.4 percent of all teachers, assistant teachers and directors, with the remaining staff employed in centers that did not enroll infants. Centers serving infants as well as preschoolers did not differ from those not serving infants, however, with respect to the proportion of their staff who were teachers, assistant teachers or directors.

Table 3.16 shows the countywide distribution of teachers, assistant teachers and directors employed across centers based on the centers' subsidy status.⁹ One-half of all assistant teachers in the county (50.8 percent), but only 21.0 percent of teachers, were employed in centers holding a Head Start or CDE contract. In contrast, 45.7 percent of all teachers in the county, but only 24.1 percent of assistant teachers, were employed in centers receiving public dollars through vouchers. Based on their relationship to public subsidy, centers varied with respect to the proportion of their staff who were teachers, assistant teachers or directors, as shown in Table 3.17.

⁹ As described in the introduction of this report, contracted centers operate under more stringent ratio and staff qualification regulations; indeed, assistant teacher qualifications in contracted programs match or exceed those of teachers required by licensing in non-contracted programs.

Figure 3.8. *Estimated Number and Percentage of Assistant Teachers, Teachers and Director Who Work with Infant and/or Preschool Children: By SPA*



Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Average Number of Teachers, Assistant Teachers and Directors Employed in Centers Licensed to Serve Infants and/or Preschoolers

As shown in Table 3.18, we estimate that centers in Los Angeles County licensed to serve infants and/or preschoolers employed, on average, seven teachers, four assistant teachers and one director.¹⁰ On average, the vast majority of teachers (91.8 percent, SE=0.3) and assistant teachers (93.3 percent, SE=0.5)

¹⁰ Note that 16.9 percent of centers had more than one director, 62.7 percent of centers had one director, and 20.5 percent of centers had no person who served only as an administrative director. In many of the latter centers, the person with director responsibilities was also a teacher.

Table 3.15. *Estimated Number and Percentage of Assistant Teachers, Teachers and Directors Working with Infants and/or Preschoolers: Countywide, and By Ages of Children Served*

		Assistant teachers	Teachers	Directors	Total
Centers enrolling infants^a	Total number	2,781	5,333	726	8,840
	Percentage	36.2	40.5	33.2	38.4
Centers without infants	Total number	4,909	7,822	1,458	14,189
	Percentage	63.8	59.5	66.8	61.6
All centers	Total number	7,690	13,155	2,184	23,029
	Percentage	100.0	100.0	100.0	100.0

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^a Most of these centers also enroll older children.

Table 3.16. *Estimated Number and Percentage of Assistant Teachers, Teachers and Directors Working with Infants and/or Preschoolers: Countywide, and By Centers' Relationship to Public Subsidy*

		Assistant teachers	Teachers	Directors	Total
Head Start/ CDE contract	Total number	3,901	2,765	464	7,130
	Percentage	50.7	21.0	21.3	31.0
Vouchers/No contract	Total number	1,854	6,014	1,021	8,889
	Percentage	24.1	45.7	46.7	38.6
No vouchers/ No contract	Total number	1,934	4,376	700	7,010
	Percentage	25.2	33.3	32.0	30.4
All centers	Total number	7,690	13,155	2,184	23,029
	Percentage	100.0	100.0	100.0	100.0

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Table 3.17. *Estimated Distribution of Assistant Teachers, Teachers and Directors Working with Infants and/or Preschoolers: Countywide, and By Centers' Relationship to Public Subsidy*

		Assistant teachers	Teachers	Directors	Total
All centers countywide	Total number	7,690	13,155	2,184	23,029
	Percentage	33.4	57.1	9.5	100.0
Head Start/ CDE contract	Total number	3,901	2,765	464	7,130
	Percentage	54.7	38.8	6.5	100.0
Vouchers/No contract	Total number	1,854	6,014	1,021	8,889
	Percentage	20.9	67.7	11.5	100.0
No vouchers/ No contract	Total number	1,934	4,376	700	7,010
	Percentage	27.6	62.4	10.0	100.0

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

in these programs worked with infants and/or preschoolers. The other teachers and assistant teachers worked with school-age children.

Table 3.19 shows the average numbers of teachers and assistant teachers in centers with different relationships to public subsidy. Contracted centers, on average, employed fewer teachers and more assistant teachers than centers receiving vouchers or those receiving no public dollars. Centers receiving no public dollars also employed fewer teachers than those centers receiving vouchers.

Table 3.18. Estimated Mean Number of Assistant Teachers, Teachers and Directors Employed by Centers: Countywide

	All staff	Infant/ preschool teaching staff
Assistant teachers	3.7 (0.23)	3.5 (0.23)
Teachers	6.5 (0.20)	6.0 (0.20)
Directors	1.0 (0.26)	

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Table 3.19. Estimated Mean Number of Teachers and Assistant Teachers Employed by Centers: Countywide, and By Centers' Relationship to Public Subsidy

	Estimated mean number (SE)			Countywide
	Head Start/CDE contract	Vouchers/No contract	No vouchers/No contract	
Assistant teachers	7.7 (0.72)	2.2 (0.21)	2.7 (0.27)	3.7 (0.23)
<i>Number of centers</i>	543	894	767	2,204
Teachers	5.6 (0.35)	7.4 (0.35)	6.1 (0.34)	6.5 (0.20)
<i>Number of centers</i>	543	894	767	2,204

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

What are the characteristics of children in Los Angeles County child care centers licensed to serve infants and/or preschoolers?

In Los Angeles County, teachers and assistants care for and educate approximately 155,000 children in centers licensed to serve infants and/or preschoolers. Approximately 90 percent of the children in these centers are not yet in kindergarten, and two-thirds are between the ages of three and five. Seven percent are children under age two, about 15 percent are age two, and 11 percent are in kindergarten or a higher grade. On average, about five percent of children in these centers are reported by directors to have special needs.

Nearly two-thirds of centers report caring for at least one child who receives public child care assistance. Forty-one percent of centers receive public dollars in the form of vouchers, and one-quarter of centers receive public dollars through a contract with Head Start or the California Department of Education, to cover the cost of care for the subsidized children they serve. Centers vary considerably in size, with about 20 percent enrolling 30 or fewer children and 20 percent enrolling 100 children or more.

Number of Children Served

As shown in Table 3.20, licensed child care centers in Los Angeles County provided services in 2005 to an estimated 136,730 infants and/or preschoolers, not yet in kindergarten. In addition, these centers cared for 17,646 children in kindergarten or a higher grade.¹¹ Table 3.20 also presents a distribution by age group of the estimated numbers of children enrolled.¹² Two-thirds (66.5 percent) of these children were preschoolers, ages three to five, 22.0 percent were two years old or younger, and 11.4 percent were in kindergarten or older. Center directors were asked about the number of children in various age groups that their centers enrolled,

Table 3.20. *Estimated Number of Children Enrolled in Los Angeles County Child Care Centers Licensed to Serve Infants and/or Preschoolers*

	Number enrolled (weighted data)
Under age 2	11,286
Age 2	22,736
Ages 3 to 5, not yet in kindergarten	102,708
Ages 5 or younger, not in kindergarten	136,730
Ages 5 or older, in kindergarten or higher grade	17,646
All ages	154,376

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

¹¹ This figure does not include centers licensed exclusively to serve school-age children.

¹² The licensed capacity of a center (the number of children it is approved to serve) may be less than or greater than actual number of children enrolled. Some centers, for example, may choose to enroll fewer children than permitted in their space, or may not be able to find enough children to reach their full capacity. Alternately, some centers may enroll children in part-day sessions, and thus serve a higher overall number of children but never exceed their licensed capacity at any given time.

and they reported a variety of age configurations:

- Virtually all centers (98.2 percent, SE=0.5) reported caring for children between the ages of three and five.
- 13.0 percent (SE=1.3) reported caring for children across the entire age span from infancy through school age. Centers enrolling at least one subsidized child through a voucher (23.8 percent, SE=2.6) were the most likely to care for children across the age span.
- 44.3 percent (SE=1.9) reported caring for at least one child attending kindergarten or a higher grade.
- 27.4 percent of centers (SE=1.7) enrolled children under two, and none of the centers reported enrolling infants exclusively.¹³
- 76.4 percent of centers (SE=1.6) enrolled two-year-old children.

The percentage of centers that served different age groups varied somewhat across SPAs. As shown in Table 3.21, centers in SPA 7 were less likely to care for at least one child under two than centers in all the other SPAs, except for SPA 4. SPA 1 centers were more likely to serve children in kindergarten or higher grades than centers in SPAs 2, 5 or 8, and centers in SPA 3 were more likely to serve this age group than centers in SPA 5.

Table 3.22 shows the average number of children by age enrolled in centers countywide and by SPA. Centers varied considerably in terms of the *overall* number of children enrolled. Approximately 20 percent of centers enrolled 30 children or fewer, and about

20 percent enrolled 100 children or more. As shown in Table 3.23, centers, on average, enrolled 69.8 children across the entire age span, and 61.9 infants and/or preschoolers. On average, SPA 3 centers enrolled more children across the age span than SPA 6. There were no other significant differences among the SPAs.

Centers and Public Dollars for Child Care Assistance

Centers subsidize the cost of services for children enrolled in their programs as a condition of a contract the center holds with Head Start or the California Department of Education (CDE), or by accepting vouchers available to families through CalWorks and Alternative Payment Program funding. Thus, to determine whether programs enrolled any children who received public child care assistance, we asked whether the program held a contract with Head Start or CDE, or enrolled at least one child who received a voucher. We estimate that 65.3 percent of centers in Los Angeles County licensed to serve infants and/or preschoolers enrolled at least one subsidized child. About one-quarter of centers (24.6 percent) held a contract with Head Start or CDE. (See Table 3.24.) Of the centers that did not have a Head Start or CDE contract, 62.1 percent reported enrolling at least one child who received a voucher. These centers represented 40.7 percent of all centers in our sample.

In centers that held contracts with Head Start or CDE, most if not all children received public assistance for child care.¹⁴ Since vouchers “follow” specific children, however, centers without contracts that

¹³ Some centers that do not have an infant license have a Toddler Option within their preschool license, allowing them to serve children under age two.

¹⁴ These centers may also accept vouchers, but we did not explore whether this was the case, as we knew that most enrolled children were subsidized.

Table 3.21. *Estimated Percentage of Centers Serving at Least One Child in Various Age Groups: Countywide, and by SPA*

	Estimated percentage (SE)			
	Under age 2*	Age 2	Ages 3-5, not yet in kindergarten	Ages 5 or older, in kindergarten or higher grade**
Countywide	27.4 (1.72)	76.4 (1.61)	98.2 (0.50)	44.3 (1.89)
<i>Number of centers</i>	2,209	2,189	2,208	2,202
SPA 1	36.0 (9.80)	84.0 (7.48)	100.0 (0.00)	72.0 (9.17)
<i>Number of centers</i>	61	61	61	61
SPA 2	35.1 (4.55)	81.1 (3.73)	97.3 (1.55)	39.6 (4.66)
<i>Number of centers</i>	465	465	466	465
SPA 3	34.3 (4.65)	79.6 (3.99)	100.0 (0.00)	53.3 (4.89)
<i>Number of centers</i>	417	408	416	416
SPA 4	21.4 (4.17)	82.1 (3.95)	96.9 (1.75)	44.9 (5.05)
<i>Number of centers</i>	248	240	248	248
SPA 5	25.9 (4.90)	77.5 (4.70)	98.8 (1.23)	26.3 (4.95)
<i>Number of centers</i>	177	175	177	175
SPA 6	24.3 (4.25)	71.8 (4.45)	96.1 (1.91)	45.6 (4.93)
<i>Number of centers</i>	257	257	257	257
SPA 7	9.1 (2.90)	67.7 (4.72)	100.0 (0.00)	46.5 (5.04)
<i>Number of centers</i>	207	207	207	207
SPA 8	25.7 (4.20)	69.7 (4.42)	98.2 (1.29)	41.7 (4.77)
<i>Number of centers</i>	377	376	376	373

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

* $p < .01$, SPA 7 < SPAs 1,2,3,5,6,8.

** $p < .01$, SPA 1 > SPAs 2,5,8; SPA 3 > SPA 5.

Table 3.22. *Estimated Mean Number of Children Served by Age Group: Countywide, and by SPA (Includes only those centers that care for at least one child in that age range)*

	Estimated mean number of children served (SE)			
	Under age 2*	Age 2**	Ages 3-5, not yet in kindergarten	Ages 5 or older, in kindergarten or higher grade
Countywide	18.7 (1.46)	13.6 (0.52)	47.4 (1.42)	18.1 (1.12)
<i>Number of centers</i>	605	1,674	2,169	976
SPA 1	12.9 (1.87)	10.9 (1.50)	44.1 (5.53)	16.4 (3.23)
<i>Number of centers</i>	22	51	61	44
SPA 2	18.5 (3.71)	16.0 (1.29)	49.6 (3.32)	18.8 (2.54)
<i>Number of centers</i>	163	377	453	184
SPA 3	27.8 (3.47)	15.6 (1.41)	47.6 (3.68)	18.5 (2.64)
<i>Number of centers</i>	143	325	416	222
SPA 4	17.5 (2.59)	10.9 (1.07)	43.9 (2.93)	21.6 (3.78)
<i>Number of centers</i>	53	197	240	111
SPA 5	20.5 (3.30)	16.5 (1.97)	41.9 (2.84)	17.5 (3.22)
<i>Number of centers</i>	46	136	175	46
SPA 6	11.2 (3.24)	10.9 (1.39)	41.6 (4.34)	14.7 (2.70)
<i>Number of centers</i>	62	185	247	117
SPA 7	14.8 (2.36)	13.8 (1.78)	57.1 (5.01)	19.9 (4.01)
<i>Number of centers</i>	19	140	207	96
SPA 8	12.0 (1.87)	10.4 (0.82)	48.1 (3.69)	16.1 (2.55)
<i>Number of centers</i>	97	262	369	155

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

* $p < .05$, SPA 3 > SPAs 1,6,7,8.

** $p < .05$, SPA 8 < SPAs 2,3,5.

Table 3.23. *Estimated Mean Number of Children Served: Countywide, and by SPA*

	Estimated mean number of children served (SE)	
	All age spans*	Ages 5 or younger, not in kindergarten
Countywide	69.8 (1.93)	61.9 (1.73)
<i>Number of centers</i>	2,185	2,189
SPA 1	69.7 (7.72)	57.9 (6.41)
<i>Number of centers</i>	61	61
SPA 2	75.3 (4.66)	67.8 (4.38)
<i>Number of centers</i>	465	465
SPA 3	79.1 (5.83)	69.4 (5.17)
<i>Number of centers</i>	408	408
SPA 4	64.7 (4.48)	54.9 (3.29)
<i>Number of centers</i>	240	240
SPA 5	64.1 (4.23)	58.9 (3.94)
<i>Number of centers</i>	173	175
SPA 6	57.2 (4.72)	50.5 (4.47)
<i>Number of centers</i>	257	257
SPA 7	77.1 (6.90)	67.8 (5.40)
<i>Number of centers</i>	207	207
SPA 8	63.6 (3.87)	57.5 (3.76)
<i>Number of centers</i>	373	376

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

* $p < .05$ SPA 3 > SPA 6.

Table 3.24. *Estimated Percentage of Centers Receiving Public Dollars: Countywide*

	Estimated percentage (SE)	Number of centers
Head Start/ CDE contract	24.6 (1.58)	543
Vouchers/No contract	40.7 (1.87)	898
No vouchers/ No contract	34.7 (1.82)	767

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

reported enrolling at least one child receiving public child care assistance may or may not have enrolled additional subsidized children. We therefore asked directors who reported enrolling at least one subsidized child through a voucher, how many such children they enrolled. We were thus able to calculate the percentage of children receiving public child care assistance in programs that enrolled at least one child with a voucher.

On average, in centers that cared for at least one child receiving a child care voucher, 21.5 percent of children enrolled in that center received this type of assistance. (See Table 3.25.) In more than half of these centers (53.9 percent), five percent or less of the children enrolled received vouchers. Approximately 80 percent of centers (83.8 percent) enrolled 25 percent or fewer children receiving vouchers, while 16.2 percent of centers enrolled more than 25 percent of such children. Among centers that cared for at least one child receiving a voucher, there were no significant differences in the average percentage of children receiving vouchers between centers enrolling and not enrolling infants. As shown in Table 3.25, the average percentage of children enrolled in centers receiving public dollars in the form of vouchers varied by SPA. Centers in SPA 6 served, on average, a higher percentage of children receiving vouchers than centers in all other SPAs, except for SPA 1; centers in SPAs 1 and 8 served a higher percentage than centers in SPAs 5 and 7; and centers in SPA 4 served a higher percentage than centers in SPA 5.

Average center size varied by the subsidy status of the center: whether a center held a contract with Head Start or CDE, did not hold a contract but accepted public vouchers for children of low-

Table 3.25. *Estimated Mean Percentage of Subsidized Children Enrolled in Centers Receiving Vouchers: Countywide and By SPA*

	Estimated mean percentage (SE)	
	Children receiving voucher subsidy*	Number of centers
Countywide	21.5 (1.34)	907
SPA 1	31.8 (7.15)	44
SPA 2	14.8 (2.67)	205
SPA 3	18.5 (3.13)	190
SPA 4	18.0 (4.50)	61
SPA 5	7.4 (1.20)	55
SPA 6	43.6 (4.31)	110
SPA 7	12.3 (1.74)	73
SPA 8	25.7 (3.79)	169

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

* $p < .05$, SPA 1,8 > SPAs 5,7; SPA 4 > SPA 5; SPA 6 > SPAs 2,3,4,5,7,8.

income families, or did not receive any public dollars. On average, contracted centers served 75.8 children (SE=3.7) compared to 56.8 (SE=2.4) children in centers receiving vouchers and 58.1 (SE=3.1) children in centers without any public funding. As shown in Tables 3.26 and 3.27, the percentage of centers caring for children of different ages, and the number of children in each age group enrolled, differed by centers' subsidy status. Generally, centers receiving public dollars in the form of vouchers were the most likely to enroll children across the

Table 3.26. *Estimated Percentage of Centers Serving at Least One Child in Various Age Groups: Countywide, and by Centers' Relationship to Public Subsidy*

	Estimated percentage (SE)			
	Countywide	Head Start/ CDE contract	Vouchers/No contract	No vouchers/ No contract
Under age 2*	27.4 (1.72)	17.6 (2.89)	39.8 (2.97)	19.8 (2.61)
<i>Number of centers</i>	2,208	544	897	767
Age 2**	76.4 (1.61)	53.1 (3.75)	92.8 (1.52)	73.4 (2.91)
<i>Number of centers</i>	2,189	533	897	759
Ages 3-5, not yet in kindergarten	98.2 (0.50)	98.4 (0.91)	98.4 (0.76)	97.9 (0.95)
<i>Number of centers</i>	2,208	543	898	767
Ages 5 or older, in kindergarten or higher grade***	44.3 (1.89)	33.2 (3.52)	60.7 (2.94)	33.0 (3.08)
<i>Number of centers</i>	2,202	538	897	767

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

* p < .001, Vouchers/No contract > Head Start/CDE contract, No vouchers/No contract.

** p < .001, Vouchers/No contract > Head Start/CDE contract, No vouchers/No contract. No vouchers/No contract > Head Start/CDE contract.

*** p < .001, Vouchers/No contract > Head Start/CDE contract, No vouchers/No contract.

Table 3.27. *Estimated Mean Number of Children Served by Age Group: Countywide, and by Centers' Relationship to Public Subsidy (Includes only those centers that care for at least one child in that age group)*

	Estimated mean number of children served (SE)			
	Countywide	Head Start/ CDE contract	Vouchers/No contract	No vouchers/No contract
Under age 2	18.7 (1.46)	23.2 (4.04)	17.1 (1.46)	19.4 (3.89)
<i>Number of centers</i>	605	96	357	152
Age 2	13.6 (0.52)	15.1 (1.35)	13.8 (0.70)	12.5 (0.94)
<i>Number of centers</i>	1,674	283	833	557
Ages 3-5, not yet in kindergarten*	47.4 (1.42)	64.8 (3.07)	37.8 (1.72)	46.1 (2.60)
<i>Number of centers</i>	2,169	535	883	751
Ages 5 or older, in kindergarten or higher grade*	18.1 (1.12)	31.2 (3.53)	15.5 (1.15)	14.2 (2.00)
<i>Number of centers</i>	976	179	544	253

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

* p < .05, Head Start/CDE contract > Vouchers/No contract, No vouchers/No contract.

age span.

We estimate that the majority of licensed child care centers in Los Angeles County (57.5 percent, SE=1.9) were private nonprofit agencies. Public agencies (e.g., school districts) operated 14.7 percent (SE=1.4) of centers, and for-profit agencies constituted 27.9 percent (SE=1.7) of centers. As shown in Table 3.28, there was some variation across SPAs with respect to programs operating under different auspices. Centers that held a Head Start or CDE contract were more likely to be publicly operated and less likely to be for-profit than other types of centers. Centers receiving no public dollars were more likely to be private nonprofit than other centers and centers receiving vouchers were the most likely to be private for-profit. In addition, centers without any public funding were more likely to be private for-profit than contracted centers.

Children with Special Needs

Center directors were asked how many children (if any) with disabilities, or with special emotional or physical needs, were enrolled in their centers.¹⁵ As a result, we estimate that 50.1 percent (SE=1.9) of Los Angeles County's centers licensed to serve infants and/or preschoolers cared for children with special needs. On average, children with special needs constituted 8.2 percent (SE=0.6) of the child population in centers that enrolled at least one such child. Only about 25 percent of all centers reported that five percent

or more of their children had special needs, and about two percent of centers reported that children with special needs constituted 30 percent or more of all children enrolled. Centers serving infants were no more likely to care for at least one child with special needs than centers not serving infants.

Depending on whether, and through which vehicle, they served subsidized children, centers differed in whether they enrolled any children with special needs, as well as in the percentage of their enrolled children who had special needs. Centers that received public funding to serve children of low-income families through a Head Start or CDE contract were more likely to care for at least one child with special needs than were centers that did not care for any subsidized children. (See Table 3.29.) Among centers serving children with special needs, there were no differences in the percentage of such children served, based on the subsidy status of the center, as shown in Table 3.30.

¹⁵ Interviewees were told, "By disabilities or special needs, we mean any child who is protected by the American with Disabilities Act (ADA)." If the interviewee asked for clarification, interviewers added, "This would include children who are considered at-risk of a developmental disability, or who may not have a specific diagnosis but whose behavior, development, and/or health affect their family's ability to find and maintain services."

Table 3.28. *Estimated Percentage of Center Auspices: Countywide, By SPA, and By Centers' Relationship to Public Subsidy*

		Estimated percentage (SE)				Number of centers
		Private nonprofit	Public	For-profit	Total	
Countywide		57.5 (1.90)	14.7 (1.35)	27.9 (1.74)	100.0	
By SPA*	SPA 1	72.0 (9.17)	8.0 (5.54)	20.0 (8.16)	100.0	
	SPA 2	50.0 (4.79)	12.7 (3.19)	37.3 (4.63)	100.0	
	SPA 3	52.4 (4.90)	12.4 (3.23)	35.2 (4.68)	100.0	
	SPA 4	61.9 (4.96)	18.6 (3.97)	19.6 (4.05)	100.0	
	SPA 5	59.0 (5.61)	11.5 (3.64)	29.5 (5.20)	100.0	
	SPA 6	70.7 (4.60)	17.2 (3.30)	12.1 (3.81)	100.0	
	SPA 7	65.7 (4.80)	17.2 (3.81)	17.2 (3.81)	100.0	
	SPA 8	53.2 (4.80)	16.5 (3.57)	30.3 (4.42)	100.0	
By relationship to subsidy**	Head Start/CDE contract	47.3 (3.71)	50.0 (3.73)	2.7 (1.24)	100.0	
	Vouchers/No contract	53.5 (3.04)	1.3 (0.69)	45.2 (3.04)	100.0	
	No vouchers/No contract	69.4 (3.09)	5.1 (1.43)	25.5 (2.94)	100.0	

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

* $p < .01$, For profit: SPA 6 < SPAs 2,3,5,8, SPA 7 < SPAs 2,3. Nonprofit: SPA 6 > SPA 2.

