Title

California Early Care and Education Workforce Study: Licensed Family Child Care Providers, Santa Francisco Country 2006

Authors

Whitebook, Marcy
Sakai, Laura
Kipnis, Fran
et al.

Publication Date

2006-08-14

California Early Care and Education Workforce Study

Licensed Family Child Care Providers

San Francisco County 2006

By Marcy Whitebook, Laura Sakai, Fran Kipnis, Yuna Lee, Dan Bellm, Richard Speiglman, Mirella Almaraz, LaToya Stubbs, 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

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 and First 5 San Francisco County. 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 family child care providers of San Francisco 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., Speiglman, R., Almaraz, M., Stubbs, L., & Tran, P. (2006). *California Early Care and Education Workforce Study: Licensed family child care providers. San Francisco County 2006.* Berkeley, CA: Center for the Study of Child Care Employment, and San Francisco, CA: California Child Care Resource and Referral Network.

Contents

Tables

Figures

Appendix Tables

Introduction

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 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 providers from every county in the state, but there were not sufficient numbers of providers 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 First 5 San Francisco County was one of nine county organizations that 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, and the county interview included one question about home ownership not included in the statewide study. The statewide and county surveys were 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).[1] 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.

The following description applies to the sample and response rate for the San Francisco County-commissioned component of the study. For information about the statewide completion and response rate, see the statewide study at the First 5 California web site, http://www.ccfc.ca.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 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 San Francisco County's children and families.

This report contains the study's findings for licensed family child care providers in San Francisco County. In studying the county's population of licensed family child care providers, our primary objectives were to:

1 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 Foundation as a pilot for this statewide survey (Whitebook, Kipnis, Sakai, Voisin & Young, 2002). For its use in 2005, certain changes were made to the 2001 survey in order to shorten the interview time, and to capture specific information requested by First 5 California to assist in its workforce development planning related to preschool services.

- Compile baseline data on licensed providers' demographic and educational characteristics;
- Identify the extent to which providers' educational backgrounds vary with respect to their age, ethnicity, linguistic characteristics, and tenure as licensed providers;
- Profile the children that providers with varying characteristics serve, in terms of numbers, ages, subsidy status, and special needs;
- Document the professional preparation of licensed providers for working with children who are dual language learners and/or have special needs; and
- Develop a sound estimate of the number of paid assistants working in licensed family child care, and the extent to which they have engaged in professional development.

Licensed Family Child Care in California

Many providers care for their own children, as well as children from other families, in their own homes. When an individual cares for children from more than one unrelated family, the California Department of Social Services requires that the provider obtain a license to provide child care services. In order to receive a family child care home license, providers must meet a number of requirements. These include:

- Fingerprint, criminal background and California Child Abuse Central Index clearances for everyone 18 years or older living in the home;
- 15 hours of training on preventative health practices, which must include pediatric CPR; pediatric first aid; the recognition, management and prevention of infectious diseases; and the prevention of childhood injuries;
- A tuberculosis clearance; and
- Home inspection by someone from the licensing agency to ensure that it meets basic health and safety requirements.

There are also regulations on both the number of children that can be cared for in a licensed family child care home and the number of paid assistants in the home, based on the number of children served.

Family child care homes in California can be licensed as either small or large. The number of allowable children in small and large homes includes children under age 10 who live in the licensee's home. The license for small homes allows providers to serve up to eight children if two of them are of school age (over six years old) and no more than two are infants (0-23 months). (Alternatively, if small-home providers do not care for school-age children, they can care for up to six children, three of whom can be infants.) Large family child care homes can serve up to 14 children if at least two of them are of school age, and no more than three are infants. (Alternatively, if large-home providers do not care for school-age children, they can care for up to 12 children, four of whom can be infants.)

San Francisco County

The social and cultural heart of the Bay Area, San Francisco has the distinction of being both a city and a county. Key sectors of the economy include information, professional, and technical services and financial, insurance, and real estate transactions.

In 2004, San Francisco's population of 792,700 represented a 2.1 percent increase over the 2000 Census (US Census Bureau, 2000a). The county is projected to increase in population by 4.5 percent between 2000 and 2010, with a 46.6 percent increase in the number of children ages 0 – 4 (California Department of Finance, 2004).

Population estimates for 2005 describe the county as 44.4 percent White, Non-Hispanic; 31.5 percent are Asian; 14.5 percent are Hispanic; 6.8 percent are Black; 2.4 percent are Multiethnic; 0.4 percent are Pacific Islander or American Indian (California Department of Finance, 2005). At the time of the 2000 Census, over half (58.2 percent) of county households were estimated to be speaking English, 10.3 percent as speaking Spanish, and 21.6 percent as speaking an Asian

or Pacific Island language (US Census Bureau, 2000b).

Several demographic measures, as well as summary statistics concerning economic wellbeing, suggest the breadth of need for early care and education in San Francisco County:

- Median family income in 1999 was $63,545 (California Department of Finance, 2003).
- In 1999 11.3 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 $18,468 (US Department of Housing and Urban Development, 2005).
- At the time of the 2000 Census, 13.0 percent of children 0-5 years of age lived in poverty[2] (California Child Care Resource and Referral Network, 2003).
- In 2000, 88,033 children under the age of 14 resided in the county, over one-half (55.2 percent) of whom had both parents in the labor force or a single head of household in the labor force[3] (California Child Care Resource and Referral Network, 2003).
- Among those children were 37,890 children under age six, 51.7 percent of whom had working parents[4] (California Child Care Resource and Referral Network, 2003).
- 18.3 percent of children ages 0-5 resided in a single-parent household[5] (California Child Care Resource and Referral Network, 2003).

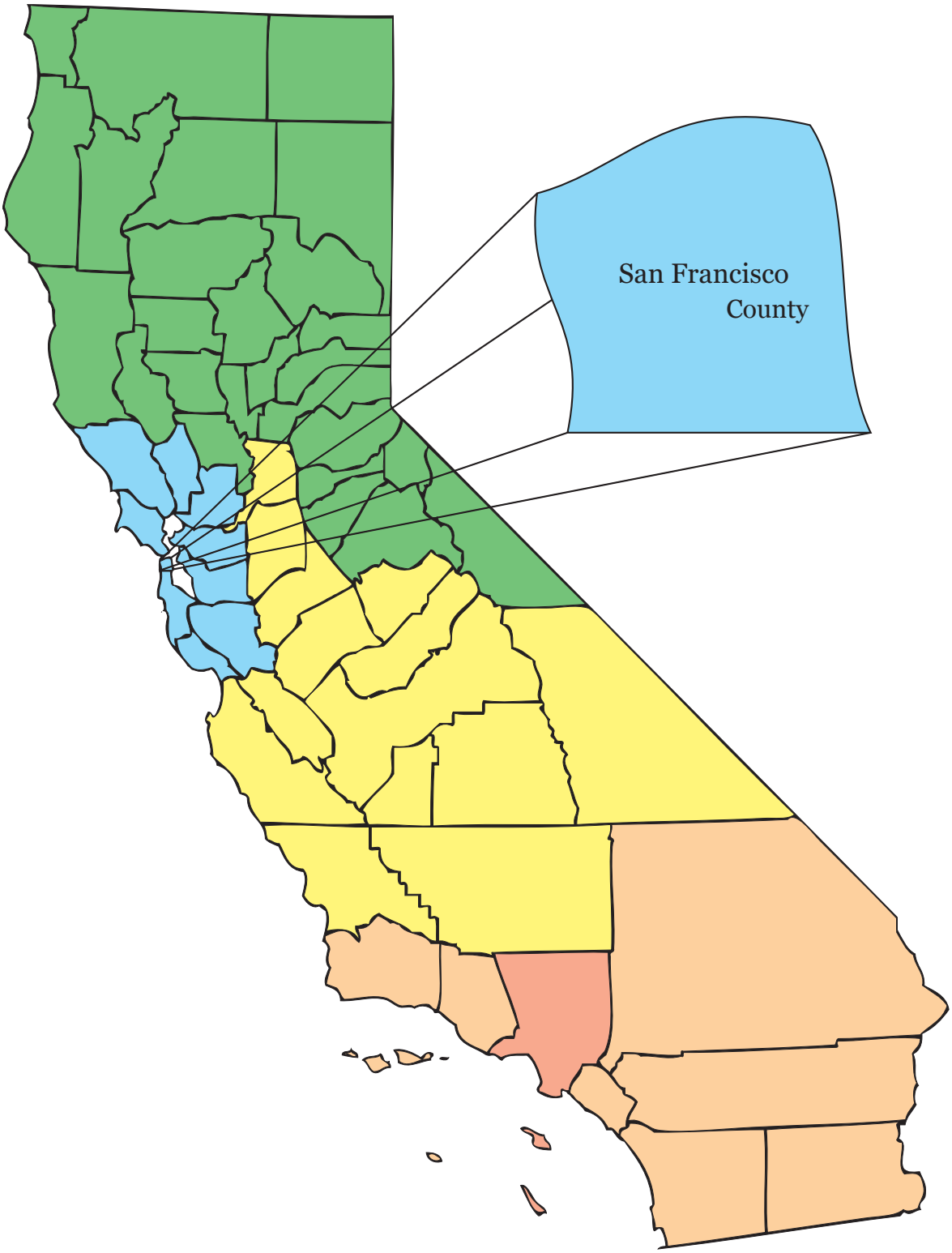
In 2004, 22,150 licensed child care slots were available in San Francisco County, one-quarter of which (24.2 percent) were in family child care homes, and three-quarters in child care centers (California Child Care Resource and Referral Network, 2005).

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).

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).


San Francisco
County

Study Design

Survey Population and Study Sample

First 5 San Francisco County sought information about licensed family child care providers in the county as a whole. The survey population included all 590 active, licensed family child care homes that were listed as of January 2004 with the county's two state-funded child care resource and referral (R&R) program, Children's Council of San Francisco and the Wu Yee Children's Services. These listings were aggregated, cleaned and verified by the California Child Care Resource and Referral Network (Network), and updated in winter 2005.

Because of the relatively small size of the licensed family child care population in San Francisco County, we attempted to conduct a census of all providers in the county. Our final number of 244 completed interviews included 22 interviews conducted in San Francisco County as part of the statewide study, and 222 interviews conducted for the county study. (See Table 2.1.)

Interviews

In each case, telephone interviews were conducted in English, Spanish or Cantonese with the owner of the family child care home. Approximately ten percent (10.6) of eligible providers in the county) were unable to complete the interview because of communication barriers. The results reported below, therefore, provide a county-wide portrait of providers who speak English, Cantonese or Spanish, and do not extend to those who do not speak either language.

The survey questions addressed:

- Provider demographics: age, ethnicity, and languages spoken in addition to the interview language;
- Levels of education and training: highest level of education; type of degree, if any; credit and non-credit training, including training to work with children with special needs or English language learners; accreditation status; and participation in the San Francisco CARES program;[6]
- Career longevity;
- Business and program characteristics: numbers and ages of children served, including children with special needs; participation in government subsidy programs; and home ownership status; and
- Paid assistants' characteristics: numbers of paid assistants, and their level of education and training.

6 San Francisco County is one of over 40 counties in California that have implemented professional development stipend programs for child care center teachers, administrators, and family child care providers based on the California CARES program model. These initiatives are intended to help build a skilled and stable early education workforce by providing monetary rewards, based on participants' education levels and continued commitment to their professional development.

Table 2.1. *San Francisco County Sample Composition*

	San Francisco County licensed providers	Percentage of final sample
Completed interviews: statewide study	22	9.0%
Completed interviews: county study	222	91.0%
Final sample	244	100.0%

Data Collection Procedures

The Network mailed a notification letter, describing the purpose of the survey and encouraging participation, to all the providers in the survey population. The letter was signed by representatives of CSCCE, the Network, and First 5 California. Providers 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 222 interviews over a six-week period beginning in early June 2005.

Licensed family child care providers were contacted during the work day, and whenever they requested it, were called back in the evening or during the weekend to complete the interview. Interviews took an average of 11.0 minutes to complete. FRC made up to eight attempts to complete an interview with each provider.

Survey Completion and Response Rate

The Network provided FRC with contact information for the 590 providers in the survey population. Because some of these providers either had completed an interview or had been coded ineligible for some other reason during the statewide survey, FRC released 553 providers' names for the county survey. As anticipated, we were unable to reach all the providers in the county. Of the 553 provider contacts, 28.6 percent were determined to be ineligible, either because they were out of business or were presumed to be. (See Table 2.2.) Because of unanticipated delays, several months passed before the survey began. For that reason, we assume that many of the providers with "unresolved phone numbers" were actually out of business. To increase the likelihood of including as many providers as possible, the Network attempted to correct any incorrect phone numbers.