** $p < .001$, Public: Head Start/CDE contract > No vouchers/No contract, Vouchers/No contract. Nonprofit: No vouchers/No contract > Head Start/CDE contract, Vouchers/No contract. For Profit: Vouchers/No contract > Head Start/CDE contract, No vouchers/No contract. No vouchers/No contract > Head Start/CDE contract.

Table 3.29. *Estimated Percentage of Centers that Care for At Least One Child with Special Needs: Countywide, and by Centers' Relationship to Public Subsidy*

	Estimated percentage (SE)			
	Countywide	Head Start/ CDE contract	Vouchers/No contract	No vouchers/ No contract
No children with special needs	49.9 (1.93)	39.6 (3.73)	51.7 (3.05)	54.7 (3.28)
At least one child with special needs*	50.1 (1.93)	60.4 (3.73)	48.4 (3.05)	45.3 (3.28)
<i>Total</i>	100.0	100.0	100.0	100.0
<i>Numbers of centers</i>	2,157	508	894	755

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

*p < .01, Head Start/CDE contract > No vouchers/No contract.

Table 3.30. *Estimated Mean Percentage of Children with Special Needs Served: Countywide, and by Centers' Relationship to Public Subsidy (Includes only those centers that care for at least one child with special needs)*

	Estimated mean percentage (SE)			
	Countywide	Head Start/ CDE contract	Vouchers/No contract	No vouchers/ No contract
Children with special needs served	8.2 (0.65)	9.5 (0.88)	7.2 (1.07)	8.2 (1.30)
<i>Number of centers</i>	1,081	307	432	342

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

What is the level of educational attainment and early childhood development-related training among teachers, assistant teachers and directors in Los Angeles County's child care centers?

Compared to Los Angeles County's overall adult female population, teachers working in centers enrolling infants and/or preschoolers are more likely to have attended college and/or completed a two-year, and are equally likely to have completed a four-year degree. They are less likely to have completed high school only.

More than one-quarter of teachers have completed a four-year or graduate degree, and nearly one-third have completed a two-year degree, typically with an early childhood focus. About 40 percent of centers, however, do not employ any teachers with a four-year or higher degree.

Assistant teachers in Los Angeles County are also more likely than the average adult female in the county to have attended college and/or completed a two-year degree, but they are less likely to have obtained a four-year or higher degree. Assistant teachers have lower levels of degree attainment than teachers or directors. Approximately one-half of assistant teachers have completed one to 23 college credits related to early childhood development. Only 11 percent have completed neither college credits nor a degree related to early childhood.

Nearly two-thirds of directors have completed a four-year or higher degree, typically with an early childhood focus. Nearly one-quarter have completed a two-year degree, most often with an early childhood focus. Directors are more than twice as likely as teachers to have completed a four-year or higher degree, and have completed associate degrees at a slightly lower rate than teachers.

The majority of degree holders have completed a degree related to early childhood development. Approximately 14 percent of those with BA or higher degrees obtained their degree through a foreign institution.

Over one-half of all teachers with an AA or higher degree hold a Child Development Permit, and over one-half of all directors hold a Site Supervisor Permit. About one-quarter of teachers and one-third of directors with a BA or higher degree have a teaching credential (as opposed to a Child Development Permit) issued by the California Commission on Teacher Credentialing.

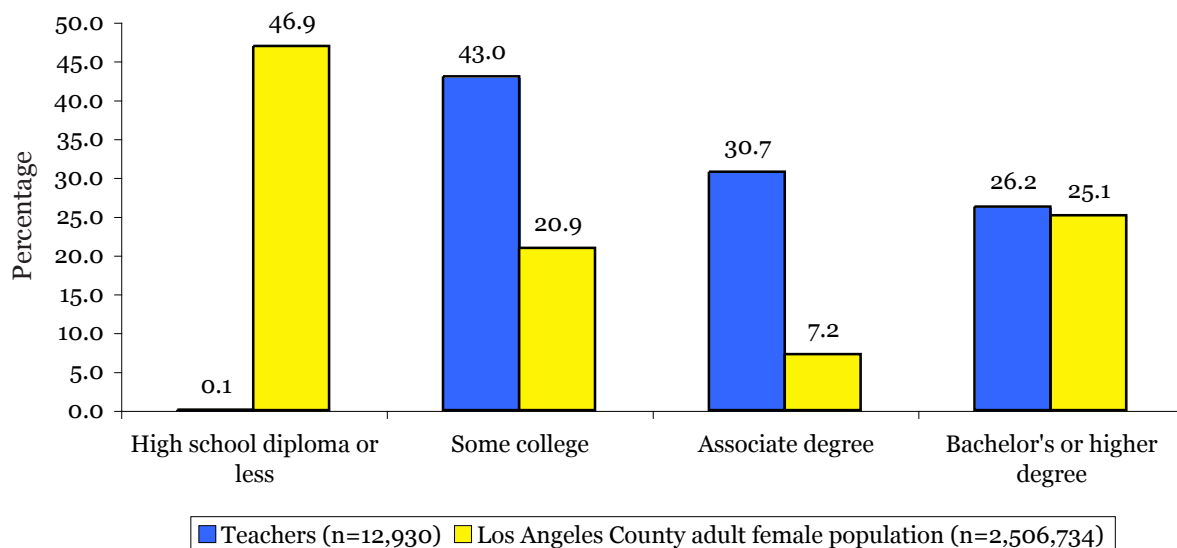
Research has indicated that the presence of better-trained adults enhances the quality of child care services for children (Whitebook & Sakai, 2004; Shonkoff & Phillips, 2000). Because of the critical role that teachers' skill and knowledge play in promoting children's optimal development, considerable effort and investment have been devoted to encouraging and supporting teachers, assistants and directors to pursue professional development through AB 212 and other programs. With the implementation of publicly funded preschool services (LAUP), there is also an increased need to assess the size of the task of recruiting and preparing a sufficient number of teachers and assistants who meet higher educational and training standards – i.e., a bachelor's (BA) degree and early childhood certification for teachers, and 46 college credits for assistant teachers. While not all teachers and assistants in publicly funded preschools will be drawn from the current early care and education workforce, many

no doubt will come from its ranks. The educational and training background of the current workforce therefore becomes an important factor in planning the level of resources needed to ensure a well-prepared workforce for preschool classrooms.

Overall Educational Attainment of Teachers, Assistant Teachers and Directors

As is true nationally (Herzenberg, Price & Bradley, 2005), we found that center-based teachers in Los Angeles County typically had completed some college credits, and were more likely than the average adult woman in the county to have done so. As shown in Figure 3.9, virtually all teachers (99.9 percent) had completed some college-level work, compared to 53.1 percent of women in Los Angeles County. Teachers reported a higher completion rate for an associate degree (30.7 percent) than is true for the average adult female in the county (7.2

Figure 3.9. *Estimated Educational Attainment of Center Infant and/or Preschool Teachers Compared to the Los Angeles County Adult Female Population*



Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

percent). Teachers' completion rates for BA or higher degrees¹⁶ (26.2 percent) slightly exceeded that of women in the county as a whole (25.1 percent).

Not all centers employed teachers with a four-year or higher degree; such teachers were concentrated in 61.1 percent of centers. In centers that employed at least one teacher with a four-year or higher degree, 45.0 percent of teachers, on average, held such degrees. (See Table 3.31.) Nearly one-half of all assistant teachers (46.6 percent) had completed one to 23 college credits related to early childhood development. In centers employing at least one assistant who had completed one to 23 credits, 71.3 percent of assistants, on average, had done so.

As shown in Figure 3.10, the vast majority of assistants (89.1 percent) had also completed some college-level work, and they were more likely than the average female in the county to have done so. Assistants had completed two-year degrees at a higher rate (11.5 percent) than the average adult female in Los Angeles County, but at a lower rate than teachers. Assistants had completed four-year or higher degrees at a lower rate (6.4 percent) than teachers or adult females in the county.

Not all centers employed assistant teachers with AA or higher degrees; assistants with AAs were concentrated in 29.4 percent of centers, and those with BA or higher in 17.9 percent of centers. In centers that employed at least one assistant teacher with an AA or higher degree, an average of 41.7 percent of assistants held AA degrees, and 39.5

percent held BA or higher degrees. (See Table 3.31.)

Most directors had completed an AA or higher degree (86.8 percent). Nearly two-thirds of directors (63.0 percent) had completed a BA or higher degree, as shown in Figure 3.10. Nearly one-quarter (23.8 percent) had completed an AA degree. Overall, 68.5 percent of centers had at least one director with a BA or higher degree.

Degree Attainment Through a Foreign Institution

Among the 26.2 percent of teachers who had earned a four-year or higher degree, 13.8 percent were reported to have obtained it through a foreign institution. These teachers were concentrated, however, in 27.1 percent of the centers across the county.

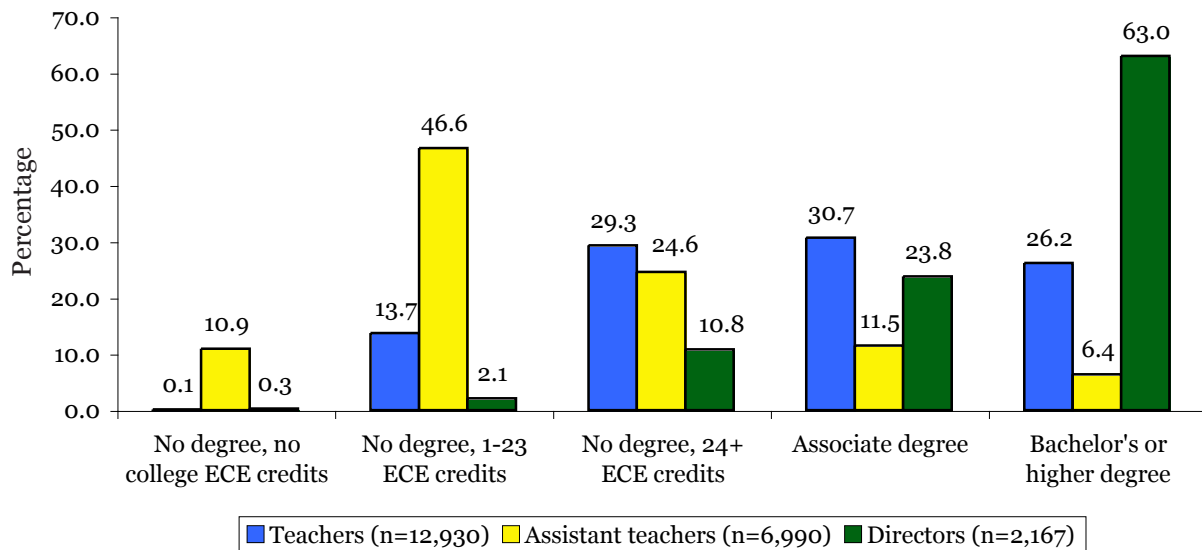
Among the approximately 17.9 percent of assistants who had earned an AA or higher degree, 9.0 percent had obtained it through a foreign institution, according to director reports. These assistant teachers were concentrated in only 16.1 percent of centers.

Nearly two-thirds (63.0 percent) of directors had obtained four-year or higher degrees. Of these, 13.5 percent had obtained their degrees through a foreign institution.

Education, Training and Certification Related to Early Childhood Development

Research findings on the contribution of education and training to teaching staff competence and sensitivity suggest that formal higher education with a specific focus in early care and education leads

¹⁶ We asked directors whether teachers had obtained four-year or higher degrees, but we did not collect independent information on the percentage of teachers with graduate degrees.

Figure 3.10. *Estimated Educational Attainment of Center Infant and/or Preschool Teachers, Assistant Teachers and Directors: Countywide*

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Table 3.31. *Estimated Mean Percentage of Teachers and Assistant Teachers Employed in Centers, By Educational Level:^a Countywide*

	Estimated mean percentage (SE)				
	No degree, no college ECE credits	No degree, 1-23 ECE credits	No degree, 24 or more ECE credits	Associate degree	Bachelor's or higher degree
Teachers	18.9 (4.68)	44.2 (1.06)	50.4 (0.74)	46.2 (0.69)	45.0 (0.76)
<i>Number of centers</i>	8	558	1,184	1,568	1,324
Assistant teachers	58.2 (1.98)	71.3 (0.98)	58.4 (1.25)	41.7 (1.37)	39.5 (1.76)
<i>Number of centers</i>	297	946	638	445	270

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^a Includes only centers with at least one staff member with that level of education

to more effective care and teaching with children (Barnett, 2003; Whitebook, 2003; Zaslow & Martinez-Beck, 2005). Thus, another important aspect of professional preparation is the extent to which teachers and assistants have received training, completed coursework, or participated in activities specifically focused on issues related to early childhood development. Research also suggests the important contribution played by director education and stability to overall center quality (Whitebook & Sakai, 2004; Helburn, 1995). To acquire a picture of the professional preparation of teachers, assistants and directors, we asked directors whether they or their teaching staff:

1. had completed a two-year or four-year degree related to early childhood development;
2. had taken college courses related to early childhood development if they had not completed a two-year or four-year degree; and/or
3. had participated in a professional development program or obtained a professional credential.

1) Degrees Related to Early Childhood Development

We examined the percentage of teachers, assistant teachers and directors with AA and BA degrees whose degree was related to early childhood development, and whether those with an AA or BA degree were more likely to have completed such a degree.

Overall, 26.2 percent of teachers had completed a BA degree or higher, and 30.7 percent had completed an AA degree. Three-quarters of teachers with a BA or higher degree (75.6 percent) and 84.6 percent of teachers with an AA degree

had obtained an early childhood-related degree.

Overall, 17.9 percent of assistant teachers had completed an AA, BA or higher degree. Two-thirds of assistants with an AA or higher degree (66.9 percent) had obtained a degree with an early childhood focus.

Overall, 63.0 percent of directors had completed a BA degree or higher, and 23.8 percent had completed an AA degree. Similar to teachers, 74.3 percent of directors with a BA or higher degree, and 85.7 percent of directors with an AA degree, had obtained a degree related to early childhood.

Among infant and preschool teachers across all levels of educational attainment, 19.1 percent had earned a four-year degree or higher with an early childhood focus, and 25.1 percent had earned an AA degree with an early childhood focus. Among directors across all levels of educational attainment, 45.6 percent had earned a four-year degree or higher, and 20.0 percent had earned an AA degree, with an early childhood focus.

2) College Credits Related to Early Childhood Development

We were interested in knowing the extent to which teachers, assistant teachers and directors who had not completed degrees had participated in specialized early childhood-related education, and thus examined what percentage had completed from one to 23, or 24 or more, early childhood-related college credits.

Over two-fifths of all teachers across the county (43.1 percent) had completed such college credits but had not completed

a degree. Thirty (29.3) percent of teachers had completed 24 or more credits, and 13.7 percent had completed from one to 23 credits, of early childhood-related coursework. Less than one percent of all teachers had completed neither a college degree nor any college credits related to early childhood.

Most assistant teachers (82.1 percent) had not completed a two-year or higher degree, but most had completed at least some college credits related to early childhood. Directors reported that 46.6 percent of assistant teachers had completed one to 23 credits, 24.6 percent had completed 24 or more credits, and only 10.9 percent had completed neither credits nor a degree.

Directors followed a similar pattern to teachers, with most of those who had not completed degrees having completed 24 or more early childhood-related credits. Only 13.2 percent of directors across the county had not completed a degree. About one-tenth (10.8 percent) of directors had completed 24 or more credits, 2.1 percent had completed less than 24 credits, and 0.3 percent had completed neither a degree nor college credits related to early childhood.

3) Participation in Professional Development Activities or Certification

Another measure of professional preparation is involvement with professional development activities and/or certification processes. We asked directors:

- whether they or their teachers held a Child Development Permit issued by the California Commission on Teacher Credentialing; and
- whether they or their teachers held

a Teacher Credential issued by the California Commission on Teacher Credentialing and/or by an equivalent agency in another state.

Child Development Permits

The California Commission on Teacher Credentialing issues Child Development Permits for teachers, assistant teachers and directors that reflect different levels of education and specialized training. These permits are required in programs holding contracts with the California Department of Education (CDE). We asked directors what percentage of their teachers and assistant teachers with two- or four-year degrees also held a permit.

More than one-half (57.0 percent) of all teachers with a BA or higher degree, and 57.1 percent of teachers with an AA degree, held a Child Development Permit, according to directors' reports. Among all teachers with an AA or higher degree, 57.1 percent held a permit. Two-fifths (42.1 percent) of assistant teachers with an AA or higher degree held a permit. We did not collect information about permits for non-degreed teachers.

Directors were asked whether they held a Site Supervisor Permit intended for program or site directors; 61.2 percent of directors with a BA or higher degree, and 41.1 percent of directors with an AA degree, did so.

Teaching Credentials

A teaching credential, in contrast to a Child Development Permit, requires the holder to have completed a BA degree at a minimum, and typically the equivalent of a fifth year of college coursework. We asked whether directors or teachers who had completed a BA or higher degree held

a teaching credential issued by the State of California or another state.¹⁷

Among all teachers who had earned a BA or higher degree, 23.7 percent held a California teaching credential, and 4.3 percent held a credential from another state. Among all teachers in the county (including those with BA or higher degrees, or with lower levels of educational attainment), 6.0 percent held a California teaching credential. Among all directors who had earned a BA or higher degree, 34.0 percent held a California teaching credential and 3.7 percent held one from another state.

¹⁷ See Bellm, Whitebook, Cohen & Stevenson (2004) for a description of the credentialing options in California related to early care and education. For this question, we did not ask respondents to specify the type of credential that teachers or directors held; thus, their answers could include early childhood-related or K-12 credentials. While the Standard Early Childhood Credential is no longer issued, the credential is still honored, though not required as a condition of employment, in most, if not all, settings.

How do levels of overall educational attainment, and professional preparation related to early childhood development, vary among teachers, assistant teachers and directors employed in centers licensed to serve infants and/or preschoolers?

Levels of education among teachers, assistant teachers and directors vary by SPA, and generally follow the patterns of variation in educational attainment among all adults in the county, with SPA 5 being the most likely, and SPA 1 the least likely, to employ at least one teacher with a BA or higher degree.

Centers that enroll both infants and preschoolers report a lower percentage of teachers with BA or higher degrees than those enrolling preschoolers only.

Educational attainment also varies by centers' relationship to public subsidy. Centers receiving public dollars through vouchers report a lower percentage of teachers and directors who have obtained a BA or higher degree than all other centers. Centers holding a Head Start or CDE contract report higher levels of AA degree attainment among teachers. Teachers in contracted centers are also the most likely to hold a Child Development Permit.

Educational attainment varies by age among teachers, and to a lesser extent among assistant teachers. Teachers with bachelor's or higher degrees are older, on average, than those with less education. Teachers' educational attainment also varies by ethnicity and language: among those with bachelor's or higher degrees, compared to the ethnic distribution of the teacher population as a whole, African American teachers are represented proportionately, while White, Non-Hispanic and Asian/Pacific Islander teachers are over-represented and Latinas are under-represented. About 52 percent of Asian/Pacific Islander, 30 percent of White, Non-Hispanic, 26 percent of African American and 16 percent of Latina teachers have completed a BA or higher degree. Latina, African American and Asian/Pacific Islander teachers have attained BA or higher degrees at higher rates – and White, Non-Hispanic teachers have done so at lower rates – than their counterparts in the overall county population.

With respect to linguistic capacity, teachers with AA degrees are somewhat more likely than either teachers with BA or higher degrees, or teachers with no degrees, to have the capacity to communicate with children in a language other than English. Among assistant teachers, those with AA or higher degrees were somewhat less likely than assistant teachers with no degrees, but more likely than teachers across educational levels, to speak a language other than English fluently.

In the previous section, we described the educational attainment and early childhood-related professional development of center-based teachers, assistants and directors employed in centers licensed to serve infants and/or preschoolers across Los Angeles as a whole. Here, we explore differences within the workforce along these dimensions based on:

- areas of the county (Service Planning Areas, or SPAs) in which they operate,
- the ages of children enrolled in centers,
- whether centers receive public dollars to care for children of low-income families,
- teaching staff compensation and turnover in centers, and
- such teacher, assistant teacher and director demographic characteristics as age, ethnicity and language background.

Overall Educational Attainment, by SPA

Figures 3.11a & b and 3.12a & b show educational attainment for teachers, assistant teachers and directors by SPA. We posed three questions with respect to SPA variation in educational attainment:

1. Are patterns of educational attainment among teachers, assistants and directors within the various SPAs similar to the countywide pattern?
2. Within SPAs, are patterns of educational attainment among teachers, assistants and directors similar to the patterns found among the SPA's overall adult population?
3. Across SPAs, does professional preparation vary, as measured by certification and early childhood-related degrees?

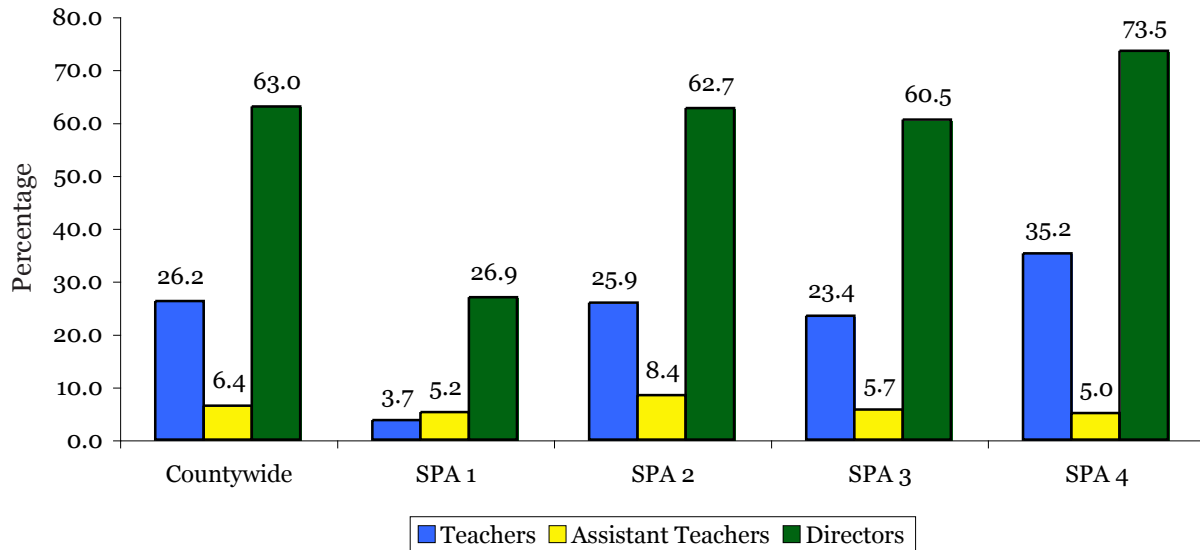
We examined whether the pattern identified for the county as a whole held at the SPA level: namely, that teachers, assistant teachers and directors were more likely than other adults in the state to have completed some college-level work and/or a two-year or four-year college degree, and that teachers were about as likely, assistant teachers were less likely, and directors were more likely than other adults to have obtained a four-year or higher college degree.

Across SPAs, as shown in Figures 3.13a & b and 3.14a & b, educational attainment among teachers and the adult population (measured by the attainment of two-year, four-year or higher degrees) were generally consistent with the pattern for the county as a whole.

Levels of educational attainment varied by SPA, and generally followed patterns of variation in educational attainment among the adult population in the SPA, as shown in Figure 3.13a & b. Teachers in SPA 5 were more likely to have obtained four-year or higher degrees (40.0 percent) than their counterparts in the rest of the county, and this pattern held for adults in the county as a whole. Teachers in SPA 1 (3.7 percent) were less likely to have obtained four-year or higher degrees, and this pattern also held for adults in these SPAs compared to the county as a whole.

Looking more closely within SPAs, teachers in SPA 5, which reported the highest level of BA or higher degrees among its teachers, reported somewhat lower rates of four-year degree completion than the average adult in SPA 5. Teachers in SPA 1 also reported lower levels of BA or higher degree completion than other adults in the SPA. In SPA 6, however,

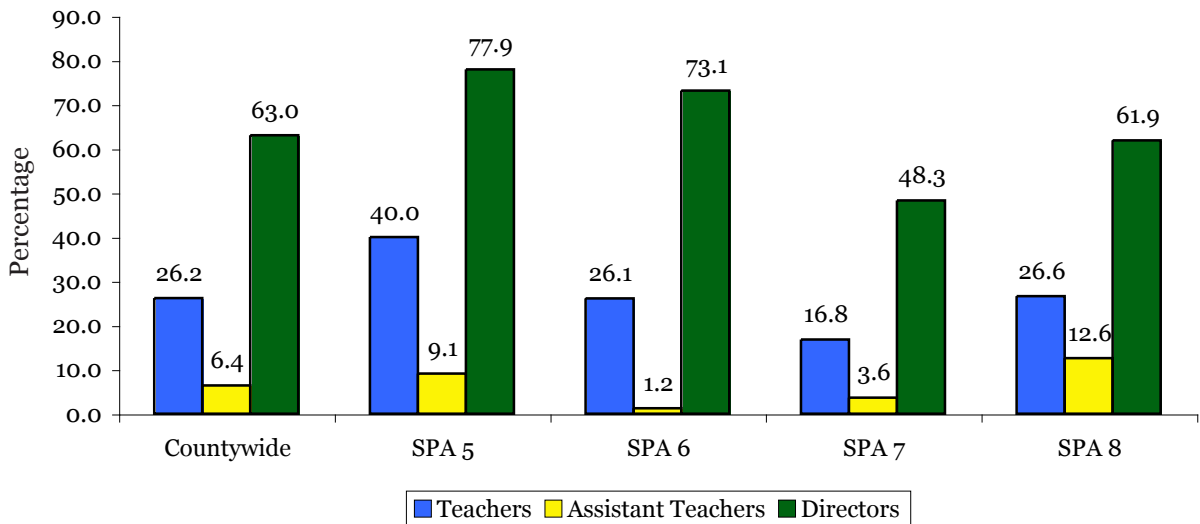
Figure 3.11a. *Estimated Percentage of Teachers, Assistant Teachers and Directors with a Bachelor's or Higher Degree: Countywide and by SPA*



Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Sample size for countywide data: Number of teachers = 3,386, number of assistants = 449, number of directors = 1,365. SPA 1: Number of teachers = 15, number of assistants = 7, number of directors = 17. SPA 2: Number of teachers = 893, number of assistants = 113, number of directors = 352. SPA 3: Number of teachers = 666, number of assistants = 95, number of directors = 274. SPA 4: Number of teachers = 465, number of assistants = 48, number of directors = 154.

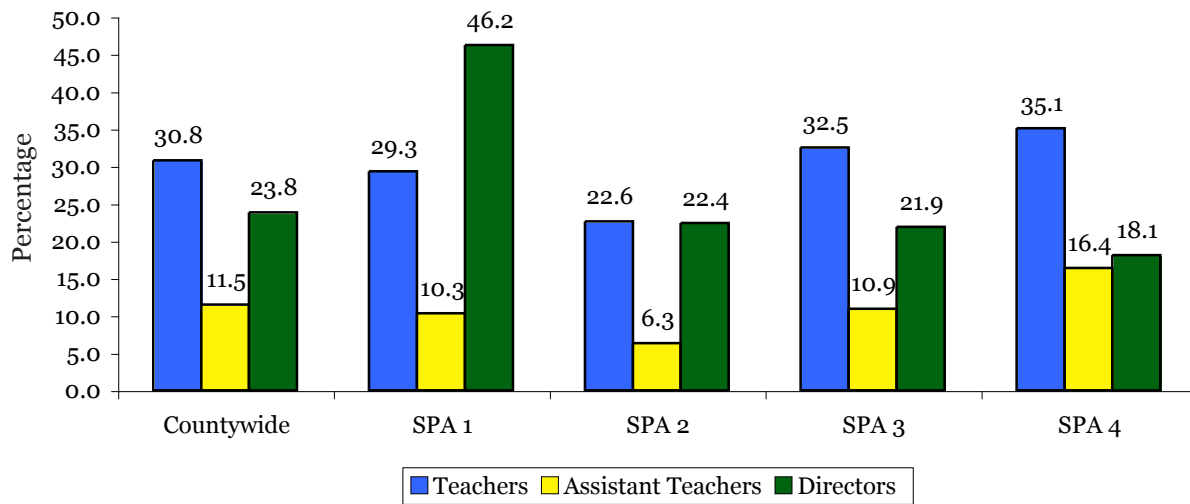
Figure 3.11b. *Estimated Percentage of Teachers, Assistant Teachers and Directors with a Bachelor's or Higher Degree: Countywide and by SPA*



Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Sample size for countywide data: Number of teachers = 3,386, number of assistants = 449, number of directors = 1,365. SPA 5: Number of teachers = 421, number of assistants = 39, number of directors = 131. SPA 6: Number of teachers = 247, number of assistants = 10, number of directors = 142. SPA 7: Number of teachers = 169, number of assistants = 25, number of directors = 88. SPA 8: Number of teachers = 511, number of assistants = 110, number of directors = 207.

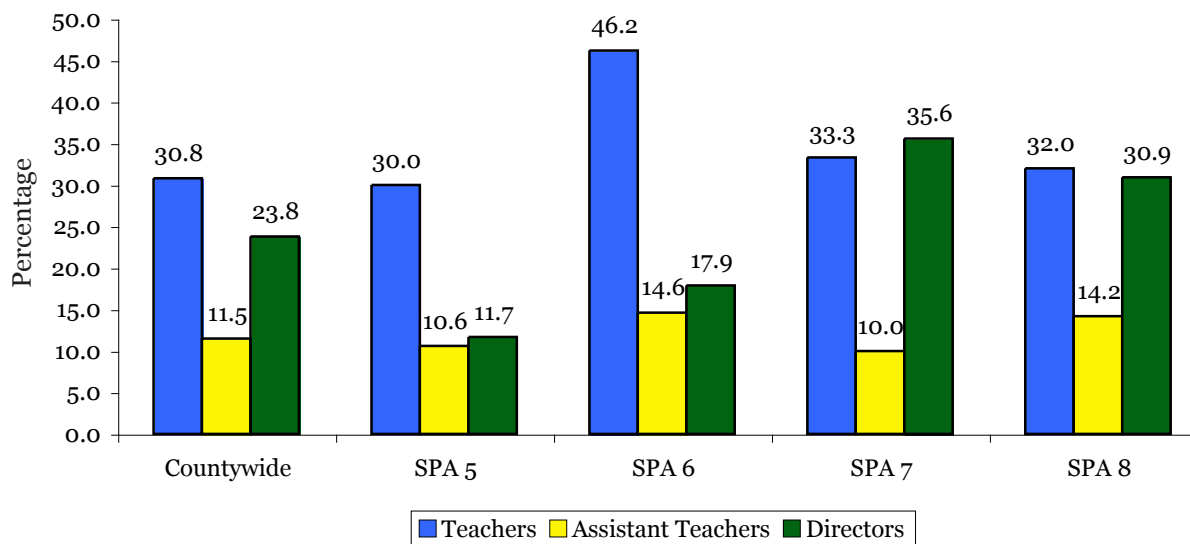
Figure 3.12a. *Estimated Percentage of Teachers, Assistant Teachers and Directors with an Associate Degree: Countywide and by SPA*



Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Sample size for countywide data: Number of teachers = 3,984, number of assistants = 804, number of directors = 515. SPA 1: Number of teachers = 118, number of assistants = 15, number of directors = 29. SPA 2: Number of teachers = 779, number of assistants = 84, number of directors = 126. SPA 3: Number of teachers = 924, number of assistants = 182, number of directors = 99. SPA 4: Number of teachers = 463, number of assistants = 157, number of directors = 38.

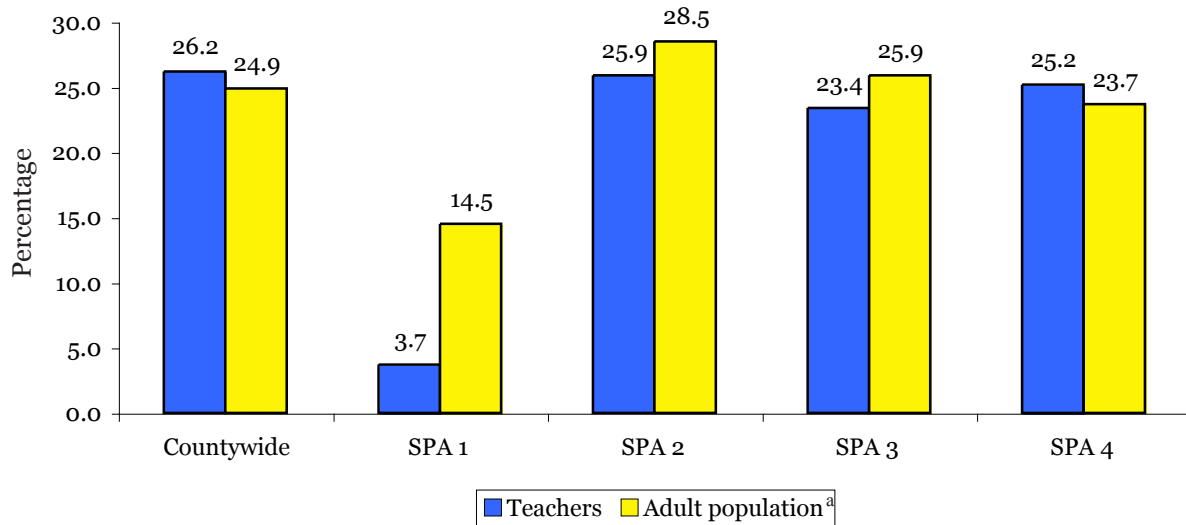
Figure 3.12b. *Estimated Percentage of Teachers, Assistant Teachers and Directors with an Associate Degree: Countywide and by SPA*



Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Sample size for countywide data: Number of teachers = 3,984, number of assistants = 804, number of directors = 515. SPA 5: Number of teachers = 315, number of assistants = 46, number of directors = 20. SPA 6: Number of teachers = 437, number of assistants = 127, number of directors = 35. SPA 7: Number of teachers = 334, number of assistants = 69, number of directors = 65. SPA 8: Number of teachers = 615, number of assistants = 124, number of directors = 104.

Figure 3.13a. *Estimated Percentage of Teachers with a Bachelor's or Higher Degree, Compared to Adult Population: Countywide and by SPA*

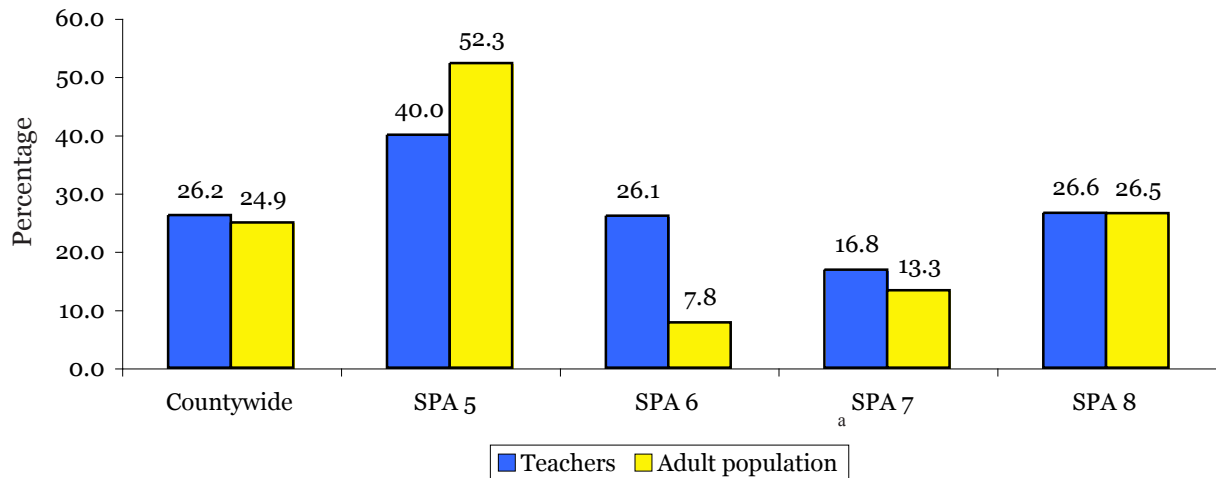


Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^a US Census Bureau (2000).

Sample size for countywide data: Number of teachers = 3,386, number of adult population = 1,462,389. SPA 1: number of teachers = 15, number of adult population = 25,397. SPA 2: number of teachers = 893, number of adult population = 364,547. SPA 3: number of teachers = 666, number of adult population = 277,129. SPA 4: number of teachers = 465, number of adult population = 176,064.

Figure 3.13b. *Estimated Percentage of Teachers with a Bachelor's or Higher Degree, Compared to Adult Population: Countywide and by SPA*

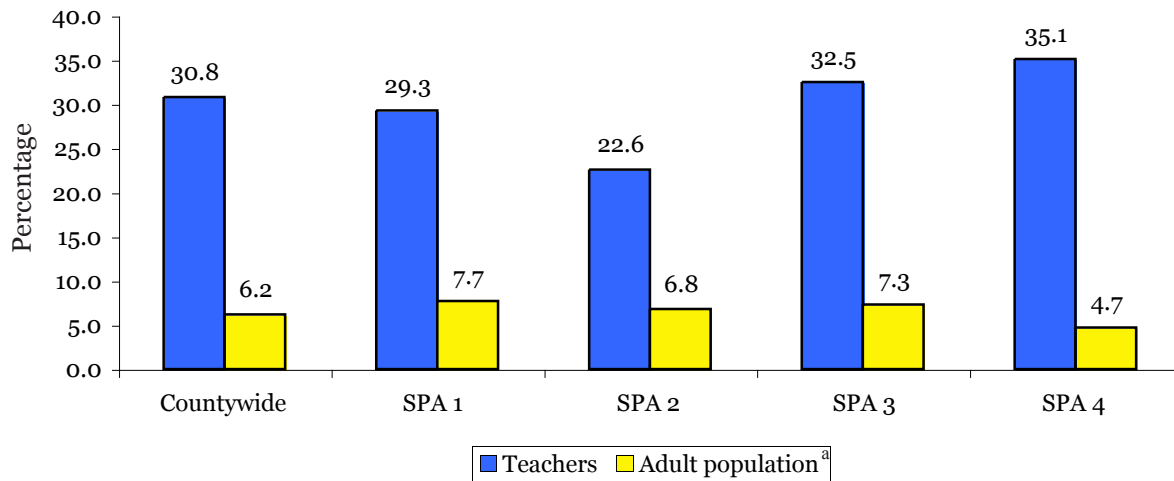


Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^a US Census Bureau (2000).

Sample size for countywide data: Number of teachers = 3,386, number of adult population = 1,462,389. SPA 5: number of teachers = 421, number of adult population = 233,436. SPA 6: number of teachers = 247, number of adult population = 38,345. SPA 7: number of teachers = 169, number of adult population = 98,184. SPA 8: number of teachers = 551, number of adult population = 249,287.

Figure 3.14a. *Estimated Percentage of Teachers with an Associate Degree, Compared to Adult Population: Countywide and by SPA*

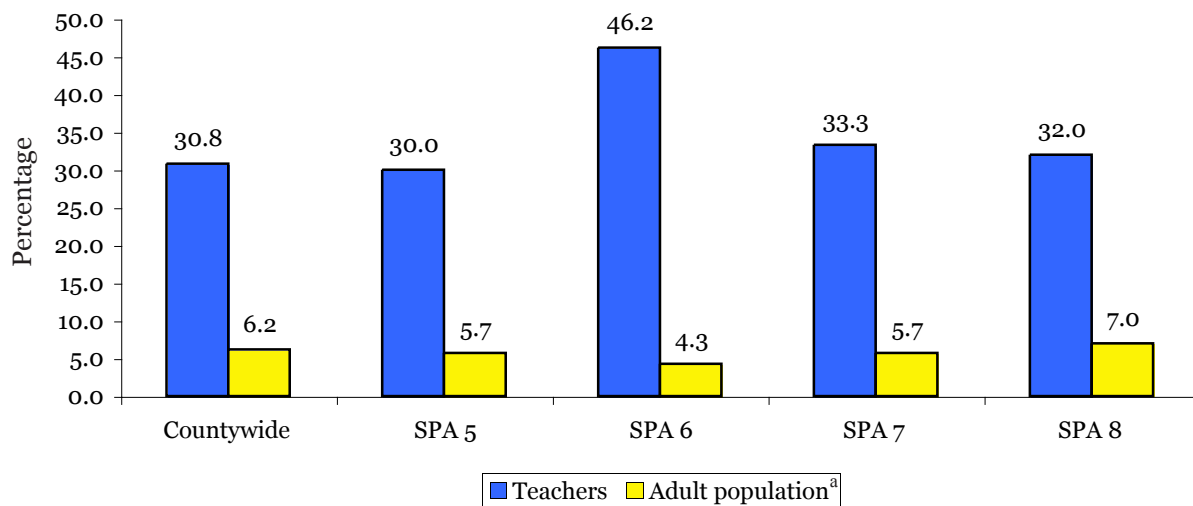


Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^a US Census Bureau (2000).

Sample size for countywide data: Number of teachers = 3,984, number of adult population = 367,244. SPA 1: number of teachers = 118, number of adult population = 13,466. SPA 2: number of teachers = 779, number of adult population = 86,187. SPA 3: number of teachers = 924, number of adult population = 77,981. SPA 4: number of teachers = 463, number of adult population = 35,189.

Figure 3.14b. *Estimated Percentage of Teachers with an Associate Degree, Compared to Adult Population: Countywide and by SPA*



Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^a US Census Bureau (2000).

Sample size for countywide data: Number of teachers = 3,984, number of adult population = 367,244. SPA 5: number of teachers = 315, number of adult population = 25,515. SPA 6: number of teachers = 437, number of adult population = 21,093. SPA 7: number of teachers = 334, number of adult population = 41,941. SPA 8: number of teachers = 615, number of adult population = 65,872.

teachers reported much higher rates of degree completion than other adults in the SPA. Among all other SPAs, the percentages of teachers and adults with BA degrees were within a couple of points, as shown in Figure 3.13a & b. AA degree completion rates were consistently higher among both teachers and assistant teachers countywide and within SPAs, with the rates for teachers being about three times higher than that of all adults, and the rates for assistants half again as high. (See Figure 3.14a & b.)

When interpreting these results, it is important to remember that not all centers employed teachers (or other staff) with various levels of education. As shown in Table 3.32, more than one-half of centers in SPAs 2, 3, 4, 5 and 8 employed at least one teacher with a BA or higher degree, while a little more than one-third of centers in SPA 7 and only 16.0 percent of centers in SPA 1 did so. Among centers employing at least one teacher with a BA or higher degree, the average percentage of such teachers also varied by SPA, as shown in Table 3.32.

SPA differences also emerged with respect to the percentage of centers employing at least one teacher who had obtained a BA or higher degree from a foreign institution. With the exception of SPAs 6 and 8, approximately one-quarter to one-third of centers employed at least one such teacher. Centers in SPA 6 (9.4 percent, SE=4.10) and SPA 8 (18.8 percent, SE=4.74) were much less likely to employ at least one such teacher.

Early Childhood-Related Education and Certification

Most degree-holding teachers and assistant teachers had completed a degree related to early childhood development,

as previously described. Most centers across the county with at least one teacher with a BA or an AA employed at least one teacher (BA, 85.5 percent, SE=1.8; AA, 90.5 percent, SE=1.3) or assistant teacher (74.1 percent, SE=3.2) with an early childhood-related degree. Among centers employing at least one such teacher, there was little variation in the percentage of such teachers employed. Centers in SPA 1, on average, employed a lower percentage of such teachers than did centers in other SPAs, as shown in Table 3.33.

The majority of teachers with a four-year or higher degree held a Child Development Permit, and the majority of centers (67.2 percent, SE =2.4) employed at least one teacher with a four-year degree and permit. Centers in SPA 6 (87.0 percent, SE=4.6) were more likely than those in SPA 2 (53.3 percent, SE=6.5), SPA 3 (63.3 percent, SE=6.3), and SPA 5 (60.7 percent, SE=6.3) to employ such teachers, and centers in SPA 4 (78.5 percent, SE=5.1) were more likely to employ such teachers than centers in SPA 2. The average percentage of teachers with such certification employed in these centers varied somewhat by SPA, with centers in SPA 6 employing a higher percentage of these teachers (95.7 percent, SE=2.20) than centers in SPA 2 (82.1 percent, SE=4.7), SPA3 (83.5 percent, SE=3.65) and SPA 5 (80.1 percent, SE=4.50).

Slightly more than one-quarter of all teachers in the county held a BA or higher degree, and about one-third of degreed teachers also held a California teaching credential. Credentialed teachers were concentrated in only 37.5 percent (SE=2.4) of centers. More centers in SPA 6 (48.2 percent, SE=6.9) and in SPA 4 (41.2 percent, SE=6.0) employed at least

Table 3.32. *Teachers with a Bachelor's Degree or Higher: Countywide and by SPA*

	Estimated percentage of centers with at least one teacher with a bachelor's degree or higher (SE)*	Number of centers	Estimated average percentage (SE) of teachers with a bachelor's degree in centers employing at least one such teacher	Number of centers
SPA 1	16.0 (7.48)	61	20.6 (3.81)	10
SPA 2	63.0 (4.67)	453	44.3 (3.68)	285
SPA 3	62.8 (4.81)	405	38.9 (3.00)	254
SPA 4	70.8 (4.66)	243	50.4 (3.64)	172
SPA 5	85.2 (3.97)	177	53.7 (3.80)	151
SPA 6	53.5 (4.99)	252	46.3 (3.49)	135
SPA 7	39.2 (4.98)	202	40.3 (3.29)	79
SPA 8	63.9 (4.64)	373	44.9 (3.02)	238
Countywide	61.1 (1.84)	2,166	45.0 (0.80)	2,208

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

*p < .001, SPA 1 < all except SPA 7; SPA 7 < SPAs 2,3,4,5,8; SPA 5 > 2,3,6,8.