Among those eligible, 56.2 percent completed the survey. Those who did not complete the survey included 11.1 percent who refused, and another 13.4 percent whose answering machine or voice mail prevented successful contact. Again, to ensure the highest response rate possible, Network staff attempted to contact all the providers with answering machines or voice mail to encourage them to participate in the study. Approximately 7.1 percent of the providers contacted were not available to complete the survey during the study period, and 10.6 percent presented communication barriers we were unable to surmount.

While we were unable to assess whether the providers who participated in the study differed from those who did not participate with respect to the variables of interest in the study, we compared the county provider population to the providers that completed interviews. We calculated the extent to which providers participating in our study represented the county overall in terms of geographical distribution and licensed capacity. As

Table 2.2. *Survey Response Rate*

	San Francisco County number of providers	Percentage of sample	Percentage of eligible
Sample released and dialed	553	100.0%	
Ineligible: out of business	46	8.3%	
Presumed ineligible*	112	20.3%	
Eligible	395	71.4%	100.0%
County surveys completed	222	40.1%	56.2%
No response, presumed eligible**	53	9.6%	13.4%
Refusals	44	8.0%	11.1%
Respondent not available	28	5.1%	7.1%
Communication barrier	42	7.6%	10.6%
Other reasons for non-completion	6	1.1%	1.5%

* Disconnected, wrong number, changed phone number, or no answer.
** Anwering machine, voice mail, or busy phone.

Table 2.3. *Comparison of Survey Respondents and County Population of Providers, by Communities Served and by Licensed Capacity*

	County population (N=590)	Survey completed (N=244)
LICENSED CAPACITY		
Small homes	78.0%	76.2%
Large homes	22.0%	23.8%
ZIP CODE		
94102	1.5%	2.5%
94103	0.7%	0.8%
94107	1.4%	1.6%
94108	1.0%	1.6%
94109	1.5%	1.2%
94110	9.5%	9.4%
94112	16.2%	16.8%
94114	0.9%	1.2%
94115	5.1%	4.9%
94116	7.6%	6.1%
94117	2.5%	1.2%
94118	3.7%	4.1%
94121	4.4%	2.1%
94122	9.8%	11.1%
94123	2.2%	2.9%
94124	14.2%	14.3%
94127	1.7%	3.3%
94130	0.2%	0.0%
94131	1.5%	2.5%
94132	3.9%	4.5%
94133	1.5%	1.2%
94134	8.8%	6.6%
TOTAL	100.0%	100.0%

shown in Table 2.3, our survey closely approximates the countywide distribution and licensed capacity of licensed family child care homes.

As shown in Table 2.1, the final sample included 244 providers, with 91.0 percent of the sample participating in the county data collection and the remainder drawn from the statewide study.

Data Analysis

Data analysis sought to address the goals of the study as outlined in the introduction to this report. All analyses were performed using Statistical Package for the Social Sciences (SPSS 12.0) and StataSE 8. First, we compiled statistics that described characteristics of the workforce, including providers' age, ethnicity, tenure, language(s) spoken, home ownership, and paid assistants employed. Second, we conducted analyses of the number of children of various age ranges served, as well as the number of children with special needs and subsidized children. Third, we examined providers' educational backgrounds, making comparisons among educational levels and provider characteristics. Fourth, we examined whether providers had completed non-credit or college credit-bearing training to care for children with special needs and/or English language learners. To more closely examine differences between providers licensed to operate small or large homes, we conducted inferential statistical tests (e.g., chi-square, t-test, ANOVA). All significant results are reported, including group differences at a p value of .05 or better.

Findings

The findings described in this report are based on interviews with 244 licensed family child care providers in the city and county of San Francisco who spoke English, Spanish or Cantonese sufficiently well to participate in a phone interview. Significant differences are reported at a *p* level of .05 or less. Figures and tables included in this chapter summarize data referred to in the text. Standard errors for all findings represented in this chapter, as well as additional data not discussed in the text, can be found in the Appendix Tables. After reporting the statewide findings, we report statistical differences between providers licensed to care for 14 children (large homes) or eight children (small homes).

Who constitutes the licensed family child care workforce in San Francisco?

In San Francisco, the typical licensed family child care provider is a woman of color of about age 50 who has been taking care of children in her home for nearly ten years. She usually works without a paid assistant. She is likely to speak English and one other language, most often Spanish or Cantonese. This profile varies, however, depending on the licensed capacity of her home. Those operating large homes, for example, are likely to be older than operators of small homes, and to have been operating their home business for a longer period of time.

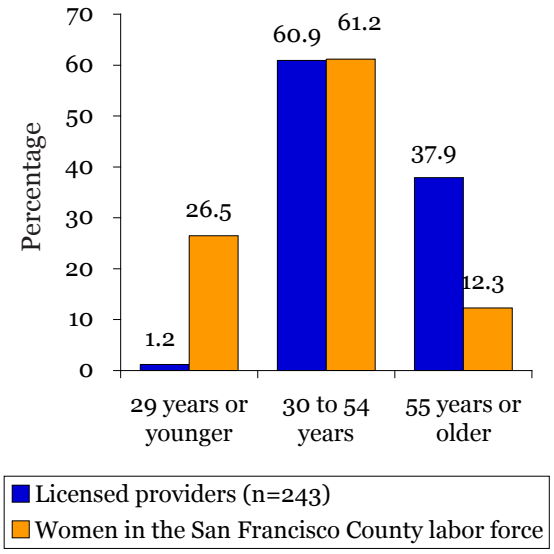
Gender and Age

San Francisco's licensed family child care workforce is predominantly female. To ascertain gender, since the interview did not specifically include this question, we analyzed the names of providers in our sample. Nearly three-quarters (73.3 percent) of the names in our sample were female, 1.3 percent was male, and 25.4 percent of the listings contained two names, typically a man and a woman.

This mostly female workforce is typically middle-aged. Compared to women in the San Francisco labor force overall, licensed family child care providers were much less likely to be younger than 30 (1.2 percent vs. 26.5 percent) and more likely to be over 55 (37.9 percent vs. 12.3 percent). (See Figure 3.1.) On average, licensed providers were 49.6 years of age, with the youngest provider 25 years old and the oldest 80. New entrants (those who had been serving children in their homes for 12 months or less) were, on average, 8.5 years younger than providers who had been serving children in their homes longer than 12 months. (See Table 3.1.)

The age distribution of licensed providers differed by their licensed capacity. (See Figure 3.2.) Providers operating smaller licensed family child care homes, as a group, were younger (average age, 48.5; SE=0.8) than were providers licensed to operate larger homes (average age, 53.2; SE=1.4).

Figure 3.1. *Age Distribution of Licensed Providers Compared to Women in the San Francisco County Labor Force*[a]



[a] US Census Bureau (2000a).

Ethnic Background

As shown in Figure 3.3, licensed family child care providers in San Francisco were ethnically diverse, with African Americans and Latinas more represented and White, Non-Hispanics much less represented

Figure 3.2. *Age Distribution of Licensed Providers, Countywide and by Licensed Capacity*

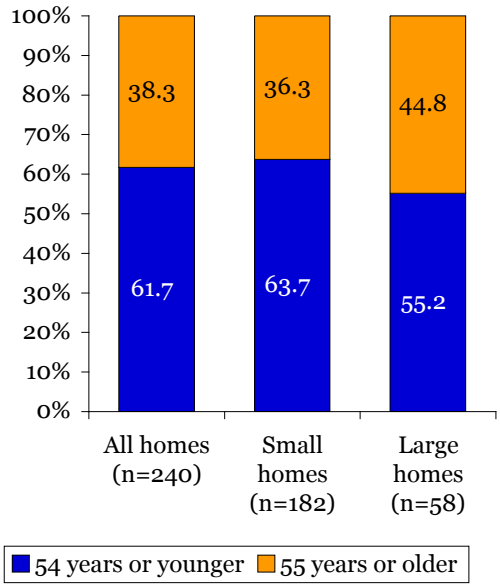
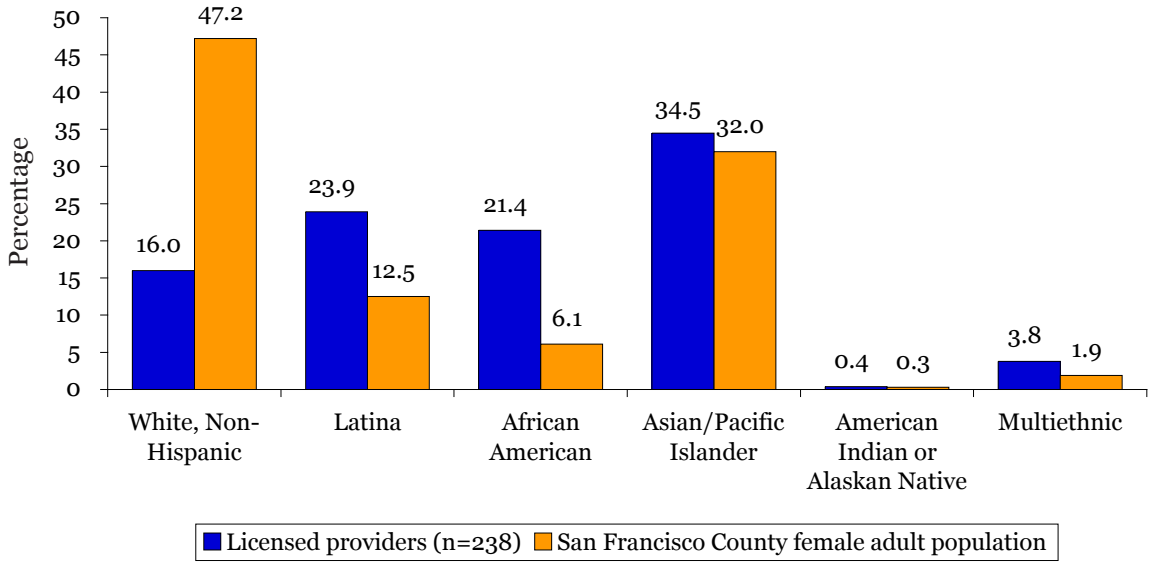


Table 3.1. *Licensed Provider Mean Age and Number of Children Served, by Tenure*

	Mean tenure (SE)	
	24 months or less	Over 24 months
Age of licensed provider*	41.9 (2.35)	50.4 (0.70)
Number of children served	4.3 (0.37)	6.0 (0.25)
Number of providers	23	220

*$p < .01$, 24 months or less < over 24 months.

Figure 3.3. *Ethnic Distribution of Licensed Providers Compared to the San Francisco County Female Adult Population*[a]



[a] California Department of Finance (2004)

among licensed providers than in the county's overall adult population.

We found that the vast majority of licensed providers in San Francisco (84.0 percent) were people of color. (See Figure 3.3.) Asians/Pacific Islander providers (34.5 percent) constituted a plurality among the county's licensed providers, and Latinas were the second largest group (23.9 percent), followed closely by African Americans (21.4 percent). White, Non-Hispanics (16.0 percent) were the next largest group of providers, followed by those identifying themselves as Multiethnic (3.8 percent) or American Indian/Alaskan Native (less than 1.0 percent).

Licensed providers were also far more diverse, and more closely reflected the ethnic distribution of children ages birth to five in San Francisco, than teachers of Grades K-12 in the county's public schools. (See Figure 3.4.) Over one-half of public school K-12 teachers (54.3 percent) were White, Non-Hispanic, compared to 16.0 percent of licensed family child care providers. Licensed providers were more likely to be African American, Latina and Asian/Pacific Islander than were K-12 teachers. Providers were less likely to be White, Non-Hispanic than were children ages birth to five (48.5 percent).

Asian/Pacific Islander (85.4 percent, SE=3.9) and Latina (91.2 percent, SE=3.8) providers were more likely to operate homes licensed to care for eight children than were African American (62.8 percent, SE=6.8) or White, Non-Hispanic (52.6 percent, SE=8.1) providers.