Table 3.33. Teachers with a Bachelor's Degree or Higher in Early Childhood Education: Countywide and By SPA

	Estimated percentage of centers with at least one teacher with a bachelor's degree or higher, employing at least one teacher with a degree in early childhood education (SE)	Number of centers	Estimated average percentage of teachers with a bachelor's degree or higher in early childhood education, in centers employing at least one such teacher (SE)	Number of centers
SPA 1	75.0 (25.0)	10	100.0 (0.00)	7
SPA 2	89.6 (3.80)	281	81.9 (3.27)	251
SPA 3	82.3 (4.90)	246	88.2 (3.00)	202
SPA 4	90.9 (3.60)	167	91.7 (2.15)	152
SPA 5	88.1 (4.00)	147	86.0 (3.04)	129
SPA 6	90.4 (4.13)	130	90.2 (2.93)	117
SPA 7	81.6 (6.40)	79	86.9 (3.80)	65
SPA 8	77.6 (5.13)	231	89.4 (2.90)	180
Countywide	85.5 (1.80)	1,291	61.6 (1.84)	1,103

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

one teacher with a BA or higher degree and a California teaching credential than did centers in other areas of the county. Centers in SPA 6 with at least one credentialed teacher employed, on average, a greater percentage of such teachers (83.8 percent, SE=5.4) than centers in SPA 5 (58.1 percent, SE=6.4).

Overall Educational Attainment and Professional Certification, by Ages of Children Served

Because of proposed increases in qualifications for teachers or assistant teachers working in publicly funded programs targeting four-year-old children, there is considerable interest in whether teachers who currently work with preschoolers differ in educational attainment from those working with younger children. We examined whether centers that enrolled only preschoolers varied in the overall educational level of their teachers and assistants from those that enrolled both infants and preschoolers.¹⁸

As shown in Table 3.34, centers that enrolled infants reported a somewhat lower percentage of teachers with BA or higher degrees, and a somewhat higher percentage of teachers with 24 or more units of early childhood-related college credits. Centers serving infants also reported a slightly lower percentage of assistants with two-year or higher degrees. Director educational attainment varied little whether centers enrolled infants or not.

¹⁸ Because there were so few programs licensed to serve infants exclusively, we could not compare those programs to those that serve preschoolers exclusively. Also, because of the complexity of staffing patterns as well as limitations on the length of the survey, we were not able to ask directors to report separately on the characteristics of teachers working exclusively with younger children and those working with older children.

We also examined the extent to which focused education related to early childhood development and certification varied between the teaching staff in centers serving infants and preschoolers and those not serving infants. There were no differences between these centers with respect to the percentage of centers employing at least one teacher with a California teaching credential or the percentage of such teachers employed in these centers. These centers did differ, however, in terms of whether they employed at least one teacher with a BA or higher and a Child Development Permit, with those centers serving infants less likely (55.0 percent, SE=5.1) than those not serving infants (71.6 percent, SE=2.7) to employ at least one such teacher.

Overall Educational Attainment, and Early Childhood-Related Training, by Centers' Relationship to Public Funding

Research suggests that children of low-income families derive greater benefit from higher-quality early care and education programs than do children of middle- and upper-income families (Helburn, 1995). Studies have found programs rated higher in quality to be staffed by teachers and assistant teachers with higher levels of education, and with training specifically focused on early childhood (Helburn, 1995; Galinsky, Howes, Kontos & Shinn, 1994; Whitebook, Howes & Phillips, 1990; Whitebook & Sakai, 1995).

In California, staff in centers receiving public dollars to serve children of low-income families are required to meet different standards, depending on whether their center holds a contract with Head Start or the California Department of Education (CDE), or receives vouchers

Table 3.34. *Estimated Educational Attainment of Teachers, Assistant Teachers and Directors, By Ages of Enrolled Children: Countywide*

		Estimated percentage					Total	Number of staff
		Bachelor's degree or higher	Associate degree	24 or more ECE credits	1-23 ECE credits	No degree, no ECE credits		
Teachers	Centers enrolling infants ^a	21.7	29.0	33.8	15.4	0.1	100.0	5,245
	Centers without infants	29.3	32.1	26.2	12.4	0.0	100.0	7,684
	All centers	26.2	30.8	29.3	13.7	0.1	100.0	12,930
Assistant teachers	Centers enrolling infants ^a	3.5	7.5	23.0	55.7	10.3	100.0	2,575
	Centers without infants	8.1	13.8	25.6	41.2	11.3	100.0	4,415
	All centers	6.4	11.5	24.6	46.6	10.9	100.0	6,990
Directors	Centers enrolling infants ^a	64.3	22.6	10.5	2.6	0.0	100.0	727
	Centers without infants	62.4	24.3	11.0	1.9	0.4	100.0	1,440
	All centers	63.0	23.8	10.8	2.1	0.3	100.0	2,167

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^aMost of these centers also enroll older children.

for children of low-income families. In centers holding contracts, instructional and administrative staff are required to meet higher educational standards than those in centers receiving public dollars through vouchers. Staff working in centers receiving vouchers are not required to meet any additional qualifications beyond what is required for centers receiving no public dollars. Although some centers may set qualifications at a higher level, centers receiving vouchers and centers receiving no public dollars are only required by law to meet the standards mandated by Community Care Licensing.

We found that teachers' educational attainment varied by centers' relationship to public subsidy. As shown in Figures 3.15 and 3.16, centers receiving public dollars through vouchers reported a lower percentage of teachers and directors who had obtained a BA or higher degree than contracted centers or centers receiving no public dollars. With respect to teachers who had achieved an AA degree, teachers in contracted centers had higher levels of AA degree attainment than their counterparts in other types of programs, as shown in Figure 3.15. Assistant teachers in centers receiving no public dollars reported higher levels of educational attainment, compared to their counterparts in other types of centers, as shown in Figure 3.17.

We also examined the extent to which a degree related to early childhood development and certification varied among teaching staff in centers with varying relationships to public subsidy. Among centers employing at least one teacher with an early childhood-related bachelor's degree, centers receiving public dollars through vouchers employed a higher percentage of such teachers, on

average (92.4 percent, SE=1.5), than centers not receiving any public dollars (82.1 percent, SE=2.3). Among centers employing at least one teacher with an early childhood-related associate degree, centers holding a contract with Head Start or CDE employed a higher average percentage of such teachers (96.3 percent, SE=1.2) than centers receiving public dollars through vouchers (90.9 percent, SE=1.5); centers not receiving public subsidies employed an average of 93.0 percent of teachers (SE=1.7) with such a degree.

There were no differences among centers with varying relationships to public subsidy with respect to the percentage of centers employing at least one teacher with a BA or higher degree and a California teaching credential. Centers holding a contract with CDE or Head Start also employed the highest percentage of teachers and assistants with Child Development Permits, as shown in Table 3.35.

Overall Educational Attainment, by Teacher and Assistant Teacher Demographic Characteristics

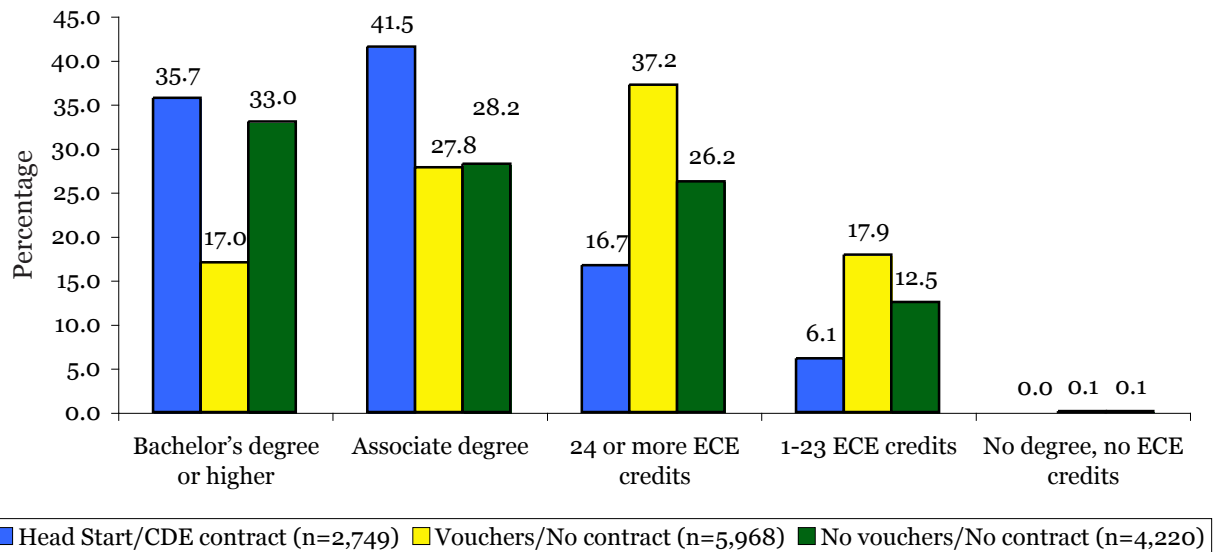
Among teachers and assistant teachers with different levels of education, we examined such characteristics as age, ethnicity and language background.

1) Overall Educational Attainment, by Age

Two intertwined concerns arise with regard to the age distribution among teachers and assistants with different levels of educational attainment:

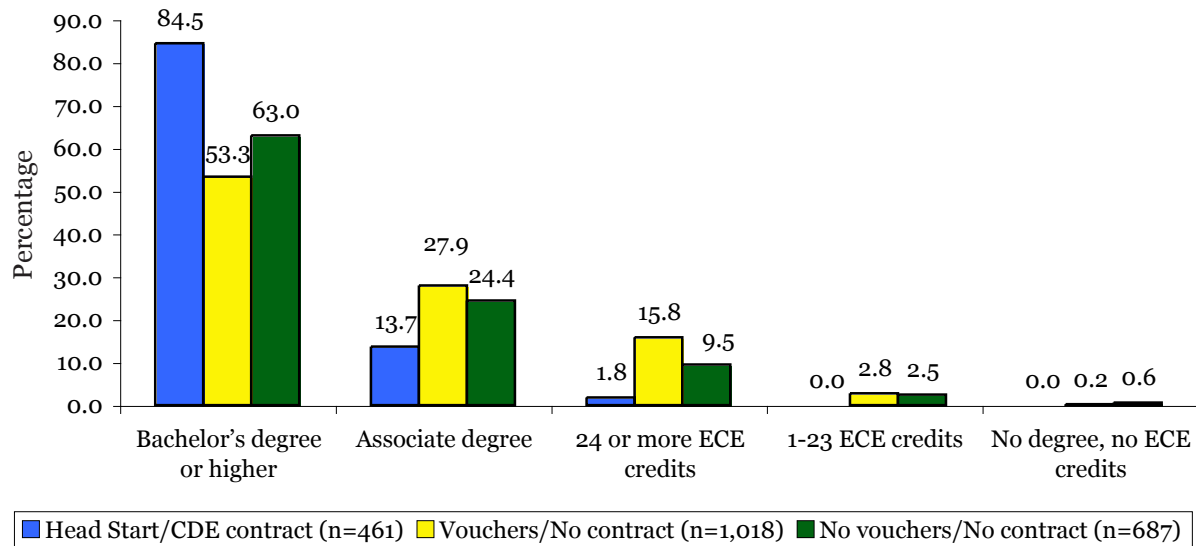
- Is the field attracting younger people to its ranks?
- Are new recruits more or less educated

Figure 3.15. *Estimated Educational Attainment of Teachers, By Centers' Relationship to Public Subsidy: Countywide*



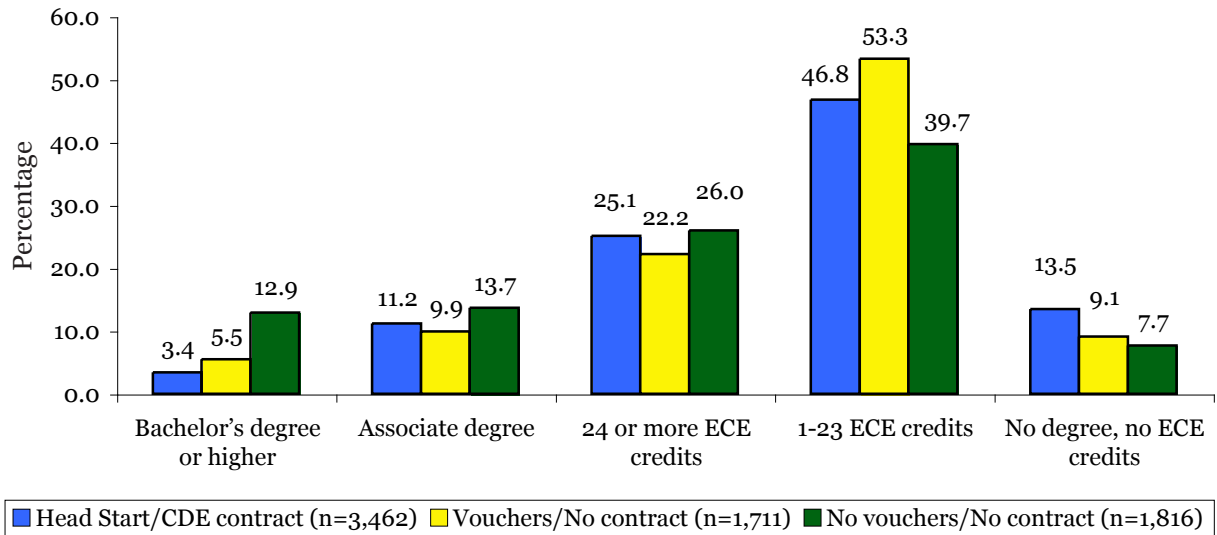
Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Figure 3.16. *Estimated Educational Attainment of Directors By Centers' Relationship to Public Subsidy: Countywide*



Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Figure 3.17. *Estimated Educational Attainment of Assistant Teachers, By Centers' Relationship to Public Subsidy: Countywide*



Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

and trained than older, more tenured members of the workforce?

Recent research has documented an alarming national trend of educational decline among the early care and education workforce, with particular concern that the most educated segment of the workforce is approaching retirement at a time when proposed qualifications for teachers are increasing (Herzenberg, Price & Bradley, 2005). As shown in Table 3.36, teachers with BA or higher degrees were older, on average, than teachers with less education. In particular, one-fifth of such teachers (20.8 percent) were age 50 or older, compared to 12.5 percent of teachers with AA degrees, and 9.1 percent of teachers with no degrees. Among assistant teachers, those with no degree were somewhat more likely to be 29 years old or younger (48.3 percent) than those with an AA or higher degree (40.7 percent).

Similar patterns were identified among centers with varying relationships to public subsidy. Among centers serving children of different ages, those serving infants employed a higher proportion of teachers 29 years old or younger with AA (47.2 percent) or BA or higher degrees (39.4 percent) than did centers not serving infants (AA teachers, 23.6 percent; BA or higher teachers, 16.8 percent). Across SPAs, teachers with BA or higher degrees were older on average than teachers at different levels of educational attainment, and assistant teachers with no degree were younger than those with AA or higher degrees, except in SPA 4 and SPA 6.

2) Overall Educational Attainment, by Ethnicity

We examined teacher and assistant

teacher ethnicity and educational background along three dimensions:

1. the ethnic distribution of teachers and assistants across different levels of formal education;
2. the distribution of educational attainment within various ethnic groups, and
3. the ethnic distribution of teachers and assistant teachers at different levels of education, compared to that of Los Angeles's overall adult population.

Combined, these analyses provide a picture of how well teachers and assistant teachers of various ethnic groups are represented at different educational levels, how this distribution reflects general trends in the population, and where supports and incentives might be directed toward particular ethnic groups in order to boost their educational attainment.

The ethnic distribution of teachers and assistant teachers varied across levels of educational attainment, as shown in Table 3.37. White, Non-Hispanic teachers comprised 35.5 percent of all teachers, and they comprised 40.3 percent of teachers with a BA or higher degree. Latinas comprised 36.6 percent of all teachers, but only 21.6 percent of teachers with a BA or higher degree. African American teachers comprised 14.1 percent of all teachers, and roughly the same percentage of teachers with a BA or higher degree (13.9 percent). Although Asian/Pacific Islanders constituted only 7.1 percent of all teachers, they comprised 13.9 percent of those who reported a BA or higher degree as their highest level of educational attainment. A similar pattern was found among assistant teachers.

In determining the distribution of educational attainment (as represented

Table 3.35. Estimated Mean Percentage of Teachers and Assistant Teachers with Child Development Permits, in Centers Employing at Least One Such Teacher: Countywide, and By Centers' Relationship to Public Subsidy

	Estimated average percentage (SE)		
	Teachers with a bachelor's or higher degree	Teachers with an associate degree	Assistant teachers with an associate or higher degree
Head Start/CDE contract	96.5 (1.10)	98.0 (0.91)	82.2 (3.88)
<i>Number of centers</i>	351	403	134
Vouchers/No contract	81.3 (3.20)	77.4 (2.88)	85.7 (5.07)
<i>Number of centers</i>	219	321	68
No vouchers/No contract	77.5 (3.03)	77.8 (3.23)	68.7 (5.78)
<i>Number of centers</i>	256	253	76
Countywide	86.6 (1.44)	86.0 (1.43)	79.4 (2.84)
<i>Number of centers</i>	825	977	144

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.
Head Start/CDE contract > Vouchers/No contract, No contract/No vouchers

Table 3.36. Teachers' Age and Educational Attainment: Countywide

	Estimated percentage			
	All teachers	Teachers with bachelor's or higher degree	Teachers with associate degree	Teachers with no degree
Under 30 years old	34.1	24.3	32.6	41.1
30 to 39 years old	31.8	30.0	34.3	31.2
40 to 49 years old	20.9	24.9	20.6	18.6
50 years and older	13.2	20.8	12.5	9.1
<i>Total</i>	100.0	100.0	100.0	100.0
<i>Number of teachers</i>	12,487	3,302	3,843	5,342

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Table 3.37. Estimated Percentage of Teachers and Assistant Teachers, By Ethnicity and Educational Attainment: Countywide

	Estimated percentage						
	All teachers	Teachers with bachelor's or higher degree	Teachers with associate degree	Teachers with no degree	All assistant teachers	Assistant teachers with associate or higher degree	Assistant teachers with no degree
White, Non-Hispanic	35.5	40.3	31.0	35.9	23.1	36.2	20.1
Latina	36.6	21.6	43.1	41.2	53.2	34.6	57.4
African American	14.1	13.9	16.4	12.6	13.8	12.4	14.1
Asian/Pacific Islander	7.1	13.9	5.0	4.3	5.4	9.0	4.6
American Indian or Alaskan Native	0.2	0.3	0.3	0.1	0.1	0.0	0.2
Multiethnic	2.9	4.5	1.7	2.8	1.4	2.9	1.0
Other	3.6	5.5	2.5	3.1	3.1	4.9	2.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<i>Number of staff</i>	12,599	3,339	3,853	5,407	6,955	1,275	5,680

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

by completion of degrees) within various ethnic groups, we found that 30.1 percent of White, Non-Hispanic, 26.0 percent of African American, 15.7 percent of Latina, and 52.4 percent of Asian/Pacific Islander teachers had completed a four-year degree or higher. (See Table 3.38.) Among assistant teachers, 28.8 percent of White, Non-Hispanics, 30.8 percent of Asian/Pacific Islanders, 16.4 percent of African Americans and 12.0 percent of Latinas had completed a two-year degree or higher.

Next, we sought to determine the ethnic distribution of teachers at different levels of education, as compared to Los Angeles's overall adult population. For example, were Latina teachers more or less likely than other Latino adults in Los Angeles to have achieved a BA degree? To make this comparison, we examined data from the 2000 U.S. Census on Los Angeles adults' attainment of BA or

higher degrees. Latina, African American, and Asian/Pacific Islander teachers had attained BA or higher degrees at higher rates than their counterparts in the overall county population (all Latino adults, 6.8 percent; all African American adults, 17.8 percent; all Asian/Pacific Islander adults, 42.4 percent). White, Non-Hispanic teachers, however, were less likely to have earned a BA than White, Non-Hispanic Los Angeles adults (24.9 percent).

3) Overall Educational Attainment, by Language

Since many of Los Angeles's young children speak a first language other than English, and many have parents with limited English proficiency, there is understandable concern about the ability of the early care and education workforce to communicate well with children and their adult family members, and to create learning environments for children that build upon their first

Table 3.38. *Estimated Percentage of Teachers with a Bachelor's Degree or Higher, Associate Degree, or No Degree, By Ethnicity: Countywide and By SPA*

		Estimated percentage				Number of teachers
		Bachelor's or higher degree	Associate degree	No degree	Total	
All Centers	White, Non-Hispanic	30.1	26.7	43.2	100.0	4,478
	Latina	15.7	36.0	28.3	100.0	4,608
	African American	26.0	35.6	38.4	100.0	1,777
	Asian/Pacific Islander	52.4	21.6	26.0	100.0	890
SPA 1	White, Non-Hispanic	5.6	25.4	69.0	100.0	174
	Latina	0.0	40.0	60.0	100.0	110
	African American	3.6	21.4	65.0	100.0	69
	Asian/Pacific Islander	50.0	0.0	50.0	100.0	5
SPA 2	White, Non-Hispanic	29.2	24.0	46.8	100.0	1,752
	Latina	17.8	25.0	57.2	100.0	968
	African American	31.0	7.2	61.8	100.0	176
	Asian/Pacific Islander	31.6	15.8	52.6	100.0	159
SPA 3	White, Non-Hispanic	26.6	28.4	45.0	100.0	924
	Latina	11.6	36.8	51.6	100.0	1,154
	African American	20.0	40.0	40.0	100.0	119
	Asian/Pacific Islander	51.6	27.4	21.0	100.0	246
SPA 4	White, Non-Hispanic	58.0	26.0	16.0	100.0	174
	Latina	18.2	43.8	36.0	100.0	733
	African American	36.8	36.8	26.4	100.0	124
	Asian/Pacific Islander	67.6	19.6	11.0	100.0	195
SPA 5	White, Non-Hispanic	46.2	26.2	27.6	100.0	427
	Latina	21.8	41.6	36.6	100.0	263
	African American	38.4	29.6	32.0	100.0	177
	Asian/Pacific Islander	74.2	20.0	5.8	100.0	77
SPA 6	White, Non-Hispanic	25.0	56.2	18.8	100.0	40
	Latina	25.2	53.0	27.8	100.0	287
	African American	23.8	46.0	30.2	100.0	569
	Asian/Pacific Islander	71.4	28.6	0.0	100.0	17
SPA 7	White, Non-Hispanic	14.2	35.8	50.0	100.0	280
	Latina	14.2	33.4	52.4	100.0	562
	African American	18.8	31.2	50.0	100.0	67
	Asian/Pacific Islander	43.8	21.8	34.4	100.0	67
SPA 8	White, Non-Hispanic	32.8	26.8	40.4	100.0	708
	Latina	13.6	37.0	79.4	100.0	532
	African American	25.2	36.8	37.6	100.0	477
	Asian/Pacific Islander	44.4	22.2	33.4	100.0	124

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

language as a foundation for successful mastery of English (Garcia, 2005; Sakai & Whitebook, 2003; Wong-Fillmore & Snow, 1999). Because of the commonly shared goal among policy makers and advocates to build not only a more educated but an ethnically and linguistically diverse early care and education workforce (Calderon, 2005), it is important to understand how language capacity varies among teachers and assistant teachers with different levels of educational attainment, in order to design and target professional development resources.

The following is an analysis of educational attainment by language, but it is important to note that language ability was reported by directors, rather than independently verified; we also were unable to determine whether teachers and assistants who spoke a language besides English fluently were also fluent in English. Finally, this study does not permit us to assess whether or not there was a linguistic match between teaching staff and the children they served.

Our analyses focused on the percentage of teachers and assistants at different educational levels who had the director-reported capacity to communicate with children in a language other than English. Across all educational levels, 50.8 percent of teachers and 62.2 percent of assistant teachers had such a capacity. Teachers with AA degrees were somewhat more likely than either teachers with BA or higher degrees or teachers with no degrees to have this linguistic capacity, as shown in Table 3.39. We do not know, however, which teachers at any educational level were bilingual, and which spoke a language other than English fluently but were limited in their

English skills.

Among assistant teachers, those with an AA or higher degree (58.2 percent) were somewhat less likely than those with no degree (63.1 percent) to speak a language other than English fluently.

Also shown in Table 3.39 are the percentages of teachers at various educational levels, by SPA, with the director-reported capacity to communicate fluently in a language other than English. Within SPAs, the percentages of teachers at various educational levels with this capacity were relatively consistent, with the exception of SPA 4, which reported the most linguistically diverse teacher workforce.

Table 3.39 shows the percentage of teachers at various educational levels, by center type, with this director-reported linguistic capacity. Centers serving infants and preschoolers employed higher percentages of teachers with AA degrees and with no degrees who spoke a language other than English fluently than did centers not serving infants. Centers holding a contract with Head Start or CDE employed a higher percentage of all teachers (60.2 percent) who could communicate fluently with children and families in a language other than English than centers receiving vouchers (47.8 percent) or those receiving no public funding (41.6 percent). In contracted programs, the most notable difference from other types of centers was among teachers without degrees, followed by teachers with AA degrees. Centers receiving vouchers employed a somewhat more linguistically diverse teaching staff than non-subsidized centers. (See Table 3.39.)

Centers holding a contract with

Head Start or CDE employed a higher percentage, on average, of assistant teachers without degrees (68.1 percent) who spoke a language other than English fluently than centers receiving vouchers (55.1 percent) and centers receiving no public dollars (57.9 percent). Among teachers AA or higher degrees, centers receiving vouchers employed a higher percentage of such teachers who spoke a language other than English fluently (68.3 percent) compared to centers holding contracts with Head Start or CDE (63.4 percent) or those receiving no public dollars (46.7 percent). Assistant teachers with AA or higher degrees, however, constituted a smaller proportion of the overall assistant teacher workforce than assistant teachers with no degrees.

Table 3.39. *Estimated Percentage of Teachers at Different Levels of Educational Attainment Who Speak A Language Other Than English Fluently: Countywide, By Ages of Enrolled Children, By SPA, and By Centers' Relationship to Public Subsidy*

	Estimated percentage		
	Teachers with bachelor's or higher degree	Teachers with associate degree	Teachers with no degree
Countywide	46.1	54.9	45.3
<i>Number of teachers</i>	3,350	3,980	5,559
Center enrolling infants ^a	45.2	60.7	48.3
<i>Number of teachers</i>	1,135	1,520	2,588
Centers without infants	46.4	51.4	42.6
<i>Number of teachers</i>	2,215	2,460	2,971
SPA 1	16.7	57.4	20.8
<i>Number of teachers</i>	15	115	269
SPA 2	38.5	54.8	41.4
<i>Number of teachers</i>	859	779	1,773
SPA 3	46.4	58.2	48.2
<i>Number of teachers</i>	666	924	1,253
SPA 4	69.9	85.2	80.0
<i>Number of teachers</i>	463	463	392
SPA 5	44.8	47.6	48.8
<i>Number of teachers</i>	421	313	315
SPA 6	42.4	38.9	31.4
<i>Number of teachers</i>	247	437	262
SPA 7	59.3	63.8	50.4
<i>Number of teachers</i>	169	334	501
SPA 8	35.1	37.1	39.6
<i>Number of teachers</i>	511	615	794
Head Start/CDE contract	50.2	65.3	66.8
<i>Number of teachers</i>	979	1,134	626
Vouchers/No contract	49.9	53.1	44.8
<i>Number of teachers</i>	1,013	1,658	3,295
No vouchers/No contract	39.9	47.8	38.6
<i>Number of teachers</i>	1,358	1,187	1,639

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^aMost of these centers also enroll older children.

How well prepared are center-based teacher staff to care for and educate children who are dual language learners or have special needs?

Only about one-half of centers employ teachers who have participated in non-credit training focused on dual language learning in young children, and slightly more than one-third employ teachers who have completed college coursework on that subject, despite the growing numbers of young children in Los Angeles County who speak a language other than English in their homes. Centers that report that at least one of their teachers has participated in training or education related to dual language learning report somewhat higher overall levels of education among their teachers. Centers with at least one teacher who has participated in training or college courses related to dual language learning children also employ a higher percentage of teachers who speak a language other than or in addition to English.

Many more teachers have participated in professional development related to working with children with special needs. Three-quarters of centers report that at least one of their teachers has participated in non-credit training, and about two-thirds report that at least one teacher has completed college credits, related to children with special needs. Centers that report caring for at least one such child also report higher levels of teacher professional development related to working with children with special needs. Centers that hold a contract with Head Start or CDE also employ a higher percentage of teachers with relevant professional development.

As Los Angeles County considers how best to prepare its workforce to meet the needs of its young children, particular concern centers on two groups of children:

- the growing number who are dual language learners, many of them from immigrant families; and
- the growing number who have been identified as having special developmental needs.

A pressing question is whether the current early care and education workforce has sufficient skill and knowledge to meet the needs of these children. While it was beyond the scope of this study to assess the overall knowledge and competencies of center-based teaching staff, our interview did allow some initial exploration of

teachers'¹⁹professional preparation related to dual language learners and/or children with special needs.

Preparation to Work with Young Children Acquiring a Second Language

In 2005, almost one-half of children entering public kindergarten in Los Angeles County were estimated to be dual language learners (California Department of Education, 2005). According to recent projections of the growth of this segment of California's population over the next several decades (Hill, Johnson & Tafoya,

¹⁹ Directors were asked the number of teachers in their centers who had participated in credit-bearing coursework or non-credit training focused on working with children who were dual language learners and/or those with special needs. Because of concern about the length of the survey, these questions were not asked with respect to directors or assistants.

Table 3.40. Estimated Mean Percentage of Teachers Completing at Least One Hour of Non-Credit Training and/or at Least One College Credit Related to Dual Language Learning Children: Countywide

	Estimated percentage (SE)
Non-credit training	34.0 (1.69)
<i>Number of centers</i>	2,012
College credits	20.9 (1.44)
<i>Number of centers</i>	1,826

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

2004), it is likely that soon the majority of young children receiving early care and education services in the state will be dual language learners and/or living in families in which some or all of the adults do not speak English.

In this survey, we were able only to investigate which languages teachers spoke, not the languages spoken by children in their care. We know, however, from anecdotal reports that a sizeable portion of teachers in Los Angeles County either care for children for whom English is a second language or will likely be called upon to do so over the course of their careers. We also know from a recent survey of early childhood teacher preparation programs in California institutions of higher education (Whitebook, Bellm, Lee & Sakai, 2005) that only one-quarter of these programs require a course focused on second-language acquisition in young children, suggesting that exposure to professional development around these issues through college courses is limited.

Table 3.41. Estimated Percentage of Centers Employing at Least One Teacher With Non-Credit Training and/or College Credits Related to Dual Language Learning Children: Countywide

	Estimated percentage (SE)
At least one teacher with non-credit training	45.9 (1.99)
<i>Number of centers</i>	2,012
At least one teacher with college credits	36.4 (2.01)
<i>Number of centers</i>	1,826

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Our goal was to ascertain the extent to which teachers had received any training focused on this topic, by asking directors whether their teachers had participated in relevant credit-bearing courses and/or non-credit training. Most had not: directors reported that, on average, only 34.0 percent of teachers had received non-credit training, and only 20.9 percent had completed college coursework, focused on dual language learning in young children. (See Table 3.40.) We estimate that 54.1 percent of centers had no teachers with non-credit training, and 63.6 percent had no teachers who had taken college courses related to dual language learning in children. (See Table 3.41.)

There were some variations between centers serving infants and those serving only older children with respect to teacher professional preparation related to working with dual language learners. Centers not serving infants reported, on average, a higher percentage of teachers with non-credit training to work with dual language learners (37.5 percent, SE=2.0) than centers serving infants (24.5 percent,

SE=2.9). There were no differences with respect to the average percentage of teachers who had participated in credit-bearing courses between centers serving infants and those serving only older children.

The average percentage of teachers who had participated in professional development related to dual language learning varied by centers' relationship to public subsidies. As shown in Figure 3.19, centers operating under a contract with Head Start or the California Department of Education reported that about two-thirds of teachers, on average, had participated in non-credit training, and two-fifths of teachers, on average, had completed college credits, related to dual language learning. Centers receiving no public dollars or those receiving vouchers for at least one child reported that their teachers were less likely than teachers in contracted centers to have participated in such professional development.

We next examined whether centers employing at least one teacher with either non-credit training or college credits related to dual language learning in children varied with respect to the percentage of teachers with AA or higher degrees. As shown in Table 3.42, centers with at least one teacher who had participated in such non-credit training were staffed with a somewhat higher percentage of teachers with an AA degree or BA degree or higher. Centers with at least one teacher who had participated in credit-bearing courses were staffed with a higher percentage of teachers with an AA degree.

Centers with teachers who had participated in training or coursework related to dual language learning also reported a higher average percentage

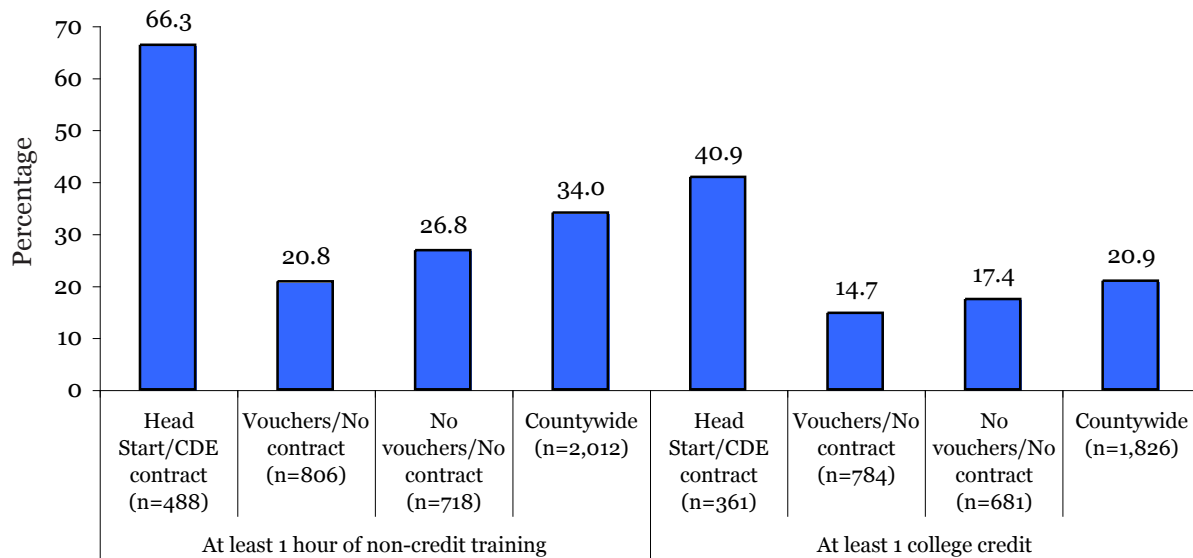
of teachers who spoke a language other than or in addition to English. In centers with at least one teacher who had participated in non-credit training, 57.8 percent (SE=2.0) of the teachers spoke a language other than English, compared to 43.8 percent (SE=1.9) of teachers in centers without teachers with this training. Similarly, 58.2 percent (SE=2.3) of teachers spoke a language other than English in centers with teachers who had participated in credit-bearing training related to dual language learning, compared to 44.9 percent (SE=1.8) in centers that had no teachers with this education..

Preparation to Work with Young Children With Special Needs

Over the last 30 years, the deepening understanding of and ability to identify developmental challenges, coupled with changes in federal law,²⁰ have led to the increased involvement of early childhood settings in providing services to children with special physical and developmental needs and/or disabilities (Shonkoff & Phillips, 2000). Recognizing that the early care and education workforce was being increasingly called upon to provide such services, the California Legislature

20 Two federal laws in particular have contributed to the inclusion of children with special needs in early childhood programs. The American with Disabilities Act (ADA), a federal civil rights law passed in 1990, prohibits discrimination by child care centers and family child care providers against individuals with disabilities. The ADA requires centers to assess, on a case-by-case basis, what a child with a disability requires in order to be fully integrated into a program, and whether reasonable accommodation can be made to allow this to happen. In addition, the Individuals with Disabilities Education Act, passed in 1975 and reauthorized in 2004, requires public schools to meet the educational needs of children as young as three with disabilities, guarantees early intervention services to infants and toddlers up to age three in their "natural environments," and addresses the transition of infants and toddlers from early intervention services to preschool programs. California's equivalent law, the Early Intervention Services Act, is also known as Early Start (Child Care Law Center, 2005).

Figure 3.18. Estimated Mean Percentage of Teachers Who Have Completed Non-Credit Training and/or College Credits Related to Dual Language Learning Children, by Centers' Relationship to Public Subsidy



Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Table 3.42. Estimated Mean Percentage of Teachers with Associate or Higher Degrees in Centers with and without Teachers with Non-Credit Training and/or College Credits Related to Dual Language Learning Children: Countywide

	Mean percentage (SE)	
	Teachers with an associate degree*	Teachers with a bachelor's degree or higher**
No teachers with non-credit training	29.4 (1.59)	24.2 (1.53)
Number of centers	1,078	1,078
At least 1 teacher with non-credit training	38.8 (1.91)	31.6 (1.92)
Number of centers	915	915
No teachers with college credits	29.8 (1.52)	23.6 (1.48)
Number of centers	1,160	1,160
At least 1 teacher with college credits	37.8 (2.20)	30.2 (2.19)
Number of centers	658	658

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

* $p < .05$, Centers with at least one teacher with college credits > centers with no teachers with college credits. Centers with at least one teacher with non-credit training > Centers with no teachers with non-credit training.

** $p < .05$, Centers with at least one teacher with non-credit training > Centers with no teachers with non-credit training.

passed SB 1703 in 2000, supporting local child care resource and referral programs and child care planning councils in providing training related to children with special needs. This funding was renewed in 2005.

For this study, we were interested in determining whether center teachers had received professional preparation related to children with special needs. Specifically, we determined:

1. whether or not centers employed any teachers who had participated in special needs-related training or college courses,
2. the average percentage of teachers in centers who had participated in special needs-related training or college courses, and
3. whether centers that reported caring for at least one child with special needs employed a higher percentage of teachers who had participated in relevant education and training.

Overall Levels of Special Needs-Related Training and Courses

Three-quarters (75.8 percent) of centers reported that at least one of their teachers had participated in non-credit training related to children with special needs. Fewer centers (63.7 percent) reported that at least one teacher had participated in credit-bearing college courses on this subject. (See Table 3.43.) As shown in Table 3.44, centers reported, on average, that 56.3 percent of teachers had participated in non-credit training and 36.2 percent in college courses related to children with special needs.

The average percentage of teachers who had participated in non-credit training and college credits related to

Table 3.43. Estimated Percentage of Centers Employing at Least One Teacher with Non-Credit Training and/or College Credits Related to Children with Special Needs: Countywide

	Estimated percentage (SE)
At least one teacher with non-credit training	75.8 (1.71)
<i>Number of centers</i>	1,999
At least one teacher with college credit	63.7 (1.99)
<i>Number of centers</i>	1,868

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

children with special needs varied with respect to center relationship to public subsidy, SPA, and the average educational background of teaching staff. As shown in Table 3.44, centers that held a contract with Head Start or CDE reported significantly higher percentages of teachers who had participated in special needs-related training or college courses than did centers receiving vouchers or centers receiving no public dollars. There were also some variations among the SPAs in the average percentage of teachers with special needs-related training and education, as shown in Table 3.44.

Centers that reported at least one teacher with training or education related to children with special needs also reported a higher percentage of teachers with a BA degree or higher, as shown in Table 3.45. Centers with at least one teacher who had participated in non-credit training related to children with special needs reported that, on average, 31.3 percent of teachers had a BA degree or higher, compared to 17.6 percent of teachers in centers that did not have any teachers with such training. Similarly,

Table 3.44. *Estimated Mean Percentage of Teachers with Non-Credit Training and/or College Credits Related to Children with Special Needs: Countywide, by Centers' Relationship to Public Subsidy and by SPA*

		Estimated mean percentage (SE)	
		Non-credit training*	College credits**
Countywide		56.3 (1.71)	36.2 (1.57)
<i>Number of centers</i>		1,999	1,868
By SPA	SPA 1	41.3 (8.95)	16.7 (4.07)
	<i>Number of centers</i>	56	56
	SPA 2	55.1 (4.21)	37.1 (4.06)
	<i>Number of centers</i>	419	377
	SPA 3	52.9 (4.45)	34.4 (4.00)
	<i>Number of centers</i>	385	368
	SPA 4	59.7 (4.72)	40.2 (4.35)
	<i>Number of centers</i>	220	200
	SPA 5	68.6 (4.77)	38.0 (4.59)
	<i>Number of centers</i>	158	142
	SPA 6	69.3 (4.16)	43.6 (4.22)
	<i>Number of centers</i>	235	225
	SPA 7	42.0 (4.80)	23.1 (3.63)
	<i>Number of centers</i>	182	171
	SPA 8	54.9 (4.18)	39.1 (3.76)
	<i>Number of centers</i>	345	328

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

* $p < .05$, SPAs 5 and 6 > SPAs 1 and 2. Head Start/CDE contract > Vouchers/no contract, no vouchers/no contract.

** $p < .05$, SPA 1 < SPAs 2,3,4,5,6,8 ; SPA 7 < SPAs 4,6,8 . Head Start/CDE contract > Vouchers/no contract, no vouchers/no contract.

Table 3.44. *Estimated Mean Percentage of Teachers with Non-Credit Training and/or College Credits Related to Children with Special Needs: Countywide, by Centers' Relationship to Public Subsidy and by SPA*

		Estimated mean percentage (SE)	
		Non-credit training*	College credits**
By relationship to subsidy	Head Start/CDE contract	75.2 (3.03)	50.8 (3.45)
	<i>Number of centers</i>	496	419
	Vouchers/No contract	47.0 (2.63)	31.9 (2.29)
	<i>Number of centers</i>	811	784
	No contract/No vouchers	53.6 (3.00)	32.1 (2.57)
	<i>Number of centers</i>	692	665

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

* $p < .05$, SPAs 5 and 6 > SPAs 1 and 2. Head Start/CDE contract > Vouchers/no contract, no vouchers/no contract.

** $p < .05$, SPA 1 < SPAs 2,3,4,5,6,8 ; SPA 7 < SPAs 4,6,8 . Head Start/CDE contract > Vouchers/no contract, no vouchers/no contract.

Table 3.45. *Estimated Mean Percentage of Teachers with AA or Higher Degrees, By Whether Centers Employ Teachers with Non-Credit Training or College Courses Related to Special Needs: Countywide*

	Mean percentage (SE)		
	Teachers with AA degree	Teachers with a BA or higher degree*	Number of centers
No teachers with non-credit training	29.2 (2.44)	17.6 (2.01)	482
At least one teacher with non-credit training	34.7 (1.39)	31.3 (1.44)	1,500
No teachers with college credits	31.2 (2.23)	21.0 (1.85)	676
At least one teacher with college credits	34.0 (1.53)	30.5 (1.63)	1,184

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

* $p < 0.5$, Centers with at least one teacher with non-credit training > centers with no teachers with non-credit training. Centers with at least one teacher with college credits > centers with no teachers with college credits.

centers with at least one teacher who had participated in credit-bearing courses reported that 30.5 percent of their teachers, on average, had a BA degree or higher, compared to 21.0 percent in centers with no teachers with such coursework. There were no significant differences in the percentages of teachers with AA degrees.

The average percentage of teachers who had participated in training or college credits related to children with special needs did not vary by whether centers served infants or only older children.

Special Needs-Related Credits and Training, by Number of Children with Special Needs Served

Overall, 50.1 percent of centers (SE=1.9) reported caring for at least one child with special needs. As shown in Tables 3.46 and 3.47, centers caring for at least one child with special needs employed a higher percentage of teachers who had participated in relevant non-credit and/or credit-bearing training than centers caring for no such children. Among centers that had at least one child with special needs in their care, 63.0 percent of teachers had participated in relevant non-credit training, whereas only 48.3 percent of teachers had received such non-credit training in centers with no children with special needs. There were some variations among the SPAs, as shown in Table 3.46. Centers that enrolled at least one child with special needs also reported higher average percentages of teachers (41.8 percent) who had completed college credits related to children with special needs than centers that did not enroll any children with special needs (29.5 percent). (See Table 3.47.)

Table 3.46. Estimated Mean Percentage of Teachers with Non-Credit Training Related to Children with Special Needs, by Number of Children with Special Needs Enrolled: Countywide and By SPA

	Estimated mean percentage (SE)	
	No children with special needs	At least one child with special needs
Countywide*	48.3 (2.50)	63.0 (2.37)
<i>Number of centers</i>	955	1,002
SPA 1	33.4 (11.40)	45.0 (13.87)
<i>Number of centers</i>	29	24
SPA 2	49.4 (6.77)	58.9 (5.51)
<i>Number of centers</i>	168	239
SPA 3	44.6 (6.50)	57.6 (6.10)
<i>Number of centers</i>	178	194
SPA 4	53.0 (6.80)	66.4 (6.49)
<i>Number of centers</i>	104	111
SPA 5*	51.0 (7.93)	81.9 (4.90)
<i>Number of centers</i>	68	90
SPA 6	59.8 (6.26)	79.1 (5.04)
<i>Number of centers</i>	125	105
SPA 7	34.2 (5.96)	54.9 (7.77)
<i>Number of centers</i>	111	69
SPA 8	50.3 (5.98)	58.7 (5.82)
<i>Number of centers</i>	173	169

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

* $p < .05$, Cares for at least one child with special needs > cares for no children with special needs.

Table 3.47. *Estimated Mean Percentage of Teachers with College Credits Related to Children with Special Needs, by Number of Children with Special Needs Enrolled: Countywide and By SPA*

	Estimated mean percentage (SE)	
	No children with special needs	At least one child with special needs
Countywide*	29.5 (2.09)	41.8 (2.30)
<i>Number of centers</i>	920	918
SPA 1	14.1 (5.67)	20.0 (5.58)
<i>Number of centers</i>	32	24
SPA 2	35.2 (6.20)	38.5 (5.46)
<i>Number of centers</i>	163	209
SPA 3	26.6 (5.11)	37.6 (5.83)
<i>Number of centers</i>	174	182
SPA 4	28.8 (5.17)	51.6 (6.64)
<i>Number of centers</i>	96	96
SPA 5	27.3 (6.23)	47.2 (6.22)
<i>Number of centers</i>	66	77
SPA 6	31.6 (5.45)	54.2 (6.00)
<i>Number of centers</i>	115	105
SPA 7	21.0 (4.41)	27.2 (6.36)
<i>Number of centers</i>	104	65
SPA 8	34.9 (5.25)	43.5 (5.32)
<i>Number of centers</i>	169	159

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

* $p < .05$, Centers that care for at least one child with special needs > centers that care for no children with special needs.