Linguistic Background

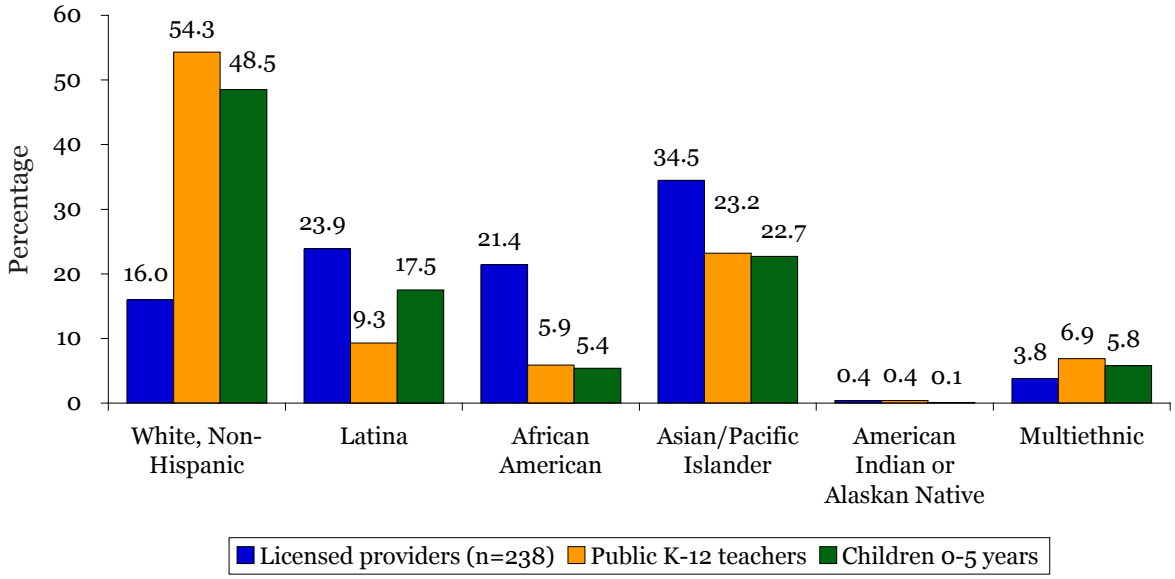
Fifty-nine percent of interviews were conducted in English, 16 percent were conducted in Spanish, and 25 percent were conducted in Cantonese. As stated earlier, 10.6 percent of providers were unable to complete the interview in English, Spanish or Cantonese. Results reported below, therefore, provide a countywide portrait of providers who speak English, Spanish or Cantonese, and do not extend to those who speak none of these languages.

Providers were asked whether they spoke any other languages fluently besides the interview language. If they answered affirmatively, they were asked which language(s) they would be able to speak fluently with children and families if necessary. Our description of providers' fluency in these other languages is based entirely on providers' self-assessments.

We found licensed family child care providers to be more linguistically diverse than San Francisco's adult population as a whole.[7] As shown in Figure 3.5, licensed providers were less likely than other adults in San Francisco to speak only English, and were more likely than the average San Francisco adult to speak English and Spanish. No data were available for the percentage of the population that spoke Cantonese. Slightly more than one-third of licensed providers (36.9 percent) spoke only English. Nearly nine percent of those interviewed (8.6 percent) spoke only Spanish, or Spanish and another language besides English. Another 15.6 percent reported speaking English and Spanish fluently, or speaking English, Spanish and at least one additional language. Nearly one-quarter

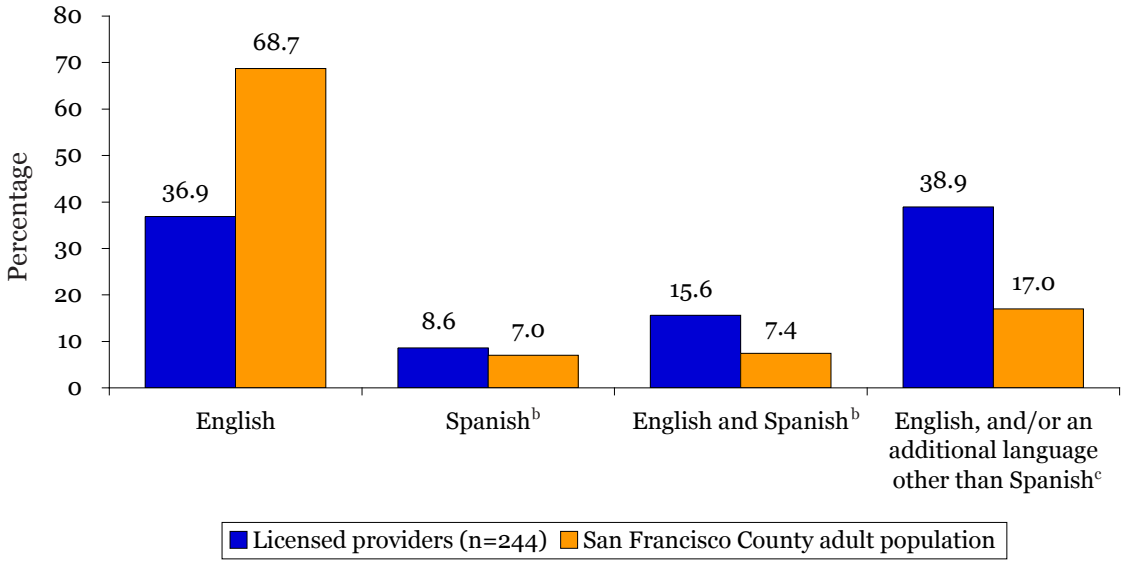
7 The most recent data available at the county level on the language background of San Francisco County adults are based on the 2000 U.S. Census. Further, these data are only available for all adults 18 to 64 years of age, whereas the licensed family child care population was composed predominantly of women ages 25 to 64.

Figure 3.4. *Ethnic Distribution of Licensed Providers Compared to San Francisco County Public K-12 Teachers[a] and Children 0-5 Years[b]*



[a] California Department of Education (2004).
[b] California Department of Finance (2004).

Figure 3.5. *Reported Language Fluency of Licensed Providers Compared to the San Francisco County Adult Population[a]*



[a] US Census Bureau (2000b).
[b] Provider may speak an additional language other than English.
[c] This includes 29.9 percent of providers who speak English and Cantonese or only Cantonese. Census data for the percentage of Cantonese speakers for San Francisco County were not available.

(22.5 percent) spoke Cantonese only, and 7.4 percent spoke Cantonese and English.

Nine percent of interviewed providers (9.0 percent) reported self-assessed fluency in languages other than English or Spanish. In order of frequency, these other languages included Russian, French, Arabic, Italian, Ukrainian, Yiddish, Bengali, Farsi, Hindi, Laotian, Filipino, Romanian, Chinese (Shanghai dialect), and Taiwanese. No single language other than English, Spanish or Cantonese was reportedly spoken by more than one percent of licensed providers. It is important to note the likelihood, however, that the frequency of various languages other than English, Spanish or Cantonese spoken by licensed providers would increase somewhat from this list if interviews had been conducted in additional languages.

Table 3.2. *San Francisco County Children in Public Kindergarten, 2004-2005: 15 Most Commonly Spoken Languages of English Language Learners*

Language	Percentage
Spanish	41.2
Cantonese	37.7
Filipino (Pilipino or Tagalog)	4.0
Vietnamese	3.4
Mandarin (Putonghua)	2.4
Arabic	1.7
Russian	1.6
Japanese	1.3
Toishanese	0.7
Khmer (Cambodian)	0.6
French	0.6
Samoan	0.6
Korean	0.6
Portuguese	0.4
Hindi	0.4
N	1,958

Source: California Department of Education (2006).

We found that the population of children served by San Francisco's licensed providers was also linguistically diverse. Our summary of the language backgrounds of young children is based on 2004-05 data from the California Department of Education (CDE), which reported that nearly one-half of kindergarteners attending San Francisco's public schools in 2004-2005 spoke a language other than English and were classified as English Learners. Of the more than 37 different languages spoken by English Learners in San Francisco's public kindergarten classrooms, Table 3.2 lists the 15 most commonly spoken. Over one-third of kindergarten children in San Francisco spoke Spanish or Cantonese.

There were differences in linguistic background found between providers licensed to care for eight children or for 14 children. Providers who spoke either Spanish or Cantonese were more likely to be licensed to care for eight children than for 14 children.

Linguistic background also varied between licensed providers serving at least one child with special needs and those who served none. Providers who cared for at least one child with special needs were less likely to speak Cantonese than were providers who did not. (See Table 3.4.) There were no differences in language between providers serving children receiving public child care subsidies and those who did not serve such children.

Tenure

Providers were asked how long they had been taking care of children in their

Table 3.3. *Reported Language Fluency of English- and Spanish-speaking Licensed Providers, by Number of Children Receiving Publicly Subsidized Child Care*

	Percentage of licensed providers, by number of publicly subsidized children (SE)		
	None	1 or more	All providers
English	32.9 (5.20)	38.5 (3.84)	36.6 (3.10)
Spanish[a]	6.1 (2.65)	9.9 (2.36)	8.6 (1.81)
Cantonese[a]	18.3 (4.28)	24.8 (3.41)	22.6 (2.69)
English and Spanish[a]	15.9 (4.04)	15.5 (2.86)	15.6 (2.33)
English and Cantonese[a]	9.8 (3.28)	6.2 (1.91)	7.4 (1.68)
English plus an additional language other than Spanish or Cantonese*	17.1 (4.16)	5.0 (1.72)	9.1 (1.84)
Total	100.0	100.0	100.0
Number of providers	82	161	243

Note. Based on the self-assessment of 243 providers.
[a] Provider may speak an additional language other than English.
*$p < .05$, None > 1 or more.

homes on a *paid* basis; the average reported was 9.8 years. (See Table 3.5.) Tenure varied greatly, however; one-quarter of providers reported offering child care in their homes for less than five years, and one-quarter reported offering care for 12 years or more. (See Table 3.6.) To some extent, providers' length of tenure reflected age: mean reported tenure of providers who were 29 or younger, for example, was 2.5 years, while mean reported tenure of providers 55 or older was 13.6 years. (See Table 3.5.)

Tenure varied by ethnicity. (See Table 3.5.) White, Non-Hispanic providers had been in business longer, on average, than Latina or African American providers, who in turn had been in business longer, on average, than Asian/Pacific Islander providers. The sample size for other ethnic groups was too small to permit comparisons.

Tenure among licensed providers also varied by licensed capacity. As a group, providers licensed to care for 14 children had been in business almost 50 percent longer than those licensed to care for eight. (See Table 3.5.) Providers licensed to serve eight children reported significantly fewer years offering child care (M=8.2 years) than did providers licensed to care for 14 children (M=15.0 years). There were no differences in tenure, however, among providers who reported caring for at least one child with special needs or at least one child receiving public assistance and those who did not care for any special needs or subsidized children.

Nine percent of providers in our sample had been taking care of children in their homes for 24 months or less, and they differed along several dimensions from those who had been caring for children for more than two years. None of the new providers were licensed to care for 14 children; all San Francisco providers operating large homes had been in business for two years or more. As with the provider population as a whole, the majority of newcomers were over 30 years old. On average, these newer providers cared for significantly fewer children (M=4.3 children) than did their more experienced counterparts (M=6.0 children), in part perhaps because their businesses were new. (See Table 3.1.) Not surprisingly, given the size of their businesses, newer providers (17 percent) were significantly less likely than more tenured providers (36 percent) to employ paid assistants in caring for children.

Home Ownership

Approximately two-thirds (64.3 percent) of providers reported that they owned their own homes, compared to 35.0 percent of adults in the county as a whole (US Bureau of the Census, 2000).[8] There were no differences in home ownership by educational attainment, but there were differences by licensed capacity, ethnicity, tenure and age. Providers licensed to care for 14 children (82.7 percent) were more likely to own their homes than providers licensed to care for eight children (58.6 percent). Asian/Pacific Islander providers were more likely to own their homes than Latina and African American providers. Those who owned their own homes, on average, were older (51.0 years, SE=0.9 vs. 47.6 years, SE=1.3) and had been caring for children longer than providers who rented their homes (10.9 years, SE=0.9, vs. 7.5 years, SE=0.7).

8 As described in the Study Design section of this report, only 222 of the 244 providers interviewed for this study were asked this question.