Discussion

This report provides the latest comprehensive profile of Los Angeles County's center-based early care and education workforce. Here, we briefly comment on the findings we consider most relevant to current efforts to design and improve policies that impact the quality and availability of services for young children prior to kindergarten.

Our study has sought to answer five overarching questions:

1. Who are the teachers, assistant teachers and directors in Los Angeles County's licensed child care centers?
2. What are the characteristics of children in Los Angeles County child care centers licensed to serve infants and/or preschoolers?
3. What is the level of educational attainment and early childhood development-related training among teachers, assistants and directors in Los Angeles County's child care centers?
4. How do levels of overall educational attainment, and professional preparation related to early childhood development, vary among teachers, assistant teachers and directors employed in centers licensed to serve infants and/or preschoolers?
5. How well prepared are teachers to care for and educate children who are dual language learners or have special needs?

1) Who are the teachers, assistant teachers and directors in California's licensed child care centers?

In Los Angeles County, a teacher in a child care center licensed to serve infants and/or preschoolers is equally likely to be White, Non-Hispanic or Latina. Assistant teachers are more diverse, and more closely reflect the ethnic distribution of children ages birth to five in the county than do teachers or directors. Still, teachers are more ethnically diverse than K-12 teachers. Compared to women in Los Angeles County, teachers and assistant teachers are more likely to be under age 30, and less likely to be over age 50. About one-third of directors, nearly one-half of teachers, and almost three-fifths of assistant teachers are able to speak a language other than English fluently, most typically Spanish.

These demographic profiles vary, however, among the eight SPAs in the county, and by such center characteristics as age group of children served and relationship to public subsidy. Center teaching staff in SPA 6, like the SPA 6 population as a whole, for example, are more likely to be African American than their counterparts in other areas of the county. Centers holding contracts with Head Start or the California Department of Education are more likely to employ teachers who speak a language other than English than are those that receive no public dollars.

The typical teacher and assistant teacher have worked in their present jobs for less than five years, while the typical director has been on the job for more than five years. The highest-paid teachers with a BA earn, on average, between \$10.00 and \$20.00 an hour, depending on the SPA in which they work. The highest-paid assistants can expect to earn about \$9.00 an hour, on average, if they work in a center receiving public dollars through vouchers, and \$11.38 an hour in a center holding a contract with Head Start or CDE.

Los Angeles County's early care and education (ECE) workforce is much more ethnically and linguistically diverse than its teachers of Grades K-12. Child care center teachers also more closely match the diversity of children in the state, and assistant teachers are even more diverse. This richness of linguistic and cultural diversity provides a promising foundation on which to revamp and expand services for County's young children.

But this comparison with the K-12 workforce can also obscure the stratification by ethnicity that does exist in the ECE workforce. Our data reveal substantial divisions by ethnicity and

language that require attention. Stated simply, about one-half of center directors were White, Non-Hispanic, whereas most assistant teachers were women of color. For example, 19.5 percent of directors, 36.6 percent of teachers and 53.2 percent of assistant teachers were Latinas. Similarly, 58.7 percent of assistant teachers could communicate with children in a language other than English, compared to 47.9 percent of teachers and about one-third of directors.

In light of the continuing efforts to upgrade the knowledge and skills of California's early care and education workforce – in particular, the proposed

increase in educational standards for teachers in publicly funded preschool – the challenge will be to intentionally maintain and expand this workforce diversity. This can only be done by investing in a range of appropriate supports that will truly allow people from a wide spectrum of cultural, educational and financial backgrounds to access professional development opportunities. A proactive strategy will be essential, including scholarships, tutoring, conveniently scheduled and located classes, and resources for students learning English as a second language. The goal must extend beyond building a diverse workforce to ensuring that such diversity is well distributed across all positions and all types of child care centers.

Another comparison with the K-12 teacher workforce reveals serious instability of staffing in child care centers. Twice as many teachers in child care centers (22 percent in California, 23 percent in Los Angeles County) as California public school K-12 teachers (11 percent in California) leave their jobs each year (Alliance for Excellent Education, 2005). Although many centers reported no turnover among teaching staff during the last year, a sizeable portion reported that about one-third of their teachers and their assistant teachers had left their jobs. Only about two-fifths of teachers, and one-third of assistant teachers, had been working in their centers for five years or more.

Given the documented relationship between turnover and program quality, the persistence of high turnover in the ECE field, often linked with poor compensation, is of serious concern. The highest-paid teachers in this study

with BA or higher degrees earned, on average, \$16.66 per hour, or \$34,653 per year, compared to a mean annual salary of Los Angeles County elementary school teachers of \$59,029, typically distributed over a shorter work year (California Department of Education, 2005). Should publicly funded preschool positions become available, at pay levels comparable to those of K-12 teachers, it is likely that many in the ECE workforce will seek these new opportunities. While this will likely create some disruption, comparable wages carry the possibility of a more stable teacher workforce, at least among teachers of four-year-olds. It is less clear what impact this shift could have on other staff positions – notably assistant teachers, teachers of younger children, and even directors – absent some equivalent overall increase in ECE workforce compensation.

2) What are the characteristics of children in Los Angeles County child care centers licensed to serve infants and/or preschoolers?

In Los Angeles County, teachers and assistants care for and educate approximately 155,000 children in centers licensed to serve infants and/or preschoolers. Approximately 90 percent of the children in these centers are not yet in kindergarten, and two-thirds are between the ages of three and five. Seven percent are children under age two, about 15 percent are age two, and 11 percent are in kindergarten or a higher grade. On average, about five percent of children in these centers are reported by directors to have special needs.

Nearly two-thirds of centers report caring for at least one child who receives public child care assistance. Forty-one percent of centers receive public dollars in the form of vouchers, and one-quarter of centers receive public dollars through a contract with Head Start or the California Department of Education, to cover the cost of care for the subsidized children they serve. Centers vary considerably in size, with about 20 percent enrolling 30 or fewer children and 20 percent enrolling 100 children or more.

Our study provides a picture of the size and organization of centers licensed to serve children birth to five, as well as the children attending these centers in terms of age, special needs, and whether their families receive public subsidies to cover the cost of their care.

With respect to center size and organization, licensed child care centers serving children prior to kindergarten are notably diverse. While the majority of centers are operated on a nonprofit basis, a sizeable portion are publicly operated or organized as for-profit businesses. Although centers, on average, serve 62 children birth to five years old and employ about seven teachers and four assistant teachers, one-quarter of centers are very small businesses or are organizations approaching the size of many elementary schools. On the one hand, this variety speaks to the richness of options available to families, as well as varied opportunities for those seeking to work in or operate child care centers. Yet this diversity also helps to explain the challenge in reaching consensus about workforce

standards, or employee benefits such as health insurance, retirement assistance or professional development, all of which may have different implications depending on a center's size and organization.

With respect to age, the standard practice among centers statewide is to care for children between the ages of two and five. Centers care for more children in the two-to-five age range than under age two, largely because of differing staffing requirements (and associated costs) for serving infants and toddlers. The child composition and financial stability of centers may shift if more spaces become available for four-year-olds through publicly funded preschool.

For many years in California, only centers contracting with CDE or Head Start received public dollars to cover the cost of serving subsidized children. But over the last two decades, public dollars have become available to both for-profit and nonprofit centers, as well as licensed and license-exempt home-based case.

Remarkably, more centers now receive public dollars in the form of vouchers than through contracts. The question arises whether public dollars are being used to provide high-quality services to young children, since centers (and homes) accepting voucher recipients are not required to meet any standards beyond basic licensing requirements, widely acknowledged as minimal at best. Of additional concern is the fact that many contracted centers are reimbursed at a lower rate per child than centers receiving public dollars through vouchers, despite the fact (discussed more fully below) that contracted centers on average employ staff with higher levels of education and more early childhood professional preparation.

While an assessment of quality was beyond the scope of this study, our findings do point to the potential leverage for improving quality that could be linked to the voucher system, since it currently touches such a high proportion of licensed centers in the state. Given the documented benefits to young children from low-income families who attend a high-quality early childhood program (Helburn, 1995), it is fitting to explore how public dollars could be used to upgrade these settings as a way to narrow the achievement gap between children of low-income families and those from better-off families.

Further discussion of children with special needs can be found below, under question 5.

3) What is the level of educational attainment and early childhood development-related training among teachers, assistant teachers, and directors in California's child care centers?

Compared to Los Angeles County's overall adult female population, teachers working in centers enrolling infants and/or preschoolers are more likely to have attended college and/or completed a two-year, and are equally likely to have completed a four-year degree. They are less likely to have completed high school only.

More than one-quarter of teachers have completed a four-year or graduate degree, and nearly one-third have completed a two-year degree, typically with an early childhood focus. About 40 percent of centers, however, do not employ any teachers with a four-year or higher degree.

Assistant teachers in Los Angeles County are also more likely than the average adult female in the county to have attended college and/or completed a two-year degree, but they are less likely to have obtained a four-year or higher degree. Assistant teachers have lower levels of degree attainment than teachers or directors. Approximately one-half of assistant teachers have completed one to 23 college credits related to early childhood development. Only 11 percent have completed neither college credits nor a degree related to early childhood.

Nearly two-thirds of directors have completed a four-year or higher degree, typically with an early childhood focus. Nearly one-quarter have completed a two-year degree, most often with an early childhood focus. Directors are more than twice as likely as teachers to have completed a four-year or higher degree, and have completed associate degrees at a slightly lower rate than teachers.

The majority of degree holders have completed a degree related to early childhood development. Approximately 14 percent of those with BA or higher degrees obtained their degree through a foreign institution.

Over one-half of all teachers with an AA or higher degree hold a Child Development Permit, and over one-half of all directors hold a Site Supervisor Permit. About one-quarter of teachers and one-third of directors with a BA or higher degree have a teaching credential (as opposed to a Child Development Permit) issued by the California Commission on Teacher Credentialing.

People hold conflicting images of the educational and professional preparation of the licensed center-based workforce. Some see center teachers and assistants as a group with limited college-level experience or training, and others point to the increasing numbers of teachers with relatively high levels of educational attainment and involvement in early childhood-related training. As a group, teachers and directors in Los Angeles County child care centers have obtained levels of education that exceed the average Los Angeles County adult female, challenging the stereotype that those who work with young children are minimally educated. Assistant teachers have attended college at higher rates, but have completed BA or higher degrees at lower rates, than the county's adult population.

Our data suggest that these conflicting public images of the ECE workforce do, however, partly reflect the complex reality that two different sets of standards govern staff qualifications in California child care centers, with more stringent requirements set for staff working in state-contracted programs. In addition, we found that educational attainment and professional preparation of ECE staff varied by type of program and region of the county. Approximately one-quarter of teachers in Los Angeles County child care centers held a bachelor's or higher degree, yet these teachers were not evenly distributed across the county. Forty percent of centers did not employ any teachers with a BA or higher degree. Similarly, contracted centers were much more likely to employ teachers with degrees than centers receiving public dollars through vouchers. With respect to proposed increases in educational requirements for teachers in publicly funded preschool programs, some ECE teachers may find such new

requirements within reach or may have already met them, while others may find it unrealistic to pursue this new opportunity.

With respect to certification, the relatively low number of Child Development Permit holders in the center-based ECE workforce reflects California's current regulatory environment, which only requires permits for staff in contracted programs. This rate of certification is in stark contrast to K-12 teachers, who are required to become credentialed in order to work in the public schools. As discussions move forward concerning higher educational qualifications for teachers in publicly funded preschool programs, including a credential or other certification, it is now an opportune time to address the larger issue of California's overall lack of uniform requirements for the ECE teaching workforce.

4) How do levels of overall educational attainment, and professional preparation related to early childhood development, vary among teachers, assistant teachers and directors employed in centers licensed to serve infants and/or preschoolers?

Levels of education among teachers, assistant teachers and directors vary by SPA, and generally follow the patterns of variation in educational attainment among all adults in the county, with SPA 5 being the most likely, and SPA 1 the least likely, to employ at least one teacher with a BA or higher degree.

Centers that enroll both infants and preschoolers report a lower percentage of teachers with BA or higher degrees than those enrolling preschoolers only.

Educational attainment also varies by centers' relationship to public subsidy. Centers receiving public dollars through vouchers report a lower percentage of teachers and directors who have obtained a BA or higher degree than all other centers. Centers holding a Head Start or CDE contract report higher levels of AA degree attainment among teachers. Teachers in contracted centers are also the most likely to hold a Child Development Permit.

Educational attainment varies by age among teachers, and to a lesser extent among assistant teachers. Teachers with bachelor's or higher degrees are older, on average, than those with less education. Teachers' educational attainment also varies by ethnicity and language: among those with bachelor's or higher degrees, compared to the ethnic distribution of the teacher population as a whole, African American teachers are represented proportionately, while White, Non-Hispanic and Asian/Pacific Islander teachers are over-represented and Latinas are under-represented. About 52 percent of Asian/Pacific Islander, 30 percent of White, Non-Hispanic, 26 percent of African American and 16 percent of Latina teachers have completed a BA or higher degree. Latina, African American and Asian/Pacific Islander teachers have attained BA or higher degrees at higher rates – and White, Non-Hispanic teachers have done so at lower rates – than their counterparts in the overall county population.

With respect to linguistic capacity, teachers with AA degrees are somewhat more likely than either teachers with BA or higher degrees, or teachers with no degrees, to have the capacity to communicate with children in a language other than English. Among assistant teachers, those with AA or higher degrees were somewhat less likely than assistant teachers with no degrees, but more likely than teachers across educational levels, to speak a language other than English fluently.

A well-trained, culturally diverse and competent workforce serving young children, wherever they live and whatever their family income, is the stated goal of many who are involved in efforts to improve and expand early care and education services. By examining how the educational and professional preparation of the current workforce varies along several dimensions, these data point to the need for a differential strategy for targeting professional development resources for the current and emerging workforce if this goal is to be met.

Although regional variations in the overall educational attainment of the child care center workforce reflect patterns found among *all* adults in the county, they nevertheless require attention in order to address current disparities among centers serving young children in various parts of Los Angeles County. In some areas, such as SPA 1, where there are relatively fewer teachers with BA or higher degrees, proposed increases in teacher qualifications related to publicly funded preschool will pose a greater challenge. Current efforts in various parts of the county to expand higher education offerings to neighborhoods without college campuses, to utilize distance learning, and to engage community agencies in offering credit-bearing training, should be strengthened and expanded.

Generally, our findings confirm that most centers serve children under age four, and thus they underscore how important it is for early childhood-related training to focus on infants, toddlers and young preschoolers as well as four-year-olds. At the same time – since many centers, whether they choose to become publicly funded preschool sites or not,

are likely to continue caring for four year olds as well as younger children for much of the day – it is important that training opportunities be made available to all who work with children prior to kindergarten, not just those serving as teachers and instructional aides in publicly funded classrooms.

Another area of inequity with regard to teacher background documented in this study concerns variation among centers with varying relationships to public subsidy. The fact that teacher educational levels in centers receiving vouchers were lower than those in contracted centers reflects current regulations, but nonetheless raises concern about the overall quality of education and care that children, particularly children of low-income families, receive in such centers. It also points to the greater challenge these programs would face in meeting higher educational standards in order to become part of a publicly funded preschool system.

While a sizeable portion of teachers and assistants working in centers were found to be relatively young when compared to the average adult female in the county, this study confirmed the troubling finding from previous studies that the most educated segment of the center teacher workforce is older than the teacher population as a whole (Herzenberg, Price & Bradley, 2005). Teachers with BA and higher degrees were more likely to be over age 50 and approaching retirement at a time when the demand is rising for teachers with such qualifications. This suggests that in addition to assisting current members of the workforce in achieving college degrees, Los Angeles County also needs a strategy to recruit college graduates to

early childhood teaching positions, which should include a strategy to improve compensation, in order to make such employment more attractive to well-educated young candidates.

With regard to educational attainment by ethnicity, Asian/Pacific Islander, White Non-Hispanic, African American and Latina teachers demonstrated very different patterns. Asian/Pacific Islanders and White Non-Hispanics comprised a higher proportion of teachers with college degrees than of teachers as a whole. African Americans were proportionately represented among those with four-year or higher degrees. Latinas, however, were under-represented among degree holders and over-represented among those with neither a two- or four-year degree. Many in the county recognize this phenomenon and are engaged in efforts to make college more accessible to Latina teachers and assistant teachers, in part by providing entry-level early childhood courses in Spanish, and intentionally using early childhood-related content as a vehicle for helping Spanish speakers build the English skills necessary to complete college degrees.

On a more promising note, it is important to recognize that early care and education appears to be a field of opportunity to some extent for teachers of color. Latina, African American, and Asian/Pacific Islander teachers had attained BA or higher degrees at higher rates than their counterparts in the overall state population, whereas White, Non-Hispanic teachers were less likely to have earned a BA than White, Non-Hispanic Los Angeles County adults. What is not possible to determine from these data is whether this is a reflection of limited opportunities in other fields or

a choice on the part of these teachers. It is also particularly striking that assistant teachers were the most linguistically diverse segment of the ECE workforce, pointing to the need for greater attention to this population in terms of access to higher education and professional development.

Our finding that many degree holders had obtained their degrees from a foreign institution also shows the importance of providing resources for transcript translation and review. This may enable teachers who seek certification to reduce the likelihood of having to repeat classes, which is now common for foreign degree holders.

5) How well prepared are teachers to care for and educate children who are dual language learners or have special needs?

Only about one-half of centers employ teachers who have participated in non-credit training focused on dual language learning in young children, and slightly more than one-third employ teachers who have completed college coursework on that subject, despite the growing numbers of young children in Los Angeles County who speak a language other than English in their homes. Centers that report that at least one of their teachers has participated in training or education related to dual language learning report somewhat higher overall levels of education among their teachers. Centers with at least one teacher who has participated in training or college courses related to dual language learning children also employ a higher percentage of teachers who speak a language other than or in addition to English.

Many more teachers have participated in professional development related to working with children with special needs. Three-quarters of centers report that at least one of their teachers has participated in non-credit training, and about two-thirds report that at least one teacher has completed college credits, related to children with special needs. Centers that report caring for at least one such child also report higher levels of teacher professional development related to working with children with special needs. Centers that hold a contract with Head Start or CDE also employ a higher percentage of teachers with relevant professional development.

Our data show that the vast majority of child care center teachers in Los Angeles County have not engaged in either non-credit or credit-bearing training related to dual language learning. This is largely because such training and coursework are not generally available, reflecting the need to update the courses of study at our training institutions, both college- and community-based, and to expand the pool of instructors who are knowledgeable about this subject (Whitebook, Bellm, Lee & Sakai, 2005).

By contrast, many more teachers in the state have received training or college coursework related to serving children with special needs. This is a reflection of an intentional strategy, supported by resources through SB 1703, to make such training available. The passage in 2005 of SB 640, extending this training program conducted by local R&Rs and

other agencies, has the potential to reach even more of the center-based ECE workforce with important information related to children with special needs. A similar effort around dual language learning is much needed. Additionally, more advanced coursework and training in these subjects must be offered if we hope to build an early care and education workforce that is well prepared to meet the diverse needs of California's young children.

* * * * *

In the last five years, with the availability of more resources for children ages 0 to 5 flowing through local and state First 5 Commissions, LAUP, and other sources, there has been a concerted effort to expand professional development opportunities for the early care and education workforce, and to make these offerings more relevant and accessible. In the process of expanding resources, however, many of the limitations of the state's current professional development infrastructure have become more visible.

Now, as Los Angeles County and various counties embark on creating publicly funded preschool programs, there is an opportunity to develop comprehensive state and local plans for professional development that are inclusive of teachers and assistant teachers in a variety of settings, whether they work primarily with four-year-olds or with younger and older children. As their foundation, such plans should reflect the latest information about what practitioners need to know and do in order to help children realize their potential.

Policy issues to be considered include: the challenges of operating a program with multiple funding streams and different qualifications and pay scales for teachers working with children of different ages; the impact on the supply of care for infants, toddlers and three-year-olds if centers choose to serve four-year-olds exclusively; the extent of career opportunities for teachers and assistants who meet publicly funded preschool standards; and the availability of educational and quality improvement pathways for teaching staff who work in programs that do not become either public preschool sites or affiliated extended-day services. The data reported here do not address these scenarios directly, but provide a baseline description of the current landscape that can help frame additional research.

This study has provided a snapshot of the center-based early care and education workforce in 2005, capturing current strengths and areas in need of improvement. It is to be hoped that future assessments will document great strides toward creating an even more diverse, culturally competent workforce, well prepared to meet the needs of Los Angeles County's young children.

Appendix A: Additional Tables

Table A1. *Los Angeles County Sample Composition - SPA 1*

	SPA 1 licensed centers	Percentage of final sample
Completed interviews: statewide study	8	32.0%
Completed interviews: county study	17	68.0%
Final sample	25	100.0%

Table A2. *Los Angeles County Sample Composition - SPA 2*

	SPA 2 licensed centers	Percentage of final sample
Completed interviews: statewide study	57	51.4%
Completed interviews: county study	54	48.6%
Final sample	111	100.0%

Table A3. *Los Angeles County Sample Composition - SPA 3*

	SPA 3 licensed centers	Percentage of final sample
Completed interviews: statewide study	42	40.0%
Completed interviews: county study	63	60.0%
Final sample	105	100.0%

Table A4. *Los Angeles County Sample Composition - SPA 4*

	SPA 4 licensed centers	Percentage of final sample
Completed interviews: statewide study	17	17.3%
Completed interviews: county study	81	82.7%
Final sample	98	100.0%

Table A5. *Los Angeles County Sample Composition - SPA 5*

	SPA 5 licensed centers	Percentage of final sample
Completed interviews: statewide study	15	18.5%
Completed interviews: county study	66	81.5%
Final sample	81	100.0%

Table A6. *Los Angeles County Sample Composition - SPA 6*

	SPA 6 licensed centers	Percentage of final sample
Completed interviews: statewide study	14	13.6%
Completed interviews: county study	89	86.4%
Final sample	103	100.0%

Table A7. *Los Angeles County Sample Composition - SPA 7*

	SPA 7 licensed centers	Percentage of final sample
Completed interviews: statewide study	22	22.2%
Completed interviews: county study	77	77.8%
Final sample	99	100.0%

Table A8. *Los Angeles County Sample Composition - SPA 8*

	SPA 8 licensed centers	Percentage of final sample
Completed interviews: statewide study	39	35.8%
Completed interviews: county study	70	64.2%
Final sample	109	100.0%

Table A9. *Survey Response Rate - SPA 1*

	SPA 1 number of centers	Percentage of sample	Percentage of eligible
Sample released and dialed	58	100.0%	
Ineligible: Out of business	4	6.9%	
Presumed ineligible*	4	6.9%	
Eligible	50	86.2%	100.0%
County surveys completed	17	29.3%	34.0%
No response, presumed eligible**	5	8.6%	10.0%
Refusals	24	41.4%	48.0%
Multi-site refusals***	-	0.0%	0.0%
Respondent not available/target reached****	4	6.9%	8.0%
Communication barrier	-	0.0%	0.0%
Other reasons for non-completion	-	0.0%	0.0%

* Disconnected, wrong number, changed phone number, or no answer.

** Answering machine, voice mail, or busy signal.

*** Answered for some centers in multi-site agency but not all.

**** In Los Angeles county, some centers coded as "respondent not available" did not receive the maximum number of eight interview attempts if the target number of interviews had been reached and the interview was no longer needed.

Table A10. *Survey Response Rate - SPA 2*

	SPA 2 number of centers	Percentage of sample	Percentage of eligible
Sample released and dialed	216	100.0%	
Ineligible: Out of business	3	1.4%	
Presumed ineligible*	16	7.4%	
Eligible	197	91.2%	100.0%
County surveys completed	54	25.0%	27.4%
No response, presumed eligible**	34	15.7%	17.3%
Refusals	34	15.7%	17.3%
Multi-site refusals***	6	2.8%	3.1%
Respondent not available/target reached****	64	29.6%	32.5%
Communication barrier	1	0.5%	0.5%
Other reasons for non-completion	4	1.9%	2.0%

* Disconnected, wrong number, changed phone number, or no answer.

** Answering machine, voice mail, or busy signal.

*** Answered for some centers in multi-site agency but not all.

**** In Los Angeles county, some centers coded as “respondent not available” did not receive the maximum number of eight interview attempts if the target number of interviews had been reached and the interview was no longer needed.

Table A11. *Survey Response Rate - SPA 3*

	SPA 3 number of centers	Percentage of sample	Percentage of eligible
Sample released and dialed	263	100.0%	
Ineligible: Out of business	7	2.7%	
Presumed ineligible*	43	16.3%	
Eligible	213	81.0%	100.0%
County surveys completed	63	23.9%	29.6%
No response, presumed eligible**	35	13.3%	16.4%
Refusals	71	27.0%	33.3%
Multi-site refusals***	11	4.2%	5.2%
Respondent not available/target reached****	29	11.0%	13.6%
Communication barrier	3	1.1%	1.4%
Other reasons for non-completion	1	0.4%	0.5%

* Disconnected, wrong number, changed phone number, or no answer.

** Answering machine, voice mail, or busy signal.

*** Answered for some centers in multi-site agency but not all.

**** In Los Angeles county, some centers coded as “respondent not available” did not receive the maximum number of eight interview attempts if the target number of interviews had been reached and the interview was no longer needed.

Table A12. Survey Response Rate - SPA 4

	SPA 4 number of centers	Percentage of sample	Percentage of eligible
Sample released and dialed	255	100.0%	
Ineligible: Out of business	4	1.6%	
Presumed ineligible*	39	15.3%	
Eligible	212	83.1%	100.0%
County surveys completed	81	31.8%	38.2%
No response, presumed eligible**	43	16.9%	20.3%
Refusals	34	13.3%	16.0%
Multi-site refusals***	-	0.0%	0.0%
Respondent not available/target reached****	30	11.8%	14.1%
Communication barrier	20	7.8%	9.4%
Other reasons for non-completion	4	1.6%	1.9%

* Disconnected, wrong number, changed phone number, or no answer.

** Answering machine, voice mail, or busy signal.

*** Answered for some centers in multi-site agency but not all.

**** In Los Angeles county, some centers coded as "respondent not available" did not receive the maximum number of eight interview attempts if the target number of interviews had been reached and the interview was no longer needed.

Table A13. Survey Response Rate - SPA 5

	SPA 5 number of centers	Percentage of sample	Percentage of eligible
Sample released and dialed	171	100.0%	
Ineligible: Out of business	4	2.3%	
Presumed ineligible*	13	7.6%	
Eligible	154	90.1%	100.0%
County surveys completed	66	38.6%	42.9%
No response, presumed eligible**	41	24.0%	26.6%
Refusals	29	17.0%	18.8%
Multi-site refusals***	1	0.6%	0.6%
Respondent not available/target reached****	15	8.8%	9.7%
Communication barrier	2	1.2%	1.3%
Other reasons for non-completion	-	0.0%	0.0%

* Disconnected, wrong number, changed phone number, or no answer.

** Answering machine, voice mail, or busy signal.

*** Answered for some centers in multi-site agency but not all.

**** In Los Angeles county, some centers coded as "respondent not available" did not receive the maximum number of eight interview attempts if the target number of interviews had been reached and the interview was no longer needed.

Table A14. Survey Response Rate - SPA 6

	SPA 6 number of centers	Percentage of sample	Percentage of eligible
Sample released and dialed	286	100.0%	
Ineligible: Out of business	6	2.0%	
Presumed ineligible*	48	16.8%	
Eligible	232	81.1%	100.0%
County surveys completed	89	31.1%	38.4%
No response, presumed eligible**	57	19.9%	24.6%
Refusals	39	13.6%	16.8%
Multi-site refusals***	1	0.3%	0.4%
Respondent not available/target reached****	44	15.4%	19.0%
Communication barrier	2	0.7%	0.9%
Other reasons for non-completion	-	0.0%	0.0%

* Disconnected, wrong number, changed phone number, or no answer.

** Answering machine, voice mail, or busy signal.

*** Answered for some centers in multi-site agency but not all.

**** In Los Angeles county, some centers coded as "respondent not available" did not receive the maximum number of eight interview attempts if the target number of interviews had been reached and the interview was no longer needed.

Table A15. Survey Response Rate - SPA 7

	SPA 7 number of centers	Percentage of sample	Percentage of eligible
Sample released and dialed	211	100.0%	
Ineligible: Out of business	2	0.9%	
Presumed ineligible*	31	14.7%	
Eligible	178	84.4%	100.0%
County surveys completed	77	36.5%	43.3%
No response, presumed eligible**	34	16.1%	19.1%
Refusals	39	18.5%	21.9%
Multi-site refusals***	15	7.1%	8.4%
Respondent not available/target reached****	11	5.2%	6.2%
Communication barrier	1	0.5%	0.6%
Other reasons for non-completion	1	0.5%	0.6%

* Disconnected, wrong number, changed phone number, or no answer.

** Answering machine, voice mail, or busy signal.

*** Answered for some centers in multi-site agency but not all.

**** In Los Angeles county, some centers coded as "respondent not available" did not receive the maximum number of eight interview attempts if the target number of interviews had been reached and the interview was no longer needed.

Table A16. *Survey Response Rate - SPA 8*

	SPA 8 number of centers	Percentage of sample	Percentage of eligible
Sample released and dialed	297	100.0%	
Ineligible: Out of business	2	0.7%	
Presumed ineligible*	25	8.4%	
Eligible	270	90.9%	100.0%
County surveys completed	70	23.6%	25.9%
No response, presumed eligible**	48	16.2%	17.8%
Refusals	27	9.1%	10.0%
Multi-site refusals***	13	4.4%	4.8%
Respondent not available/target reached****	102	34.3%	37.8%
Communication barrier	2	0.7%	0.7%
Other reasons for non-completion	8	2.7%	3.0%

* Disconnected, wrong number, changed phone number, or no answer.

** Answering machine, voice mail, or busy signal.

*** Answered for some centers in multi-site agency but not all.

**** In Los Angeles county, some centers coded as "respondent not available" did not receive the maximum number of eight interview attempts if the target number of interviews had been reached and the interview was no longer needed.

Table A17. *Comparison of Survey Respondents and County Population of Centers By Communities Served, By Infant License and By Relationship to Public Subsidy - SPA 1*

	County population (N=71)	Surveys completed (N=25)
Licensed for infants	11.3%	28.0%
CDE/Head Start contract	40.9%	8.0%
City		
Agua Dulce	2.8%	0.0%
Lake Los Angeles	2.8%	4.0%
Lancaster	57.7%	56.0%
Littlerock	1.4%	0.0%
Palmdale	32.4%	36.0%
Quartz Hill	2.8%	4.0%
Total	100.0%	100.0%

Table A18. Comparison of Survey Respondents and County Population of Centers By Communities Served, By Infant License and By Relationship to Public Subsidy - SPA 2

	County population (N=512)	Surveys completed (N=111)
Licensed for infants	16.4%	18.9%
CDE/Head Start contract	24.6%	17.1%
City		
Agoura	1.0%	0.0%
Agoura Hills	0.6%	0.9%
Arleta	1.0%	1.8%
Burbank	6.5%	6.3%
Calabasas	0.4%	0.0%
Canoga Park	2.9%	1.8%
Canyon Country	2.7%	2.7%
Castaic	0.8%	0.0%
Chatsworth	2.9%	2.7%
Encino	1.9%	2.7%
Glendale	9.0%	9.0%
Granada Hills	2.9%	1.8%
La Canada	1.6%	0.9%
La Crescenta	1.8%	2.7%
Los Angeles	0.2%	0.9%
Mission Hills	0.8%	0.9%
Montrose	0.6%	0.9%
Newhall	2.7%	3.6%
North Hills	3.3%	2.7%
North Hollywood	9.2%	9.0%
Northridge	5.5%	5.4%
Pacoima	3.3%	1.8%
Panorama City	0.2%	0.0%
Reseda	3.5%	4.5%
San Fernando	1.8%	0.9%
Santa Clarita	0.8%	1.8%
Saugus	2.3%	2.7%
Sherman Oaks	2.1%	3.6%
Stevenson Ranch	0.6%	0.0%
Studio City	0.2%	0.0%
Sun Valley	1.6%	2.7%
Sunland	1.4%	1.8%
Sylmar	2.1%	1.8%
Tarzana	2.1%	1.8%

Table A18. Comparison of Survey Respondents and County Population of Centers By Communities Served, By Infant License and By Relationship to Public Subsidy - SPA 2

	County population (N=512)	Surveys completed (N=111)
Topanga	0.6%	0.9%
Tujunga	1.8%	0.9%
Val Verde	0.2%	0.0%
Valencia	2.1%	3.6%
Valley Glen	0.2%	0.0%
Valley Village	0.2%	0.0%
Van Nuys	7.2%	5.4%
West Hills	1.4%	1.8%
Westlake Village	0.6%	0.0%
Winnetka	1.2%	0.9%
Woodland Hill	4.3%	6.3%
Total	100.0%	100.0%

Table A19. Comparison of Survey Respondents and County Population of Centers By Communities Served, By Infant License and By Relationship to Public Subsidy - SPA 3

	County population (N=514)	Surveys completed (N=105)
Licensed for infants	13.6%	24.8%
CDE/Head Start contract	29.2%	15.2%
City		
Alhambra	5.5%	7.6%
Altadena	4.3%	1.9%
Arcadia	3.9%	8.6%
Azusa	1.3%	1.0%
Baldwin Park	2.9%	2.9%
Claremont	3.5%	1.9%
Covina	5.6%	3.8%
Diamond Bar	2.3%	2.9%
Duarte	1.7%	0.9%
El Monte	4.7%	2.9%
Glendora	2.5%	3.8%
Hacienda Heights	2.7%	4.8%
Irwindale	0.2%	0.0%
La Canada	0.4%	1.9%
La Puente	6.2%	1.9%
La Verne	1.2%	0.9%
Monrovia	1.7%	4.8%
Monterey Park	3.1%	0.9%
Pasadena	14.6%	12.4%
Pomona	8.6%	8.6%
Rosemead	3.5%	1.9%
Rowland Heights	2.1%	1.9%
S. El Monte	0.4%	0.0%
San Dimas	2.1%	0.9%
San Gabriel	3.1%	1.9%
San Marino	0.6%	0.9%
Sierra Madre	0.6%	0.9%
S. Pasadena	1.4%	1.9%
Temple City	1.2%	0.9%
Valinda	0.2%	0.9%
Walnut	2.7%	6.7%
West Covina	5.1%	6.7%
TOTAL	100.0%	100.0%

Table A20. Comparison of Survey Respondents and County Population of Centers By Communities Served, By Infant License and By Relationship to Public Subsidy - SPA 4

	County population (N=298)	Surveys completed (N=98)
Licensed for infants	10.1%	15.3%
CDE/Head Start contract	37.9%	38.8%
City		
Highland Park	0.3%	0.0%
Hollywood	0.3%	0.0%
Los Angeles	98.7%	99.0%
West Hollywood	0.7%	1.0%
TOTAL	100.0%	100.0%

Table A21. Comparison of Survey Respondents and County Population of Centers By Communities Served, By Infant License and By Relationship to Public Subsidy - SPA 5

	County population (N=197)	Surveys completed (N=81)
Licensed for infants	11.7%	16.1%
CDE/Head Start contract	18.8%	23.5%
City		
Beverly Hills	4.6%	6.2%
Culver City	14.2%	13.6%
Los Angeles	39.6%	43.2%
Malibu	2.5%	3.7%
Marina Del Rey	1.5%	0.0%
Pacific Palisades	5.1%	2.5%
Playa Del Rey	0.5%	1.2%
Santa Monica	26.9%	23.5%
Topanga	0.5%	0.0%
Venice	4.1%	4.9%
Winchester	0.5%	1.2%
TOTAL	100.0%	100.0%

Table A22. Comparison of Survey Respondents and County Population of Centers By Communities Served, By Infant License and By Relationship to Public Subsidy - SPA 6

	County population (N=317)	Surveys completed (N=103)
Licensed for infants	13.3%	15.5%
CDE/Head Start contract	31.9%	33.0%
City		
Carson	0.3%	1.0%
Compton	14.8%	20.4%
Los Angeles	77.0%	64.1%
Lynwood	51%	8.7%
Paramount	2.2%	5.8%
Rancho Dominguez	0.6%	0.0%
TOTAL	100.0%	100.0%

Table A23. Comparison of Survey Respondents and County Population of Centers By Communities Served, By Infant License and By Relationship to Public Subsidy - SPA 7

	County population (N=247)	Surveys completed (N=99)
Licensed for infants	10.9%	8.1%
CDE/Head Start contract	34.4%	33.3%
City		
Artesia	4.5%	6.1%
Bell	1.2%	1.0%
Bell Gardens	2.4%	3.0%
Bellflower	7.3%	7.1%
Cerritos	4.9%	5.1%
Commerce	2.0%	2.0%
Cudahy	0.8%	1.0%
Downey	6.5%	7.1%
E. Whittier	0.4%	1.0%
Hawaiian Gardens	1.6%	2.0%
Huntington Park	3.6%	2.0%
La Habra Heights	1.2%	0.0%
La Mirada	1.6%	3.0%
Lakewood	6.5%	5.1%
Long Beach	0.4%	0.0%
Los Angeles	10.9%	10.1%
Maywood	2.0%	2.0%
Montebello	3.6%	1.0%
Monterey Park	0.4%	1.0%
Norwalk	8.9%	8.1%
Pico Rivera	4.9%	4.0%
Santa Fe Springs	1.6%	2.0%
Signal Hill	0.8%	0.0%
South Gate	3.2%	5.1%
Vernon	0.4%	1.0%
Walnut Park	0.4%	1.0%
Whittier	17.8%	19.2%
Total	100.0%	100.0%

Table A24. Comparison of Survey Respondents and County Population of Centers By Communities Served, By Infant License and By Relationship to Public Subsidy - SPA 8

	County population (N=414)	Surveys completed (N=109)
Licensed for infants	17.1%	14.7%
CDE/Head Start contract	19.8%	21.1%
City		
Avalon	0.5%	0.9%
Carson	4.6%	2.7%
El Segundo	1.9%	0.9%
Gardena	4.1%	4.6%
Harbor City	1.2%	0.9%
Hawthorne	4.1%	3.7%
Hermosa Beach	0.5%	0.0%
Inglewood	9.2%	7.3%
Lawndale	2.4%	0.0%
Lennox	1.0%	1.8%
Lomita	2.9%	2.7%
Long Beach	31.4%	33.9%
Los Angeles	4.3%	3.7%
Manhattan Beach	4.3%	3.7%
Palos Verdes	0.5%	0.9%
Palos Verdes Estates	0.2%	0.9%
Rancho Palos	0.0%	0.0%
Rancho Palos Verdes	2.9%	5.5%
Redondo Beach	4.8%	6.4%
Rolling Hills	1.0%	0.0%
Rolling Hills Estates	0.7%	1.8%
San Pedro	5.1%	7.3%
Torrance	9.9%	8.3%
Wilmington	2.4%	1.8%
Total	100.0%	100.0%

Table A25. Estimated Age Distribution of Assistant Teachers, Countywide, and By Ages of Children Served

	Estimated percentage		
	Countywide	Center enrolling infants ^a	Centers without infants
Under 30 years old	46.5	60.7	39.6
30 to 39 years old	28.5	24.5	30.4
40 to 49 years old	14.9	8.7	17.9
50 years and older	10.1	6.1	12.1
<i>Total</i>	100.0	100.0	100.0
<i>Number of centers</i>	2,170	703	1,467

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^a Most of these centers also enroll older children.

Table A26. Estimated Age Distribution of Assistant Teachers, Countywide and By Centers' Relationship to Public Subsidy

	Estimated percentage			
	Countywide	Head Start/ CDE contract	Vouchers/No contract	No vouchers/ No contract
Under 30 years old	46.5	44.8	51.5	45.0
30 to 39 years old	28.5	28.8	29.8	26.6
40 to 49 years old	14.9	15.1	10.8	18.3
50 years and older	10.1	11.2	7.9	10.1
<i>Total</i>	100.0	100.0	100.0	100.0
<i>Number of centers</i>	2,170	1,086	517	567

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Table A27. Estimated Age Distribution of Assistant Teachers: Countywide, and by SPA

	Estimated percentage					<i>Number of centers</i>
	Under 30 years old	30 to 39 years old	40 to 49 years old	50 years and older	<i>Total</i>	
Countywide	46.5	28.5	14.9	10.1	100.0	2,170
SPA 1	66.0	30.2	3.8	0.0	100.0	53
SPA 2	54.1	22.0	15.1	8.9	100.0	305
SPA 3	48.3	30.2	13.7	7.8	100.0	358
SPA 4	43.8	26.8	15.1	14.3	100.0	384
SPA 5	37.9	29.9	20.3	11.9	100.0	177
SPA 6	43.2	36.0	11.4	9.3	100.0	333
SPA 7	52.1	23.3	16.2	8.4	100.0	309
SPA 8	37.8	31.5	17.9	12.7	100.0	251

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Table A28. *Estimated Ethnicity of Teachers, Assistant Teachers and Directors: Countywide, and By Ages of Children Served*

		Estimated percentage		
		All centers	Center enrolling infants ^a	Centers without infants
Teachers	White, Non-Hispanic	35.5	32.3	37.7
	Latina	36.6	42.4	32.7
	African American	14.1	13.5	14.5
	Asian/Pacific Islander	7.1	5.4	8.2
	American Indian or Alaskan Native	0.2	0.1	0.4
	Multiethnic	2.9	1.9	3.6
	Other	3.6	4.5	3.0
	<i>Total</i>	100.0	100.0	100.0
	<i>Number of teachers</i>	12,598	5,045	7,554
Assistant teachers	White, Non-Hispanic	23.1	23.5	22.8
	Latina	53.2	60.1	49.1
	African American	13.8	10.1	16
	Asian/Pacific Islander	5.4	3.7	6.4
	American Indian or Alaskan Native	0.2	0.1	0.2
	Multiethnic	1.4	1.2	1.5
	Other	3.0	1.3	4.0
	<i>Total</i>	100.0	100.0	100.0
	<i>Number of assistant teachers</i>	6,956	2,589	4,366
Directors	White, Non-Hispanic	49.1	47.8	49.8
	Latina	19.5	26.3	16.0
	African American	15.4	14.2	16.0
	Asian/Pacific Islander	8.0	4.9	9.5
	American Indian or Alaskan Native	0.6	0.9	0.5
	Multiethnic	4.2	4.6	4.0
	Other	3.2	1.4	4.1
	<i>Total</i>	100.0	100.0	100.0
	<i>Number of directors</i>	2,201	747	1,453

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^aMost of these centers also enroll older children.

Table A29. *Estimated Distribution of Assistant Teachers, Teachers and Directors Working with Infants and Preschoolers: Countywide, and By SPA*

		Assistant teachers	Teachers	Directors	Total
SPA 1	Total number	59	164	26	249
	Percentage	23.7	65.9	10.4	100.0
SPA 2	Total number	373	854	136	1,363
	Percentage	27.4	62.7	10.0	100.0
SPA 3	Total number	439	726	114	1,279
	Percentage	34.3	56.8	8.9	100
SPA 4	Total number	467	528	84	1,079
	Percentage	43.3	48.9	7.8	100.0
SPA 5	Total number	215	481	77	773
	Percentage	27.8	62.2	10.0	100.0
SPA 6	Total number	360	383	79	822
	Percentage	43.8	46.6	9.6	100
SPA 7	Total number	339	486	89	914
	Percentage	37.1	53.2	9.7	100.0
SPA 8	Total number	285	561	97	943
	Percentage	30.3	59.6	10.3	100.0

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Table A30. Estimated Percentage of Centers that Care for At Least One Child with Special Needs, By SPA and By Ages of Children Served

	No children with special needs	At least one child with special needs	Total	Number of centers
Countywide	49.9 (1.93)	50.1 (1.93)	100.0	2,156
Centers enrolling infants ^a	45.4 (3.77)	54.6 (3.77)	100.0	593
Centers without infants	51.6 (2.25)	48.4 (2.25)	100.0	1,563
SPA 1	54.2 (10.39)	45.8 (10.39)	100.0	59
SPA 2	41.7 (4.77)	58.3 (4.77)	100.0	453
SPA 3	51.0 (4.97)	49.0 (4.97)	100.0	404
SPA 4	50.5 (5.16)	49.5 (5.16)	100.0	240
SPA 5	43.6 (5.65)	56.4 (5.65)	100.0	170
SPA 6	52.5 (4.99)	47.5 (4.99)	100.0	252
SPA 7	62.2 (4.92)	37.8 (4.92)	100.0	204
SPA 8	51.9 (4.83)	48.2 (4.83)	100.0	374

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^a Most of these centers also enroll older children.