Table 3.4. *Reported Language Fluency of English- and Spanish-speaking Licensed Providers, by Number of Children with Special Needs, Countywide*

	Percentage of licensed providers by number children with special needs (SE)		
	None	1 or more	All providers
English	32.1 (3.3)	56.3 (7.2)	36.9 (3.1)
Spanish[a]	9.2 (2.1)	6.3 (3.5)	8.6 (1.8)
Cantonese[a]	26.0 (3.1)	8.3 (4.0)	22.5 (2.7)
English and Spanish[a]	14.3 (2.5)	20.8 (5.9)	15.6 (2.3)
English and Cantonese[a]	7.7 (1.9)	6.3 (3.5)	7.4 (1.7)
English plus an additional language other than Spanish or Cantonese	10.7 (2.2)	2.1 (2.1)	9.0 (1.8)
Total	100.0	100.0	100.0
Number of providers	196	48	244

Note. Based on the self-assessment of 244 providers.
[a] Provider may speak an additional language other than English.

Table 3.5. *Tenure of Licensed Providers, by Age, Ethnicity and Licensed Capacity*

		Mean years of tenure (SE)
All providers		9.8 (0.51)
Number of providers		244
By age*	29 years or younger	2.5 (1.75)
	30 to 54 years	7.5 (0.42)
	55 years or older	13.6 (1.04)
Number of providers		243
By ethnicity**	White, Non-Hispanic	12.7 (1.43)
	Latina	8.5 (1.02)
	African American	11.5 (1.13)
	Asian/Pacific Islander	7.3 (0.63)
Number of providers		228
By licensed capacity***	Small homes	8.2 (0.53)
	Large homes	15.0 (1.02)
Number of providers		244

Tests of significance were only performed for White, Non-Hispanic and Latina provider groups.
*$p < .001$, 55 years or older > 29 years or younger, 30 to 54 years.
**$p < .001$, White, Non-Hispanic > Latina, Asian/Pacific Islander; Latina, African American > Asian/Pacific Islander.
***$p < .001$, Large homes > small homes.

Table 3.6. *Distribution of Licensed Providers, by Tenure*

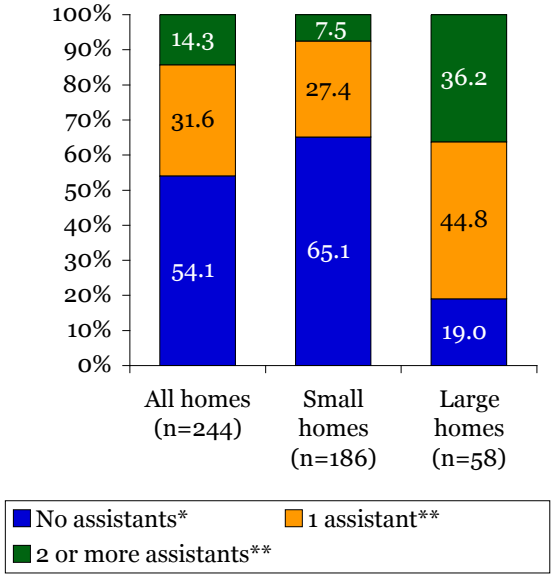
	Percentage (SE)
4 years or less	23.0 (2.7)
5 - 11 years	47.5 (3.2)
12 years or more	29.5 (2.9)
Total	100.0
Number of providers	244

Paid Assistants

Many providers involve other adults in their family child care businesses. Spouses, older children and other relatives may assist providers, often in an unpaid capacity. In addition, many providers employ paid assistants. Providers were asked how many assistant caregivers, if any, they *paid* to help them with the children in their care. As shown in Figure 3.6, more than one-half of providers (54.1 percent) reported working without any paid assistants; approximately one-third (31.6 percent) reported paying one assistant; and 14.3 percent reported paying two or more assistants.

As would be expected because of required adult-child ratios, providers who were licensed to care for 14 children were significantly more likely to employ paid assistants than were those licensed to care for eight children. As shown in Figure 3.6, 34.9 percent of providers licensed to care for eight children reported employing one or more paid assistants, compared to 81.0 percent of providers licensed to care for 14 children. Operators of large homes were also significantly more likely than other providers to employ more than one paid assistant.

Figure 3.6. *Percentage of Licensed Providers with Paid Assistants, Countywide and by Licensed Capacity*



*p < .001, Small homes > large homes.
**p < .001, Large homes > small homes.

Table 3.7. *Estimated Number of Licensed Providers and Paid Assistants*

	Total number	
	Low estimate	High estimate
Workforce		
Number of active providers	590	590
Number of paid assistants	357	387
Total family child care workforce (paid assistants plus active providers)	947	977

*See Appendix B for a full discussion of the methodology used here. Licensed providers who had been in business for more years typically employed a greater number of paid assistants than those new to the field. The low estimate takes into account tenure of individual providers, while the high estimate does not. If more than one name appeared on the license, only one provider was counted.

Size of the Licensed Family Child Care Workforce

Typically, the number of *active* licensed family child care providers, as verified by the California Child Care Resource and Referral Network, is used to determine the size of the licensed provider workforce. A broader estimate of the size of the workforce would include paid assistants, however, since a sizeable number of providers employ them, yet prior to this study, no countywide data permitted a calculation of the number of paid family child care assistants. Using these data, we estimate that between 357 and 387 paid assistants were employed in San Francisco's licensed family child care homes in 2005. (For a full discussion of how these estimates were calculated, see Appendix B.) Added to the 590 active licensed providers from which our sample was drawn, we estimate that San Francisco's entire licensed family child care workforce in 2005, including licensees and any paid assistants, totaled between 947 and 977. (See Table 3.7.)

What are the characteristics of children served by San Francisco County's licensed family child care providers?

In San Francisco County, nearly 1,000 licensed family child care providers and paid assistants care for nearly 4,000 children, mostly in mixed-age groups. More than four-fifths of the children cared for by licensed providers are not yet in kindergarten, and more than one-half of them are age two or younger. Two-thirds of licensed providers report caring for at least one child who receives public child care assistance. One-fifth of licensed providers report caring for at least one child with special needs.

As shown in Table 3.8, San Francisco County's licensed family child care workforce provided services in 2005 to an estimated 3,777 to 4,042 children and their families. (For a full discussion of how these estimates were calculated, see Appendix B.) Table 3.8 also presents a distribution by age group of the estimated numbers of children served. Approximately one-quarter of these children were preschoolers, ages three to five, and slightly more than one-half were two years old or younger.

Table 3.8. *Estimated Number of Children Served, by Age*

	Total number	
	Low estimate	High estimate
All children		
Under age 2	1,158	1,151
Age 2	1,044	1,126
Ages 3 to 5, not in kindergarten	983	1,160
Ages 5 or older, in kindergarten	593	605
All ages	3,777	4,042

See Appendix B for a full discussion of the methodology used here. Licensed providers who had been in business for more years typically cared for a greater number of children than those new to the field. The low estimate takes into account tenure of individual providers, while the high estimate does not. However, in some cases, the average number of children served within a particular age group by new providers was greater than the average number served by more tenured providers.

Providers licensed to care for eight children comprised 76.2 percent of the estimated population of providers in the county; on average, they reported caring for 5.7 children across all age spans, of whom 4.7 children were age five or younger, not in kindergarten. (See Table 3.9.) Those licensed to care for 14 children reported caring for an average of 10.7 children across all age spans, including 9.5 children age five or younger who were not in kindergarten. (See Table 3.9.) On average, providers cared for fewer than the maximum number of children they were licensed to serve.

Because we did not ask providers why they typically cared for fewer than the permitted number of children, one can only speculate about the reasons for this gap between licensed capacity and enrollment. This finding, however, helps to explain why the estimated number of children *enrolled* in licensed family child care, as presented in this report, is lower than the estimated licensed *capacity* of homes in the county. Currently, the licensed capacity is 5,364 slots, based on the maximum numbers of children (eight or 14) for small and large licensed homes (California Child Care Resource & Referral Network, 2005.)

Licensed providers were asked about the number of children they served in various age groups. Providers reported

a variety of configurations of the ages of children they served:

- approximately one-quarter (23.1 percent, SE=2.7) reported caring for children across the entire age span from infancy to school age;
- only 2.5 percent of providers (SE=1.0) cared exclusively for children ages three to five but not yet in kindergarten;
- many providers serving children ages three to five also served younger (90.4 percent, SE=2.4) and/or older children (55.8 percent, SE=4.0), but 44.2 percent (SE=4.0) reported serving no children of kindergarten age or older;
- one-fifth of providers (20.7 percent, SE=2.6) reported caring exclusively for children age two and younger; and
- only 2.9 percent (SE=1.1) reported caring exclusively for children age five and older.

Each provider was asked how many children (if any) with disabilities, or with special emotional or physical needs, she served in her home. As a result, we estimate that approximately one-fifth (19.7 percent) of San Francisco's licensed family child care providers cared for such children.[9] There were no statistically significant differences in the proportion of providers caring for at least one child with special needs by licensed capacity. (See Figure 3.7.)

The proportion of providers who cared for at least one child with special needs varied by provider ethnicity. White, Non-Hispanic and Asian/Pacific Islander providers were less likely to report caring for at least one child with special needs than were Latina or African American providers. (See Table 3.10.)

Providers were also asked how many of the children they served, if any, received public child care assistance.[10] Two-thirds of providers (66.3 percent) reported caring for at least one subsidized child. We then calculated the percentage of subsidized children cared for by licensed providers in order to assess the extent to which government dollars contribute to providers' businesses. Among providers who served children receiving public child care assistance, 57.1 percent reported that 50 percent or less of the children enrolled in their homes received such assistance (SE=3.9). Among all providers, including those who did not care for any children receiving public assistance as well as those who cared for at least one child receiving it, 16.2 percent reported that 75 percent or more of the children enrolled in their programs received assistance (SE=2.4).

9 Interviewees were told, "By disabilities or special needs, we mean any child who is protected by the American with Disabilities Act (ADA)." If the provider 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."

10 Government subsidies in San Francisco County come through CalWORKs and Alternative Payment Program funding. Providers were also asked if they held a contract with the Head Start, Early Head Start, or Migrant Head Start programs, which provide subsidized services to children of low-income families. In contrast to the percentage of providers serving children receiving other forms of public child care assistance, only seven percent of providers reported providing services to children in their homes through any type of Head Start program. Because of the small number of providers offering Head Start services, we did not conduct any comparative analyses. In addition, some family child care providers serve children through a contract with the California Department of Education, although this was not tracked in the survey.

Table 3.9. *Mean Number of Children Served by Licensed Providers, by Age Group: Countywide*

	Mean number of children served (SE)		
	All homes	Small homes	Large homes
Under age 2	2.0 (0.09)	1.9 (0.09)	2.2 (0.22)
Age 2*	1.9 (0.12)	1.5 (0.11)	3.1 (0.33)
Ages 3-5, not yet in kindergarten*	2.0 (0.19)	1.3 (0.12)	4.2 (0.62)
Ages 5 or under, not in kindergarten*	5.8 (0.23)	4.7 (0.17)	9.5 (0.57)
Ages 5 and older	1.0 (0.10)	1.0 (0.09)	1.1 (0.27)
All age spans*	6.9 (0.24)	5.7 (0.19)	10.7 (0.55)
Number of providers	242	184	58

*$p < .001$, Large homes > small homes.

Figure 3.7. *Percentage of Licensed Providers Serving Children with Special Needs, Countywide and by Licensed Capacity*

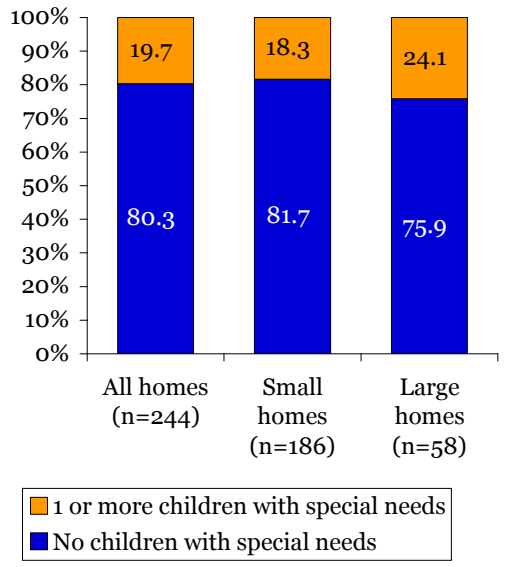


Table 3.10. *Comparison of Licensed Providers Serving Children with Special Needs, by Ethnicity*

	Percentage of licensed providers, by number of children with special needs (SE)				
	White, Non-Hispanic	Latina	African American	Asian/Pacific Islander	All providers
None	94.7 (3.6)	77.2 (5.6)	60.8 (6.9)	91.5 (3.9)	81.6 (2.5)
1 or more*	5.3 (3.6)	22.8 (5.6)	39.2 (6.9)	8.5 (3.9)	18.4 (2.5)
Total	100.0	100.0	100.0	100.0	100.0
Number of providers	38	57	51	82	228

Tests of significance were only performed for White, Non-Hispanic, Latina, African American, and Asian/Pacific Islander provider groups.
The number of providers described in this table is less than the total sample, because Native American and Multiethnic providers were not included in the tests of significance due to their small numbers within the sample.
*p < .001, White, Non-Hispanic, Asian/Pacific Islander < Latina, African American.

What is the level of educational attainment and early childhood development-related training among licensed family child care providers?

Compared to San Francisco's overall female population, licensed family child care providers are more likely to have attended college and/or completed a two-year college degree. At either end of the educational spectrum, they are less likely to have completed high school only, or to have obtained a four-year or higher college degree.

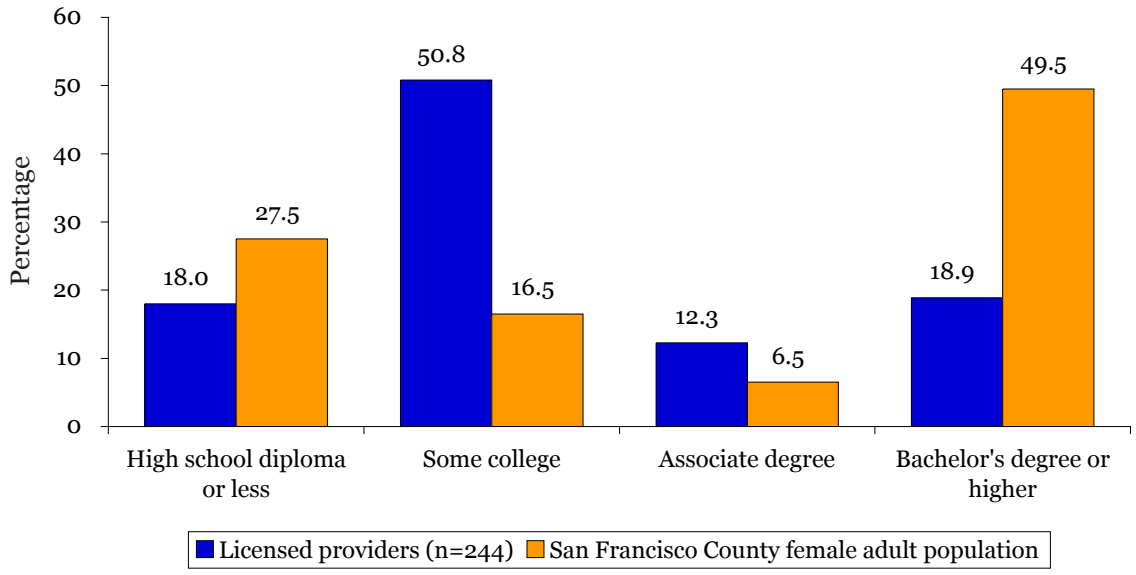
Nearly one-third of providers have obtained a two-year, four-year or graduate degree, typically not related to early childhood development. Nearly all providers report having completed at least one college credit related to early childhood development, and approximately three-fourths report participating in non-credit-bearing training related to that subject. More than one-half of providers report that their paid assistants have participated in some early childhood-related non-credit training or college courses.

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 providers' skill and knowledge play in promoting children's optimal development, considerable effort and investment have been devoted to encouraging and supporting providers to pursue professional development through CARES and other programs. With the movement toward publicly funded preschool programs, there is also an increased need to assess the size of the task of recruiting and preparing a sufficient number of teachers who meet higher educational and training standards – i.e., a bachelor's (BA) degree and early childhood certification. While not all preschool teachers will be drawn from the current early care and education workforce, many no doubt will come from its ranks. Although many states operate publicly funded preschools exclusively in center-based programs, many California communities, including San Francisco, are attempting to include licensed family child care providers in the delivery of new publicly funded preschool services. The educational and training background of licensed family child care providers therefore becomes an important factor in planning the level of resources needed to ensure a well-prepared preschool workforce.

Overall Educational Attainment of Family Child Care Providers

As is true nationally (Herzenberg, Price & Bradley, 2005), licensed family child care providers in San Francisco County typically have completed some college credits, and are more likely than the average female adult in the county to have done so. As shown in Figure 3.8, 50.8 percent of licensed providers reported completing some college-level work, compared to 16.5 percent of female adults in San Francisco County. Providers reported a higher completion rate for an AA degree (12.3 percent) than is true for the average female adult in the county (6.5 percent). Providers' completion rate for BA or higher degrees, however (18.9 percent), was less than one-half that of women in the county as a whole (49.5

Figure 3.8. *Estimated Educational Attainment of Licensed Providers Compared to the San Francisco County Female Adult Population*[a]



a US Census Bureau (2000)

percent). Only 2.5 percent of providers reported completing a graduate degree beyond the BA. Nearly one-half of licensed providers with a BA or higher degree[11] (46.7 percent) reported having obtained it through a foreign institution.

Education, Training and Certification Related to Early Childhood Development

Research findings on the contribution of education and training to provider competence and sensitivity suggest that formal higher education with a specific focus in early care and education leads 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 providers have received training, completed coursework, or participated in activities specifically focused on issues related to early childhood development.[12] To acquire a picture of the professional preparation of providers, we asked providers whether they:

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;
3. had participated in non-credit training related to early childhood development, and the extent of such training; and/or
4. had participated in a professional development program or obtained a professional credential.

11 Only 14.3 percent of providers with a foreign degree had earned a graduate degree.

12 "Early Childhood Development-related" was defined as courses or training in early childhood education, child development or psychology.

1) Degrees Related to Early Childhood Development

We examined the percentage of providers with AA and BA degrees who had obtained a degree related to early childhood development, and whether those with a BA or AA degree were more likely to have completed such a degree.

Overall, just 31.2 percent of all providers had completed an AA or BA degree or higher. Among those who had completed a degree, 38.2 percent reported that their highest degree was related to early childhood development. Nearly one-third of providers with a BA or higher degree (32.6 percent) and nearly one-half (46.7 percent) of providers with an AA degree had obtained a degree with an early childhood focus. (See Figure 3.9.)

2) College Credits Related to Early Childhood Development

We examined the percentage of providers who reported having completed at least one college credit in early childhood education. The vast majority of providers with education beyond high school (91.0 percent, SE=2.0) reported having completed at least one college credit in early childhood education, child development or psychology. Providers who reported their highest level of education as high school or less were not included in these calculations. However, when they are included, the proportion of all providers who have completed at least one college credit related to early childhood development falls to 74.6 percent (SE=3.0).

We next examined differences in the percentage of providers, at varying levels of college attainment (some college, or an AA or BA degree), who had completed some early childhood development-related college coursework. We also looked at differences in the amount of such coursework that providers at different levels of college attainment had completed.

Almost all providers had completed at least one course related to early childhood development. Those who had completed a BA degree were more likely to have completed at least one course related to early childhood development than were those who had only completed some college but not a degree. As shown in Figure 3.10, the mean number of college credits related to early childhood development was 33.5 units for providers with an AA degree and 27.7 units for those who had obtained a BA degree, compared to 16.3 units among those who had attended some college classes but had not completed a degree.

3) Non-Credit Training Related to Early Childhood Development

We examined the overall percentage of providers who reported having *ever* participated in non-college training related to early childhood development. Nearly three-fourths (74.1 percent) had done so. Next, we examined the percentage of providers at different levels of educational attainment who reported having *ever* participated in such non-credit training. Participation was similar among providers across educational levels, as shown in Figure 3.11.

Next, we examined how many providers had participated in non-credit training *during the last 12 months*, the amount of such training, and whether this amount varied by level of educational attainment. Over one-half of all providers (50.0 percent, SE=3.2) had participated

Figure 3.9. *Percentage of Licensed Providers, by Degree Attainment Related to Early Care and Education*

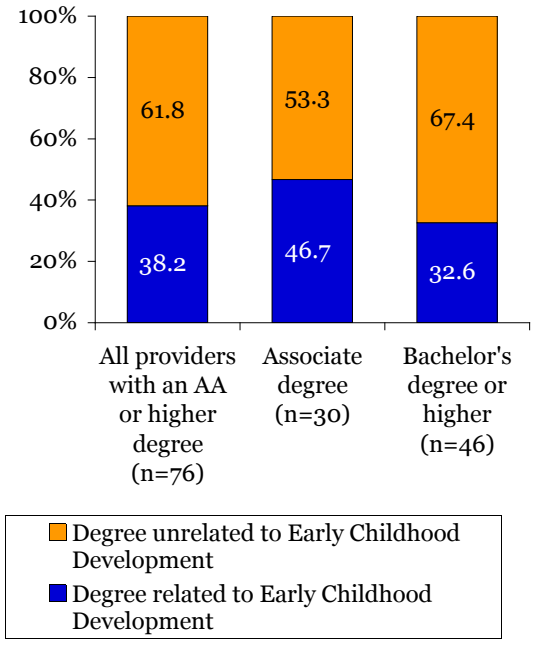
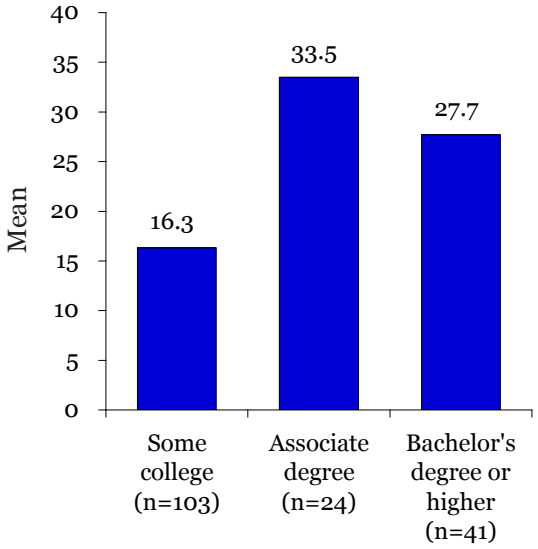
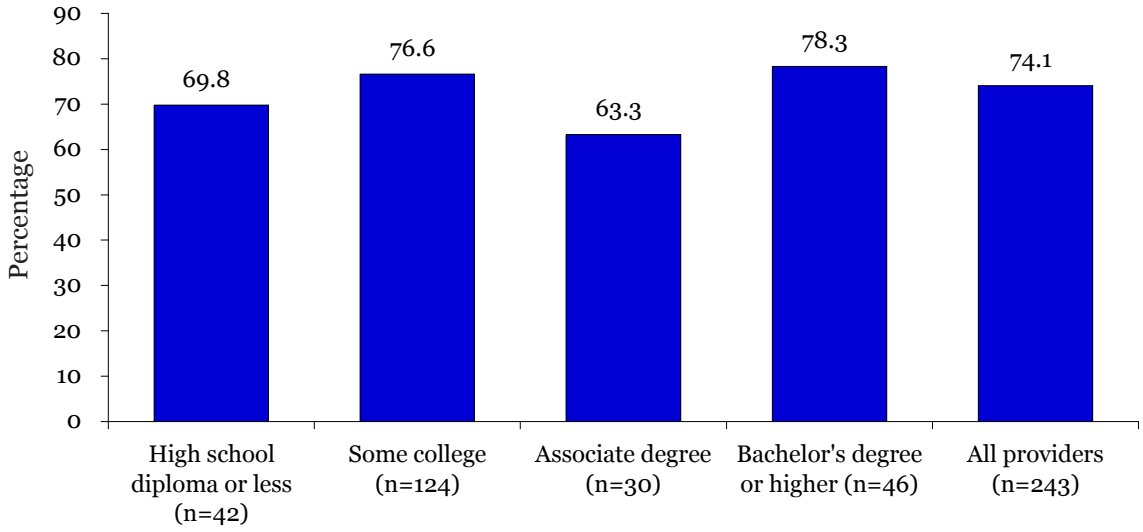


Figure 3.10. *Mean Number of Credits Among Licensed Providers Reporting Completion of College Credits Related to Early Care and Education, by Educational Level*



*$p < .001$, Some college < Associate degree, Bachelor's degree or higher.