Table A31. Assistant Teachers' Age and Educational Attainment: Countywide

	Estimated percentage		
	All assistant teachers	Assistants with associate or higher degree	Assistants with no degree
Under 30 years old	46.5	40.7	48.3
30 to 39 years old	28.5	31	27.7
40 to 49 years old	14.9	18.3	14.0
50 years and older	10.1	10.0	10.0
Total	100.0	100.0	100.0
Number of staff	2,170	1,250	5,279

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Table A32. *Estimated Percentage of Teachers and Assistant Teachers by Age and Educational Attainment, By Ages of Children Enrolled and Centers' Relationship to Public Subsidy and By SPA*

		Estimated percentage						
		All teachers	Teachers with bachelor's or higher degree	Teachers with associate degree	Teachers with no degree	All assistant teachers	Assistant teachers with associate or higher degree	Assistant teachers with no degree
SPA 1	Under 30 years old	45.5	16.7	51.1	44.7	66.0	50.0	68.9
	30 to 39 years old	26.3	33.3	21.3	28.1	30.2	37.5	28.9
	40 to 49 years old	24.4	33.3	23.4	24.3	3.8	12.5	2.2
	50 years and older	3.8	16.7	4.2	2.9	0.0	0.0	0.0
	<i>Total</i>	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	<i>Number of staff</i>	382	15	115	252	53	20	110
SPA 2	Under 30 years old	34.6	19.7	35.1	41.8	54.1	22.9	59.9
	30 to 39 years old	30.2	34.3	29.2	28.7	22.0	43.8	17.9
	40 to 49 years old	20.3	25.8	20	17.7	15.1	18.7	14.4
	50 years and older	14.9	20.2	15.7	11.8	8.8	14.6	7.8
	<i>Total</i>	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	<i>Number of staff</i>	3,440	893	775	1,773	305	201	1,077
SPA 3	Under 30 years old	40.4	28.2	42.9	45.6	48.3	47.0	48.9
	30 to 39 years old	29.9	28.9	31.7	29.2	30.2	33.3	29.5
	40 to 49 years old	19.8	23.9	18.7	18.1	13.7	12.1	14.0
	50 years and older	9.9	19.0	6.7	7.1	7.8	7.6	7.9
	<i>Total</i>	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	<i>Number of staff</i>	2,648	646	888	1,114	358	262	1,158

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Table A32. *Estimated Percentage of Teachers and Assistant Teachers by Age and Educational Attainment, By Ages of Children Enrolled and Centers' Relationship to Public Subsidy and By SPA*

		Estimated percentage						
		All teachers	Teachers with bachelor's or higher degree	Teachers with associate degree	Teachers with no degree	All assistant teachers	Assistant teachers with associate or higher degree	Assistant teachers with no degree
SPA 4	Under 30 years old	31.6	22.9	33.9	39.0	43.8	52.4	41.3
	30 to 39 years old	36.6	33.7	42.5	33.1	26.8	26.2	27.0
	40 to 49 years old	16.9	18.3	12.6	20.1	15.1	8.3	17.0
	50 years and older	14.9	25.1	11.0	7.8	14.3	13.1	14.7
	<i>Total</i>	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	<i>Number of staff</i>	1,272	442	440	389	384	212	758
SPA 5	Under 30 years old	32.0	31.0	24.7	44.2	37.9	30.0	40.1
	30 to 39 years old	29.5	25.7	38.8	25.5	29.9	25.0	31.4
	40 to 49 years old	22.2	26.2	24.6	14.0	20.3	32.5	16.8
	50 years and older	6.5	17.1	11.9	16.3	11.9	12.5	11.7
	<i>Total</i>	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	<i>Number of staff</i>	986	410	294	283	177	88	300
SPA 6	Under 30 years old	21.3	19.3	17.1	29.5	43.3	50.9	41.7
	30 to 39 years old	34.7	29.5	39.6	31.4	36.0	30.9	37.1
	40 to 49 years old	26.9	27.3	23.8	31.4	11.4	16.4	10.4
	50 years and older	17.1	23.9	19.5	7.7	9.3	1.8	10.8
	<i>Total</i>	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	<i>Number of staff</i>	891	220	409	262	333	137	694

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Table A32. *Estimated Percentage of Teachers and Assistant Teachers by Age and Educational Attainment, By Ages of Children Enrolled and Centers' Relationship to Public Subsidy and By SPA*

		Estimated percentage						
		All teachers	Teachers with bachelor's or higher degree	Teachers with associate degree	Teachers with no degree	All assistant teachers	Assistant teachers with associate or higher degree	Assistant teachers with no degree
SPA 7	Under 30 years old	33.0	22.2	28.5	39.7	52.1	50.0	52.5
	30 to 39 years old	34.5	40.8	31.1	34.5	23.3	25.0	23.0
	40 to 49 years old	20.9	16.0	29.1	17.2	16.2	13.6	16.6
	50 years and older	11.6	21.0	11.3	8.6	8.4	11.4	7.9
	<i>Total</i>	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	<i>Number of staff</i>	969	169	315	484	309	92	553
SPA 8	Under 30 years old	30.9	26.5	26.7	37.1	37.9	31.9	40.1
	30 to 39 years old	33.8	21.1	36.9	39.6	31.5	26.1	33.6
	40 to 49 years old	21.7	30.6	20.5	16.7	17.9	31.9	12.6
	50 years and older	13.6	21.8	15.9	6.6	12.7	10.1	13.7
	<i>Total</i>	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	<i>Number of staff</i>	1,899	508	608	784	251	238	628

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Table A33. *Teachers' and Assistant Teachers' Age and Educational Attainment, By Ages of Children Enrolled and Centers' Relationship to Public Subsidy*

		Estimated percentage						
		All teachers	Teachers with bachelor's or higher degree	Teachers with associate degree	Teachers with no degree	All assistant teachers	Assistants with associate or higher degree	Assistants with no degree
Centers enrolling infants^a	Under 30 years old	47.6	39.4	47.2	51.4	60.7	57.0	61.9
	30 to 39 years old	29.5	30.1	30.4	28.7	24.5	29.0	23.5
	40 to 49 years old	16.1	18.8	16.5	14.7	8.7	9.5	8.1
	50 years and older	6.8	11.7	5.9	5.2	6.1	4.5	6.5
	<i>Total</i>	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	<i>Number of staff</i>	5,110	1,111	1,476	2,524	703	293	2,077
Centers without infants	Under 30 years old	24.7	16.8	23.6	31.9	39.6	35.7	39.5
	30 to 39 years old	33.5	30.0	36.7	33.4	30.4	31.7	30.3
	40 to 49 years old	24.1	27.9	23.1	22.1	17.9	21.0	18.0
	50 years and older	17.7	25.3	16.6	12.6	12.1	11.6	12.2
	<i>Total</i>	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	<i>Number of staff</i>	7,377	2,191	2,369	2,817	1,467	956	3,201
Head Start/CDE contract	Under 30 years old	19.9	20.0	17.2	24.7	44.9	46.5	44.8
	30 to 39 years old	35.6	31.0	37.1	40.4	28.8	31.1	28.4
	40 to 49 years old	27.2	33.7	30.3	27.1	15.1	12.6	15.5
	50 years and older	17.3	25.3	15.4	7.8	11.2	9.8	11.3
	<i>Total</i>	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	<i>Number of staff</i>	2,506	905	1,042	560	1,086	500	2,533

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^a Most of these centers also enroll older children.

Table A33. *Teachers' and Assistant Teachers' Age and Educational Attainment, By Ages of Children Enrolled and Centers' Relationship to Public Subsidy*

		Estimated percentage						
		All teachers	Teachers with bachelor's or higher degree	Teachers with associate degree	Teachers with no degree	All assistant teachers	Assistants with associate or higher degree	Assistants with no degree
Vouchers/ No contract	Under 30 years old	43.5	33.2	44.3	46.3	51.5	40.6	55.6
	30 to 39 years old	30.3	28.4	34.7	28.6	29.8	30.4	30.5
	40 to 49 years old	16.7	22.1	11.7	17.6	10.8	14.7	9.3
	50 years and older	9.5	16.3	9.3	7.5	7.9	14.3	6.6
	<i>Total</i>	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	<i>Number of staff</i>	5,780	1,009	1,617	3,155	517	271	1,414
No vouchers/ No contract	Under 30 years old	29.6	20.8	30.2	36.8	45.0	34.7	49.1
	30 to 39 years old	31.7	30.7	31.3	33.0	26.6	31.2	23.3
	40 to 49 years old	22.8	27.6	24.1	17.6	18.3	26.3	16.5
	50 years and older	15.9	21.1	14.4	12.6	10.1	7.8	11.1
	<i>Total</i>	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	<i>Number of staff</i>	4,200	1,388	1,185	1,626	567	480	1,332

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^aMost of these centers also enroll older children.

Table A34. *Teachers' Ethnicity and Educational Attainment: Countywide and By SPA*

		Estimated percentage					Total	Number of teachers
		White, Non-Hispanic	Latina	African American	Asian/ Pacific Islander	Other		
Teachers with bachelor's or higher degree	Countywide	40.3	21.6	13.9	13.9	10.3	100.0	3,339
	SPA 1	66.6	0.0	16.7	16.7	0.0	100.0	15
	SPA 2	56.0	18.8	6.0	5.5	13.7	100.0	914
	SPA 3	40.5	22.2	3.9	20.9	12.5	100.0	607
	SPA 4	21.9	29.0	9.8	28.4	10.9	100.0	463
	SPA 5	47.4	13.7	16.3	13.7	8.9	100.0	416
	SPA 6	4.1	29.9	55.7	5.2	5.1	100.0	242
	SPA 7	23.5	46.9	7.4	17.3	4.9	100.0	169
	SPA 8	45.0	14.1	23.5	10.7	6.7	100.0	514
Teachers with associate degree	Countywide	31.0	43.1	16.4	5.0	4.5	100.0	3,853
	SPA 1	40.0	40.0	13.3	0.0	6.7	100.0	110
	SPA 2	55.6	32.2	1.7	3.3	7.2	100.0	754
	SPA 3	31.7	51.4	5.8	8.2	2.9	100.0	825
	SPA 4	9.8	69.0	9.8	8.2	3.2	100.0	465
	SPA 5	35.4	34.7	16.7	4.9	8.3	100.0	315
	SPA 6	5.2	31.1	60.3	1.1	2.3	100.0	434
	SPA 7	30.0	56.2	6.3	4.4	3.1	100.0	334
	SPA 8	30.9	32.0	28.7	4.5	3.9	100.0	615
Teachers with no degree	Countywide	35.9	41.2	12.6	4.3	6.0	100.0	5,407
	SPA 1	49.0	27.0	21.0	1.0	2.0	100.0	245
	SPA 2	46.6	31.3	6.2	4.8	11.1	100.0	1,764
	SPA 3	35.8	51.2	4.1	4.5	4.4	100.0	1,162
	SPA 4	7.1	71.0	8.4	6.4	7.1	100.0	392
	SPA 5	41.2	33.6	19.8	1.6	3.8	100.0	287
	SPA 6	2.9	30.5	65.7	0.0	0.9	100.0	262
	SPA 7	27.9	58.7	6.7	4.6	2.1	100.0	501
	SPA 8	36.1	33.0	22.6	5.2	3.0	100.0	794

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Table A35. Assistant Teachers' Ethnicity and Educational Attainment: Countywide and By SPA

		Estimated percentage					Total	Number of teachers
		White, Non-Hispanic	Latina	African American	Asian/ Pacific Islander	Other		
Assistant teachers with associate or higher degree	Countywide	36.2	34.6	12.4	9.0	7.8	100.0	1,275
	SPA 1	66.7	0.0	11.1	0.0	22.2	100.0	22
	SPA 2	61.2	22.5	6.1	0.0	10.2	100.0	205
	SPA 3	35.7	34.3	1.4	18.6	10.0	100.0	278
	SPA 4	14.1	48.2	13.0	11.8	12.9	100.0	215
	SPA 5	50.0	21.1	15.8	10.5	2.6	100.0	83
	SPA 6	0.0	41.1	55.3	0.0	3.6	100.0	140
	SPA 7	20.0	55.6	6.7	13.3	4.4	100.0	94
	SPA 8	55.1	29.0	5.8	7.3	2.8	100.0	238
Assistant teachers with no degree	Countywide	20.1	57.4	14.1	0.2	3.6	100.0	5,680
	SPA 1	40.8	28.6	24.5	6.1	0.0	100.0	120
	SPA 2	33.1	51.4	6.1	3.6	5.8	100.0	1,165
	SPA 3	22.2	65.1	4.8	4.8	3.1	100.0	1,396
	SPA 4	6.3	70.8	9.3	10.0	3.6	100.0	761
	SPA 5	18.1	41.9	23.2	4.5	12.3	100.0	339
	SPA 6	3.4	52.4	42.2	1.0	1.0	100.0	734
	SPA 7	13.1	72.2	7.1	4.0	3.6	100.0	526
	SPA 8	30.8	42.7	21.6	3.8	1.1	100.0	639

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Table A36. Assistant Teachers with an Associate or Higher Degree, or No Degree, By Ethnicity: Countywide and By SPA

		Estimated percentage			
		Associate or higher degree	No degree	Total	Number of assistant teachers
All centers	White, Non-Hispanic	28.8	71.2	100.0	1,605
	Latina	12.0	88.0	100.0	3,701
	African American	16.4	83.6	100.0	960
	Asian/Pacific Islander	30.8	69.2	100.0	376
SPA 1	White, Non-Hispanic	23.0	77.0	100.0	127
	Latina	0.0	100.0	100.0	69
	African American	7.6	92.4	100.0	64
	Asian/Pacific Islander	0.0	100.0	100.0	15
SPA 2	White, Non-Hispanic	24.6	75.4	100.0	511
	Latina	7.2	92.8	100.0	645
	African American	15.0	85.0	100.0	84
	Asian/Pacific Islander	0.0	100.0	100.0	42
SPA 3	White, Non-Hispanic	24.1	75.8	100.0	817
	Latina	9.4	90.6	100.0	1,003
	African American	5.6	94.4	100.0	71
	Asian/Pacific Islander	43.4	56.6	100.0	238
SPA 4	White, Non-Hispanic	39.4	61.2	100.0	78
	Latina	16.2	83.8	100.0	642
	African American	28.2	71.8	100.0	197
	Asian/Pacific Islander	25.0	75.0	100.0	202
SPA 5	White, Non-Hispanic	40.4	59.6	100.0	103
	Latina	11.0	89.0	100.0	160
	African American	14.2	85.8	100.0	92
	Asian/Pacific Islander	36.4	63.6	100.0	24
SPA 6	White, Non-Hispanic	0.0	50.0	100.0	25
	Latina	13.0	87.0	100.0	442
	African American	20.0	80.0	100.0	387
	Asian/Pacific Islander	0.0	100.0	100.0	15
SPA 7	White, Non-Hispanic	21.4	78.6	100.0	88
	Latina	12.0	88.0	100.0	432
	African American	14.2	85.8	100.0	44
	Asian/Pacific Islander	37.6	62.4	100.0	33
SPA 8	White, Non-Hispanic	40.0	60.0	100.0	328
	Latina	20.2	79.8	100.0	342
	African American	9.0	91.0	100.0	152
	Asian/Pacific Islander	41.6	58.4	100.0	41

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

Table A37. *Estimated Mean Percentage of Teachers with Non-Credit Training and/or College Credits Related to Dual Language Learning Children, by Age of Children Served and SPA*

	Estimated mean percentage per center (SE)	
	At least one hour of non-credit training*	At least one college credit**
Countywide	34.0 (1.69)	20.9 (1.44)
<i>Number of centers</i>	2,012	1,826
Centers enrolling infants ^a	24.5 (2.94)	15.8 (2.37)
<i>Number of centers</i>	544	518
Centers without infants	37.5 (2.04)	22.9 (1.77)
<i>Number of centers</i>	1,468	1,308
SPA 1	16.6 (6.60)	93.6 (3.95)
<i>Number of centers</i>	54	49
SPA 2	29.4 (4.18)	18.2 (3.65)
<i>Number of centers</i>	415	365
SPA 3	31.9 (4.34)	18.3 (3.40)
<i>Number of centers</i>	381	373
SPA 4	54.0 (4.99)	29.7 (4.36)
<i>Number of centers</i>	217	187
SPA 5	29.5 (4.88)	13.4 (3.87)
<i>Number of centers</i>	158	136
SPA 6	41.3 (4.48)	25.4 (3.82)
<i>Number of centers</i>	247	212
SPA 7	33.1 (4.58)	24.9 (4.33)
<i>Number of centers</i>	192	173
SPA 8	29.2 (4.02)	21.6 (3.50)
<i>Number of centers</i>	349	331

Note. Based on a sample of 731 centers, weighted to represent the population of licensed centers.

^aMost of these centers also enroll older children.

* $p < .05$, Centers without infants > centers enrolling infants. SPA 4 > all others; SPA 6 > SPA 1.

** $p < .05$, SPA1 < SPAs 4 and 6. SPA 5 < SPA 4.

References

- Alliance for Excellent Education (2005). *Teacher attrition: A costly loss to the nation and for the states. Issue Brief, August 2005*. Washington, DC: Alliance for Excellent Education.
- Barnett, W.S. (2003). *Better teachers, better preschools: Student achievement linked to teacher qualifications*. Preschool Policy Matters (2), March 2003. New Brunswick, NJ: National Institute for Early Education Research.
- Bellm, D., Whitebook, M., Cohen, A., & Stevenson, C. (2004). *Teacher credentialing in early care and education: Prospects for universal preschool in California, and lessons from other states*. Berkeley, CA: Center for the Study of Child Care Employment, University of California at Berkeley.
- Calderon, M. (2005). *Achieving a high-quality preschool teacher corps: A focus on California*. Washington, DC: National Council of La Raza.
- California Child Care Resource and Referral Network (2003). *The 2003 California Child Care Portfolio*. San Francisco: California Child Care Resource and Referral Network.
- California Child Care Resource & Referral Network (2005). *2005 California Child Care Portfolio*. San Francisco: California Child Care Resource and Referral Network.
- California Department of Education (2004). *Number of staff by ethnicity, 2003-04*. Data retrieved June 16, 2005, from <http://data1.cde.ca.gov/dataquest/>.
- California Department of Education (2005). *Selected certificated salaries and related statistics, 2004-05*. Sacramento, CA: California Department of Education.
- California Department of Education (2006). *Number of English learners by language, 2004-05*. Data retrieved July 27, 2005, from <http://data1.cde.ca.gov/dataquest/>.
- California Department of Finance (2003a). *California Statistical Abstract, 2003*. Retrieved January 1, 2005, http://www.dof.ca.gov/HTML/FS_DATA/STAT-ABS
- California Department of Finance (2003b). *California Statistical Abstract, 2003*. Retrieved January 13, 2005, http://www.dof.ca.gov/HTML/FS_DATA/STAT-ABS.
- California Department of Finance (2004a). *2000-2003. Population 2000-2050. Population projections with age, sex, and race/ethnic detail, May 2004*. <http://www.dhs.ca.gov/hisp/chs/ohir/tables/datafiles/vsofca/o116.xls>.

- California Department of Finance (2004b). *Population projections by race/ethnicity, gender and age for California and its counties, 2000-2050*. Data retrieved July 19, 2005, from http://www.dof.ca.gov/HTML/DEMOGRAP/DRU_Publications/Projections/P3/P3.htm.
- California Department of Finance (2005). *Race/ethnic population with age and sex detail, 2000-2050. 2005 estimates, both genders, all ages*. Data retrieved January 19, 2005, from http://www.dof.ca.gov/html/Demograph/DRU_datafiles/Race/RaceData/2000-2050/.
- Center for the Child Care Workforce (2001). *Family child care provider income and working conditions survey*. Washington, DC: Center for the Child Care Workforce.
- Child Care Law Center (2005). *Applying the Individuals with Disabilities Education Act*. In *Preschools Legal Update*, Summer 2005. San Francisco: Child Care Law Center.
- Galinsky, E., Howes, C., Kontos, S., & Shinn, M. (1994). *The study of children in family child care and relative care: Highlights of findings*. New York: Families and Work Institute.
- Garcia, E.E. (2005). *Teaching and learning in two languages: Bilingualism and schooling in the United States*. New York: Teachers College Press.
- Gormley, W., Gayer, T., Phillips, D., & Dawson, B. (2004). *The effects of Oklahoma's Pre-K Program on school readiness*. Washington, DC: Georgetown University Public Policy Institute.
- Helburn, S.W., Ed. (1995). *Cost, quality and child outcomes in child care centers*. Technical report. Denver: University of Colorado, Center for Research in Economic and Social Policy.
- Henry, G.T., Gordon, C.S., Henderson, L.W., & Ponder, B.D. (2003). *Georgia Pre-K Longitudinal Study: Final report 1996-2001*. Atlanta, GA: Andrew Young School of Policy Studies, Georgia State University.
- Herzenberg, S., Price, M., & Bradley, D. (2005). *Losing ground in early childhood education: Declining workforce qualifications in an expanding industry, 1979-2004*. Washington, DC: Economic Policy Institute.
- Hill, L.E., Johnson, H.P., & Tafoya, S.M. (2004). *California's multiracial population*. San Francisco: Public Policy Institute of California.

- National Economic Development and Law Center (2001). *The economic impact of the child care industry in California*. Oakland, CA: NEDLC.
- Reynolds, A.J., Temple, J.A., Robertson, D.L., & Mann, E.A. (2001). *Age 21 cost-benefit analysis of the Title I Chicago Child-Parent Center Program: Executive summary*. Madison, WI: Waisman Center, University of Wisconsin. <http://www.waisman.wisc.edu/cls/cbaexecsum4.html>.
- Sakai, L.M., & Whitebook, M. (2003). *Evaluating the Early Childhood Environment Rating Scale (ECERS): Assessing differences between the first and revised editions*. *Early Childhood Research Quality* 18(4), 427-445.
- Schulman, K. (2005). *Overlooked benefits of prekindergarten*. New Brunswick, NJ: National Institute for Early Education Research.
- Schulman, K. & Barnett, W.S. (2005). *The benefits of prekindergarten for middle-income children*. New Brunswick, NJ: National Institute for Early Education Research.
- Schweinhart, L. J., Montie, J., Xiang, Z., Barnett, W. S., Belfield, C. R., & Nores, M. (2005). *Lifetime effects: The High/Scope Perry Preschool Study through age 40*. Ypsilanti, MI: High/Scope Press.
- Shonkoff, J.P., & Phillips, D.A., Eds. (2000). *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academy Press.
- U.S. Census Bureau (2000a). *Census 2000 Summary File 1*. Data retrieved January 21, 2005, from <http://factfinder.census.gov/servlet>.
- U.S. Census Bureau (2000b). *Census 2000 Summary File 4*. Data retrieved March 3, 2005, from <http://factfinder.census.gov/servlet>.
- U.S. Census Bureau (2004). *American Community Survey*. Table S0101. Age and sex. Washington, DC: U.S. Census Bureau. <http://factfinder.census.gov/>.
- U.S. Department of Housing and Urban Development (2005). Data retrieved July 1, 2005, from http://www.huduser.org/datasets/FMR/FMR2005R/Revised_FY2005_CntLevel.Xls.
- Whitebook, M. (2003). *Early education quality: Higher teacher qualifications for better learning environments. A review of the literature*. Berkeley, CA: Center for the Study of Child Care Employment, University of California at Berkeley.

- Whitebook, M., Bellm, D., Lee, Y., & Sakai, L. (2005). *Time to revamp and expand: Early childhood teacher preparation programs in California's institutions of higher education*. Berkeley, CA: Center for the Study of Child Care Employment, University of California at Berkeley.
- Whitebook, M., Howes, C., & Phillips, D.A. (1990). *The National Child Care Staffing Study. Final report: Who cares? Child care teachers and the quality of care in America*. Washington, DC: Center for the Child Care Workforce.
- Whitebook, M., Howes, C., & Phillips, D.A. (1998). *Worthy work, unlivable wages: The National Child Care Staffing Study, 1988-1997*. Washington, DC: Center for the Child Care Workforce.
- Whitebook, M., & Sakai, L. (1995). *The potential of mentoring: An assessment of the California Early Childhood Mentor Teacher Program*. Washington, DC: Center for the Child Care Workforce.
- Whitebook, M., & Sakai, L. (2004). *Improving and sustaining center quality: The role of NAEYC accreditation and staff stability*. Early Education and Development 15(3).
- Whitebook, M., Kipnis, F., Sakai, L., Voisin, I., & Young, M. (2002). *California child care workforce study: Family child care providers and assistants in Alameda, Kern, Monterey, San Benito, San Francisco, San Mateo, Santa Clara and Santa Cruz counties*. Washington, DC: Center for the Child Care Workforce.
- Whitebook, M., Sakai, L., Gerber, E., & Howes, C. (2001). *Then & now: Changes in child care staffing, 1994-2000*. Washington, DC: Center for the Child Care Workforce.
- Wong-Fillmore, L., & Snow, S.E. (1999). *What educators – especially teachers – need to know about language: The bare minimum*. Santa Barbara: Language Minority Research Institute.
- Zaslow, M., & Martinez-Beck, I., Eds. (2005). *Critical issues in early childhood professional development*. Baltimore: Paul H. Brookes Publishing.