Figure 3.11. *Percentage of Licensed Providers Reporting Completion of Non-Credit Training Related to Early Care and Education, by Educational Level*



in such non-credit training during the last 12 months, and among those who had, the average amount of such training was 14.1 hours during the last 12 months (SE=1.31). There were no differences among providers by level of educational attainment in the number of hours of non-credit early childhood development training completed in the previous year.

4) Provider Participation in Professional Development Activities or Certification

Another measure of providers' professional preparation is their involvement with professional development activities or certification processes. We asked providers about their involvement with four professional programs:

1. whether they had heard of or participated in San Francisco CARES;
2. whether they were accredited by the National Association for Family Child Care (NAFCC);
3. whether they held a Child Development Permit issued by the California Commission on Teacher Credentialing; and/or
4. whether they held a teacher credential issued by the California Commission on Teacher Credentialing and/or by an equivalent agency in another state.

We lack confidence, however, about the reliability of many of these particular findings, because the responses to some questions were disproportionate to the actual number of known program participants. Our estimate of provider participation in San Francisco CARES, based on provider reports, for example, exceeds the number of providers actually enrolled in the program. Similarly, our estimate of participation in NAFCC accreditation, based on providers' reports, exceeds the number of NAFCC-accredited providers in San Francisco County indicated in NAFCC records.[13] In addition, respondents reporting that they possessed a Child Development Permit included some who had not taken any college credit-bearing courses, even though these are required for obtaining an entry-level permit, again rendering the responses questionable. Other studies and program administrators have noted this phenomenon in the field, in which providers and other early childhood staff report participation in various programs or achievement of a particular status that does not reflect administrative records (Whitebook & Sakai, 2004). This may be due to confusion about the various names of professional development-related programs.

A teaching credential 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 those providers who had completed a BA or higher degree whether they held a teaching credential issued by the State of California or by another state. Among the 18.9 percent of providers (SE=2.5) who had completed a BA or higher degree, 13.0 percent (SE=5.0) reported holding a California teaching credential and 6.5 percent (SE=3.7) reported holding a credential from another state. Based on these findings, we estimate that only 2.5 percent (SE=1.0) of all providers in the state (including those with BA degrees, as well as those with lower levels of educational attainment) hold a California public school teaching credential.

13 According to NAFCC, four providers were accredited by their organization during the time of this study. However, 15.5 percent of providers (N=34) reported being accredited in our sample.

Professional Preparation of Family Child Care Paid Assistants

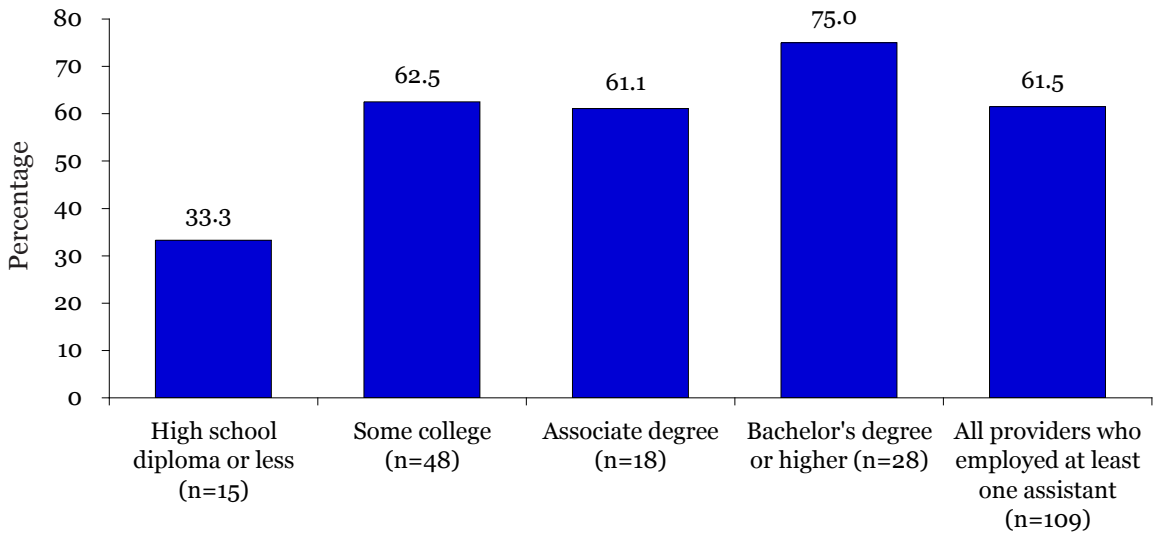
To further explore the educational background of adults in licensed family child care homes, we examined two issues:

1. the extent to which providers were working with paid assistants who had received some training or education related to early childhood development, and
2. whether providers who employed better-trained and /or educated paid assistants had themselves completed more education and training.

To explore the extent to which providers were working with paid assistants with some training or education related to early childhood development, we examined what percentage of providers reported that their paid assistants had earned college credits or participated in non-credit training. Providers reported that, on average, 55.1 percent (SE=4.5) of their paid assistants had earned college credits, and 58.3 percent (SE=4.7) had received non-credit training related to early childhood development. More than one-third (38.5 percent, SE=4.7) of providers with paid assistants reported that *none* of their paid assistants had earned such college credits, and 38.1 percent (SE=4.8) reported that *none* of their paid assistants had received non-credit training in this field. Approximately one-half (55.2 percent, SE=4.9) of providers reported that *all* of their paid assistants had received college credits related to early childhood development, and 48.6 percent (SE=4.8) reported that *all* of their paid assistants had participated in non-credit training.

To explore whether providers who employed better-trained and/or educated paid assistants had themselves completed more education and training, we calculated the percentage of providers who reported that *at least one* paid assistant in their employ had participated in education or training related to the care of young children, and compared these rates across educational levels. We found no statistically significant differences among providers by education level in this respect. (See Figure 3.12.)

Figure 3.12. *Percentage of Licensed Providers who Employed At Least One Paid Assistant with College Credits, by Provider Education*



How do levels of overall educational attainment, and of training related to early childhood development, vary among licensed family child care providers?

Overall educational attainment among providers varies by the number and characteristics of children served. Providers licensed to care for 14 children report higher levels of educational attainment than those licensed to care for eight children. Providers caring for children ages three to five report higher levels of educational attainment than those who care exclusively for younger or older children. Providers caring for at least one subsidized child are not likely to have attained higher levels of education than providers who do not care for any such children, but providers caring for at least one subsidized child are more likely to have participated in non-credit training related to early childhood development in the last twelve months.

Educational attainment also varies by ethnicity. Compared to their proportion of the overall sample, White, Non-Hispanic providers are over-represented among BA degree holders; Latinas are over-represented among those who report high school or less as their highest level of education; African American providers are concentrated among those with AA degrees; and Asian/Pacific Islanders are concentrated among those who have completed some college. Across all ethnic groups, providers report lower levels of BA or higher degree attainment than the average adult in San Francisco County. Providers speaking Spanish or Cantonese but not English have less education, on average, than those who speak English only, or English and a language other than Spanish or Cantonese.

Regardless of educational level, the average family child care provider is about 50 years old.

In the previous section, we described the educational attainment and specific early childhood-related training of San Francisco's overall population of licensed family child care providers. In this section, we explore differences among providers along these dimensions based on:

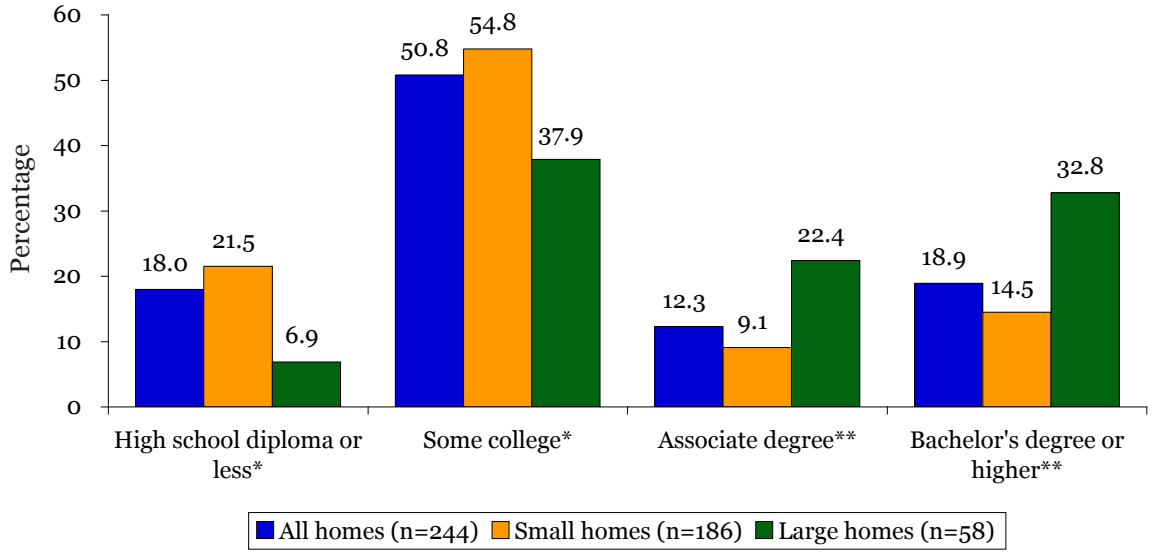
- the licensed capacity of their homes,
- the ages of children with whom they work,
- whether they receive public dollars to care for children of low-income families, and
- such provider demographic characteristics as age, ethnicity and language background.

Overall Educational Attainment, by Licensed Capacity

We explored whether providers licensed to care for larger or smaller groups of children varied from each other with respect to their level of education. We identified significant differences in this regard. As shown in Figure 3.13, providers licensed to care for eight children were more likely to report high school or less, or some college, and were less likely to report an AA or a BA, as their highest level of educational attainment than were providers licensed to care for 14 children.

We found that providers licensed to

Figure 3.13. *Educational Attainment of Licensed Providers, Countywide and by Licensed Capacity*



*p < .05, Small homes > large homes.
**p < .05, Small homes < large homes.

care for 14 children were more likely to have earned BA degrees (32.8 percent) than providers licensed to care for eight children (14.5 percent). Providers licensed to care for 14 children were also less likely to report their highest level of education as a high school diploma or less (6.9 percent) than providers licensed to care for eight children (21.5 percent).

Overall Educational Attainment, by Ages of Children Served

Because of proposed increases in qualifications for teachers or providers working in publicly funded preschool programs targeting four-year-old children, there is considerable interest in whether providers who currently work with preschoolers differ in educational attainment from those working with younger children. We examined whether providers who served children between three and five years of age, whether exclusively or with other children, differed as a group with respect to educational attainment from those who worked exclusively with younger or older children.

As noted earlier in this report, however, there were few family child care providers in the sample who served children of one age group exclusively. Overall, most providers served a mixed age of children, and most groupings included children between the ages of three and five. Only 2.5 percent of providers (SE=1.0) cared exclusively for children between the ages of three and five; overall, 64.5 percent (SE=3.1) cared for children ages three to five, usually with children from another age range as well. Providers who cared for at least one three- to five-year-old child were more likely to report an AA degree, and less likely to report some college, as their highest level of educational attainment than providers who did not care for any children of this

Table 3.11. *Educational Attainment of Licensed Providers, by Number of Children Served Ages 3 to 5 years*

	Percentage of licensed providers, by number of children served ages 3 to 5 years (SE)			
	None	1 or more*	*Total*	*Number of providers*
High school diploma or less	43.2 (7.5)	56.8 (7.5)	100.0	44
Some college	40.3 (4.4)	59.7 (4.4)	100.0	124
Associate degree	17.9 (7.3)	82.1 (7.3)	100.0	28
Bachelor's degree or higher	26.1 (6.5)	73.9 (6.5)	100.0	46
All providers	35.5 (3.1)	64.5 (3.1)	100.0	242

*$p < .05$, Associate degree > high school diploma or less, some college.

age range. (See Table 3.11.)

Overall Educational Attainment, and Early Childhood-Related Training, by Number of Children Receiving Government Subsidy

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 providers 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, however, licensed providers receiving subsidies through vouchers to care for children of low-income families are not required to meet higher educational or training standards than providers not receiving subsidies. Reflecting these current standards, we found that providers caring for at least one subsidized child were no more likely to have completed a degree than providers who reported caring for no children receiving public child care assistance. (See Table 3.12.) Providers caring for at least one subsidized child did not report higher levels of educational attainment. To the contrary, providers who cared for at least one subsidized child were more likely to report some college than a BA degree as their highest level of educational attainment.

We also examined whether providers' completion of college credits and/or participation in non-credit training related to early childhood development varied between providers caring for at least one subsidized child and those not caring for any children receiving public child care assistance. We found that providers caring for one or more subsidized children were no more likely to have completed college credits related

to early childhood development than were those caring for no subsidized children.

Approximately three-quarters of all providers (74.1 percent) reported having *ever* participated in non-credit early childhood training; those providers who reported caring for at least one child receiving public child care subsidy were no more likely to have ever taken such training than those not caring for such children (62.0 percent). However, those caring for at least one child receiving subsidy were more likely to have completed some non-credit hours related to early childhood development *in the last 12 months* (54.8 percent) than were those who did not report caring for any such children (41.5 percent). (See Figure 3.14.) In addition, among providers who had participated in non-credit early childhood training in the last 12 months, those who cared for at least one subsidized child had completed, on average, more hours of training (22.7 hours, SE=1.9) than those who did not care for such children (15.9 hours, SE=2.9).

Overall Educational Attainment, and Early Childhood-Related Training, by Provider Demographic Characteristics

Among providers with different levels of education and specific early childhood-related training, we examined such characteristics as age and tenure, ethnicity, and language background.

1) Overall Educational Attainment, by Age and Tenure

With respect to average age, we found no significant differences among groups of providers who reported different educational backgrounds. On average, providers were about 50 years old, whether they had completed a college degree, taken some college courses, or reported their highest level of education as high school or less.[14] Across educational levels, more than one-third of providers were 55 years of age or older. Providers' tenure in providing licensed family child care for pay did vary by educational level; those who reported an AA degree as their highest level of educational attainment reported longer tenure than those at other levels, as shown in Table 3.13. There were no differences among providers with or without a degree focused on early childhood development with respect to age and tenure.

2) Overall Educational Attainment, by Ethnicity

We examined provider ethnicity and educational background along three dimensions:

- the ethnic distribution of providers *across* different levels of formal education;
- the distribution of educational attainment *within* various ethnic groups, and
- the ethnic distribution of providers at different levels of education, compared to that of San Francisco County's adult population.

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

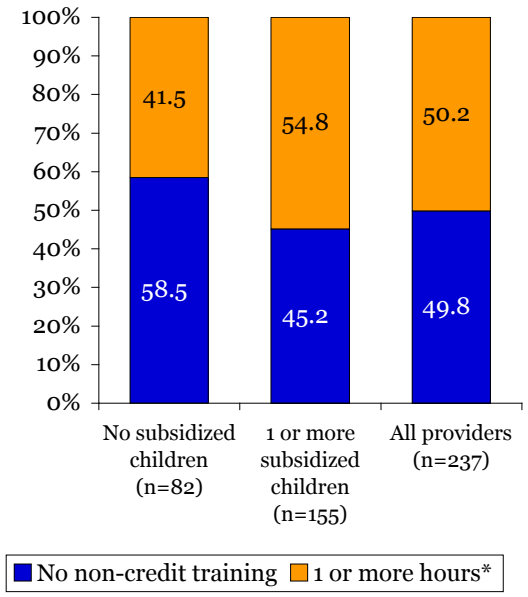
14 On average, those who had completed a graduate degree were 48.5 years old, with an average tenure in the field of 9.5 years. None had been in the field for 24 months or less.

Table 3.12. *Educational Attainment of Licensed Providers, by Number of Children Receiving Publicly Subsidized Child Care*

	Percentage of licensed providers, by number of publicly subsidized children (SE)		
	None	1 or more	All providers
High school diploma or less	18.3 (4.28)	17.4 (2.99)	17.7 (2.45)
Some college*	40.2 (5.43)	56.5 (3.91)	51.0 (3.21)
Associate degree	12.2 (3.62)	12.4 (2.60)	12.3 (2.11)
Bachelor's degree or higher**	29.3 (5.03)	13.7 (2.71)	18.9 (2.52)
Total	100.0	100.0	100.0
Number of providers	82	161	243

*$p < .05$, 1 or more > none.
**$p < .05$, 1 or more < none.

Figure 3.14. *Percentage of Licensed Providers Reporting Completion of Non-Credit Training in the Last 12 Months Related to Early Care and Education, by Number of Publicly Subsidized Children Served*



*$p < .05$, 1 or more subsidized children > no subsidized children.

Table 3.13. *Mean Years of Tenure by Educational Attainment of Licensed Providers*

	Mean (SE)
High school diploma or less	8.8 (0.96)
Some college	9.1 (0.72)
Associate degree	14.1 (1.61)
Bachelor's degree or higher	9.8 (1.10)
Number of providers	244

*p < .05, Associate degree > high school diploma or less, some college, Bachelor's degree or higher.

attainment.

The ethnic distribution of providers varied across levels of educational attainment, as shown in Figure 3.15. White, Non-Hispanic providers comprised 16.7 percent of all providers, but they comprised only 7.0 percent of providers who had completed high school or less, and 7.8 percent of providers who had completed some college. In contrast, they comprised 25.0 percent of those who had completed an AA degree, and 45.2 percent of those who had completed a BA degree. Latinas comprised 25.0 percent of all providers, but 65.1 percent of those whose highest level of education was high school, and only 14.3 percent of those with a BA degree or higher. African American providers comprised 22.4 percent of all providers, but only 13.9 percent of those who had completed high school or less, and 35.7 percent of those with an AA degree, as shown in Figure 3.15. Asian Americans constituted 36.0 percent of all providers, but they comprised 51.3 percent of those who reported some college as their highest level of educational attainment.[15]

In determining the distribution of educational attainment (as represented by college attendance and completion of degrees) *within* various ethnic groups, we found that approximately 90 percent of White, Non-Hispanic, African American, and Asian/Pacific Islander providers reported completing some college-level work. The proportion of providers in each group who had completed a two- or four-year degree or higher, however, varied considerably. Over two-thirds of White, Non-Hispanic providers (68.4 percent) had completed either an AA or a BA degree, compared to 31.4 percent of African Americans, 20.7 percent of Asian/Pacific Islanders, and 19.3 percent of Latina providers. (See Figure 3.16.)

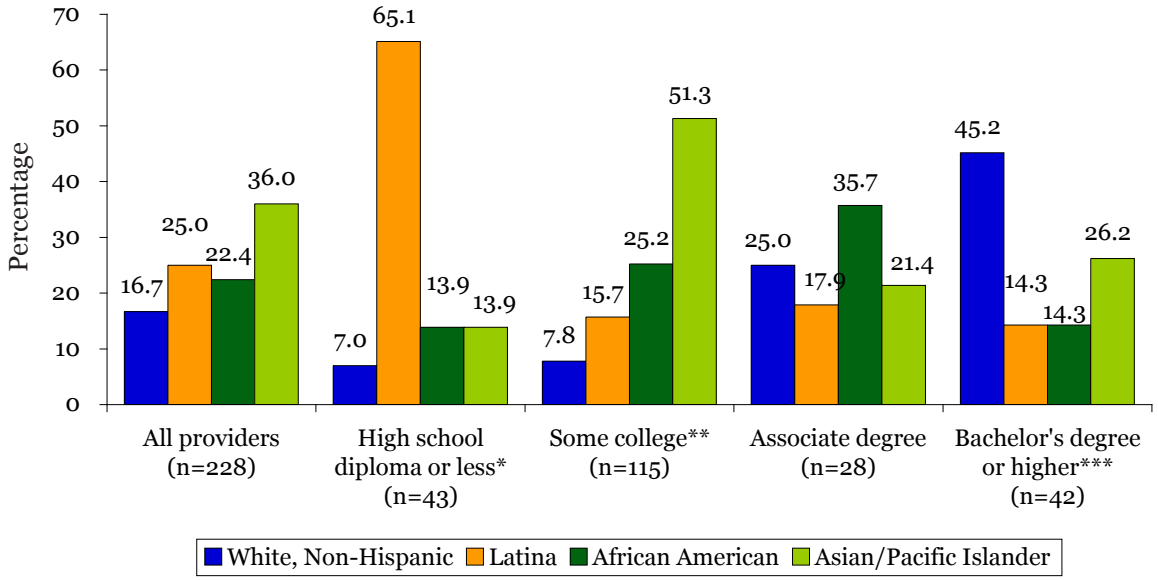
Next, we sought to determine the ethnic distribution of licensed providers at different levels of education, as compared to San Francisco County's overall adult population. For example, were Latina providers more or less likely than other Latino adults in San Francisco County to have achieved a BA degree? To make this comparison, we examined data from the 2000 U.S. Census on San Francisco County adults' attainment of BA or higher degrees. Across ethnic groups, providers were less likely to report a BA or higher as their highest level of educational attainment than the average San Francisco County adult representing the same ethnic group. African American (11.8 percent), Asian (13.4 percent), Latina (10.5 percent) and White, Non-Hispanic (50.0 percent) providers had attained BA or higher degrees at a lesser rate than their counterparts in the overall county population (all African American adults, 18.1 percent; all Asian adults, 31.6 percent; all Latino adults, 20.3 percent; and all White, Non-Hispanic adults, 50.0 percent).

3) Overall Educational Attainment, by Language

Since many of San Francisco County'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

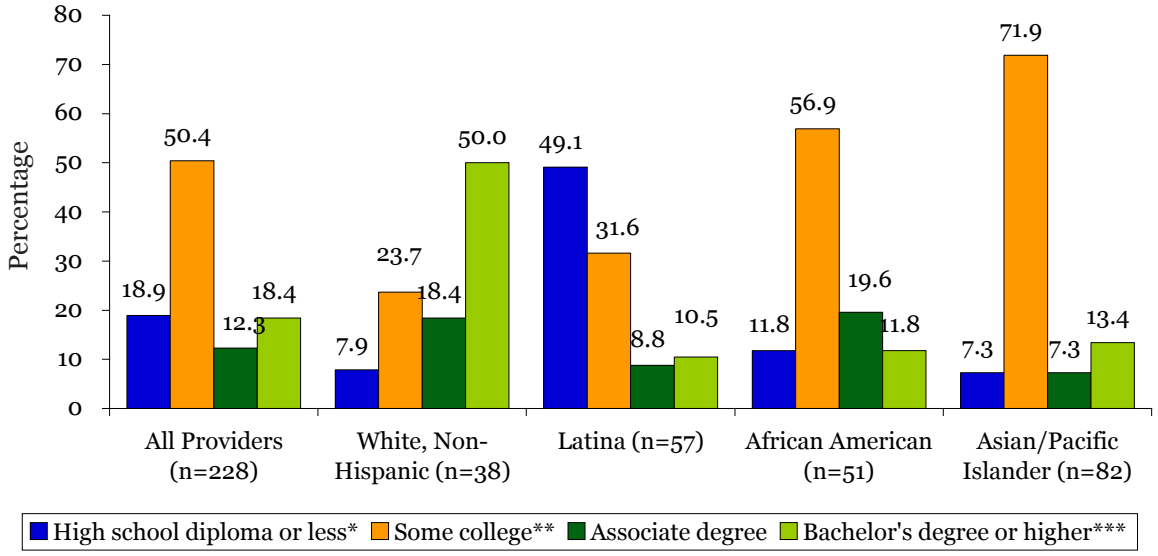
15 Approximately two-thirds of those who had completed a graduate degree were White, Non-Hispanic, but the sample size was very small.

Figure 3.15. *Ethnic Distribution of Licensed Providers, by Educational Level*



Tests of significance were only performed for White, Non-Hispanic, Latina, African American, and Asian/Pacific Islander provider groups.
*$p < .001$, Latina > White, Non-Hispanic, African American, Asian/Pacific Islander.
**$p < .001$, Asian/Pacific Islander > White, Non-Hispanic, Latina, African American.
***$p < .001$, White, Non-Hispanic > Latina, African American, Asian/Pacific Islander.

Figure 3.16. *Educational Attainment of Licensed Providers, by Ethnicity*



Tests of significance were only performed for White, Non-Hispanic, Latina, African American, and Asian/Pacific Islander provider groups.
*$p < .001$, Latina > White, Non-Hispanic, Asian/Pacific Islander.
**$p < .001$, Asian/Pacific Islander > White, Non-Hispanic, Latina; African American > White, Non-Hispanic.
***$p < .001$, White, Non-Hispanic > Latina, African American, Asian/Pacific Islander.

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 providers 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 since interviews were conducted only in Spanish, Cantonese or English, providers who are fluent in other languages but do not speak English, Spanish, or Cantonese are not represented in this study. In addition, we note again that language ability was self-reported by providers, rather than independently verified; we also were unable to determine whether or not there was a linguistic match between providers and the children they served.

Our analyses focused on four issues:

1. the percentage of providers at different educational levels with the self-reported capacity to communicate with children in English and in an additional language;
2. the levels of educational attainment and early childhood training among providers with the self-reported capacity to communicate with children in Spanish and/or in Spanish and English;
3. the levels of educational attainment and early childhood training among providers with the self-reported capacity to communicate with children in Cantonese and/or in Cantonese and English; and
4. the self-reported language capacity of providers who had obtained a college degree in a foreign institution.

Approximately one-third of all providers had the self-reported capacity to communicate with children and families in English and in an additional language. Providers who reported speaking English and Spanish most typically reported high school or less as their highest level of educational attainment. Providers who spoke Cantonese and English were more evenly distributed across the educational spectrum, with somewhat more reporting the attainment of an AA or a BA or higher degree. The majority of providers who spoke English and a language other than Spanish or Cantonese, however, typically reported a BA or higher degree as their highest level of educational attainment. Among all providers, only 9.0 percent spoke English and another language besides Spanish or Cantonese fluently, but 28.3 percent of providers with a BA degree or higher did so. (See Table 3.14.)

In addition, the majority of providers who spoke only Spanish reported high school or less as their highest level of education. Among all providers, only 8.6 percent spoke only Spanish, but 27.3 percent of providers who reported high school or less as their highest level of educational attainment did so. The majority of providers who spoke only Cantonese, or Cantonese and another language other than English or Spanish, reported some college as their highest level of educational attainment. Among all providers, 22.5 percent spoke only Cantonese, or Cantonese and another language other than English or Spanish, but 38.7 percent of providers who

reported "some college" as their highest level of educational attainment did so. (See Table 3.14.) There were no language differences between those with a degree related to early childhood and those with a degree in other subjects.

Approximately one-half (46.7 percent) of providers who reported a BA or higher degree as their highest level of educational attainment had earned their degree from a foreign institution. The majority of providers who spoke a language other than or in addition to English had earned their degree from a foreign institution, while nearly all (94.4 percent) speakers of English only had earned their degrees inside the United States. (See Table 3.15.)

Table 3.14. *Reported Language Fluency of Licensed Providers, by Educational Level*

	Percentage (SE)				
	High school diploma or less	Some college	Associate degree	Bachelor's degree or higher	All providers
English	15.9 (5.53)	37.1 (4.35)	60.0 (8.96)	41.3 (7.27)	36.9 (3.10)
Spanish[a]	27.3 (6.73)	4.0 (1.77)	3.3 (3.28)	6.5 (3.65)	8.6 (1.80)
Cantonese[a]	11.4 (4.79)	38.7 (4.38)	3.3 (3.28)	2.2 (2.5)	22.5 (2.68)
English and Spanish[a]	36.4 (7.27)	10.5 (2.76)	13.3 (6.22)	10.9 (4.60)	15.6 (2.33)
English and Cantonese[a]	2.3 (2.25)	6.5 (2.21)	13.3 (6.22)	10.9 (4.60)	7.4 (1.68)
English, plus an additional language other than Spanish or Cantonese	6.8 (3.81)	3.2 (1.59)	6.7 (4.56)	28.3 (6.65)	9.0 (1.84)
Total	100.0	100.0	100.0	100.0	100.0
Number of providers	44	124	30	46	244

Note. Based on the self-assessment of 244 providers.
[a] Provider may speak an additional language other than English.

Table 3.15. *Percentage of English-speaking Licensed Providers Obtaining Bachelor's Degree or Higher from Foreign Institutions*

	Percentage (SE)		
	Speaks English only	Speaks a language other than or in addition to English	All providers with a Bachelor's degree or higher
Foreign institution	5.6 (5.46)	74.1 (8.53)	46.7 (7.52)
U.S. institution	94.4 (5.46)	25.9 (8.53)	53.3 (7.52)
Total	100.0	100.0	100.0
Number of providers	18	27	45

Note. Based on the self-assessment of 45 providers.

How well prepared are licensed providers to care for and educate children who are dual language learners or have special needs?

Only one in five licensed providers have participated in non-credit training or have completed college coursework focused on dual language learning in young children, despite the growing numbers of young children in San Francisco County who speak a language other than English in their homes. Providers who speak English only are less likely to have participated in such training than providers who speak another language besides or in addition to English.

Many more providers are trained to work with children with special needs. More than one-half of all providers have participated in non-credit training, and nearly one-half have completed college credits, related to children with special needs. Those caring for at least one such child are more likely to be trained in this area, and those with college degrees who have participated in courses have completed more credits than those with some college, short of a degree.

As San Francisco County considers how best to prepare its workforce to meet the needs of young children across the state, 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 licensed family child care providers, our interview did allow some initial exploration of providers' professional preparation related to dual language learners and/or children with special needs.

Preparation to Work with Young Children Acquiring a Second Language

In 2005, nearly one-half of children entering public kindergarten in San Francisco County were estimated to be dual language learners (California Department of Education, 2006). According to recent projections of the growth of this segment of California's population over the next several decades (Hill, Johnson & Tafoya, 2004), it is likely that soon the majority of young children in many counties receiving early care and education services 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 providers spoke, not the languages spoken by children in their care. We know, however, from anecdotal reports that a sizeable portion of providers in many areas of the state 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.

Our goal was to ascertain the extent to which providers had received any training focused on this topic, by asking whether they had participated in relevant credit-bearing courses and/or non-credit training. Most had not: only 18.4 percent of providers reported that they had received non-credit training, and only 19.3 percent of providers reported that they had completed college coursework, focused on dual language learning in young children. (See Tables 3.16 and 3.18.)

Providers who *had* participated in non-credit training reported, on average, participating in 23.7 hours of training on this topic. (See Table 3.17.) Among those who had completed college credits related to dual language learning, the average number of credits was 8.7. (See Table 3.19.) Those who had completed a BA degree had completed more credits than those with only some college as their highest level of educational attainment.

Several groups of providers were more likely than others to have completed at least one hour of training or one college credit related to dual language learning: those licensed to care for 14 children, rather than eight; those who spoke English and another language, or only a language other than English, rather than those who spoke English only. (See Table 3.20.)

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,[16] 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 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 how much professional preparation licensed family child care providers had received related to children with special needs. Specifically, we determined:

1. the percentage of providers who had

16 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 providers 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).

Table 3.16. *Percentage of Licensed Providers Reporting Completion of Non-Credit Training Related to Dual Language Learning Children*

	Percentage (SE)
None	81.9 (2.5)
1 or more hours	18.1 (2.5)
Total	100.0
Number of providers	239

Table 3.17. *Mean Hours of Training Among Licensed Providers Reporting Completion of Non-Credit Training Related to Dual Language Learning Children*

	Mean (SE)
Mean hours of training	23.8 (9.39)
Number of providers	44

Table 3.18. *Percentage of Licensed Providers Reporting Completion of College Credits Related to Dual Language Learning Children*

	Percentage (SE)
	Providers with some college or higher
None	80.9 (2.9)
1 or more credits	19.2 (2.9)
Total	100.0
Number of providers	187

Table 3.19. *Mean Number of Credits Among Licensed Providers Reporting Completion of College Credits Related to Dual Language Learning Children*

	Mean (SE)
Mean number of credits	8.7 (1.70)
Number of providers	36

Table 3.20. *Percentage of Licensed Providers Reporting Completion of Credit or Non-Credit Training Related to Dual Language Learning Children, by Language Fluency and Licensed Capacity*

		Percentage of licensed providers, by number of credits or hours in dual language learning (SE)			
		None	1 or more	Total	Number of providers
By licensed capacity*	Small homes	78.1 (3.06)	21.9 (3.06)	100.0	183
	Large homes	64.8 (6.51)	35.2 (6.51)	100.0	54
	All providers	75.1 (2.81)	24.9 (2.81)	100.0	237
By language fluency**	Does not speak Spanish	71.5 (3.38)	28.5 (3.38)	100.0	179
	Speaks Spanish	86.2 (4.54)	13.8 (4.54)	100.0	58
	Does not speak Cantonese	83.1 (2.91)	16.9 (2.91)	100.0	166
	Speaks Cantonese	56.3 (5.90)	43.7 (5.90)	100.0	71
	Speaks English only	87.5 (3.53)	12.5 (3.53)	100.0	88
	Speaks non-English language	67.8 (3.84)	32.2 (3.84)	100.0	149
	All providers	75.1 (2.81)	24.9 (2.81)	100.0	237

Note. Language fluency based on the self-assessment of 151 providers.
* $p < .05$, Large homes > small homes (1 or more).
** $p < .05$, Speaks Spanish < does not speak Spanish; speaks Cantonese > does not speak Cantonese; speaks non-English language > speaks English only (1 or more).

participated in special needs-related training or college courses,
2. whether providers who reported caring for at least one child with special needs were more likely to have participated in relevant education and training, and
3. differences in overall educational attainment between providers who cared for children with special needs and those who did not, as well as those who had or had not participated in special needs-related training or education.

Providers' Overall Levels of Professional Development Related to Special Needs

We found that almost two-thirds of all licensed providers in the county (63.1 percent), whether they served any children with special needs or not, had participated either in non-credit training or in college coursework related to special needs. (See Table 3.21.) Approximately one-half of all providers (52.5 percent) reported that they had participated in non-credit training related to special needs, and their average number of training hours was 17.5. (See Tables 3.22 and 3.23.) Fewer providers (45.4 percent) had participated in college credit-bearing courses on this subject, and among them, the average number of credits received was 4.6. (See Table 3.24.)

Professional Development Related to Special Needs, by Number of Children with Special Needs Served

Overall, about one-fifth of providers reported caring for at least one child with special needs, and of these providers, 76.6 percent had participated either in non-credit training or in college coursework related to special needs. (See Table 3.21.)

Non-Credit Training Related to Special Needs

Providers caring for one or more children with special needs had participated in more non-credit training than providers caring for no such children. (See Table 3.22.) Among those with at least one child with special needs in their care, 67.4 percent had participated in relevant non-credit training, and 60.5 percent had completed at least eight hours of such training, whereas only 49.2 percent of providers serving no children with special needs had received such non-credit training, and 40.9 percent had completed at least eight training hours. (See Tables 3.22 and 3.25.)

College Credits Related to Special Needs

When examining only those providers who had completed some education beyond high school, we found that 45.4 percent had completed one or more college credits related to working with children with special needs. (See Table 3.24.)

Providers' Overall Educational Attainment, by Number of Children with Special Needs Served

Providers serving children with special needs were no more likely to report higher levels of overall educational attainment than providers not serving such children. (See Table 3.26.)

Table 3.21. *Percentage of Licensed Providers Reporting Completion of Credit or Non-Credit Training Related to Children with Special Needs, by Number of Such Children Served*

	Percentage of licensed providers, by number of children with special needs (SE)		
	No children	1 or more children	All providers
0 credits or hours*	40.2	23.4	36.9
	(3.53)	(6.19)	(3.12)
1 or more credits or hours**	59.8	76.6	63.1
	(3.53)	(6.19)	(3.12)
Total	100.0	100.0	100.0
Number of providers	194	47	241

*$p < .05$, No children > 1 or more children.
**$p < .05$, 1 or more children > no children.

Table 3.22. *Percentage of Licensed Providers Reporting Completion of Non-Credit Training Related to Children with Special Needs, by Number of Such Children Served*

	Percentage of licensed providers, by number of children with special needs (SE)		
	No children	1 or more children	All providers
0 hours*	50.8	32.6	47.5
	(3.61)	(7.16)	(3.26)
1 or more hours**	49.2	67.4	52.5
	(3.61)	(7.16)	(3.26)
Total	100.0	100.0	100.0
Number of providers	193	43	236

*$p < .05$, No children > 1 or more children.
**$p < .05$, 1 or more children > no children.

Table 3.23. *Mean Hours of Training Among Licensed Providers Reporting Completion of Non-Credit Training Related to Children with Special Needs, by Number of Such Children Served*

	Mean hours of training, by number of children with special needs (SE)			
	No children	1 child	2 or more children	All children
Providers with 1 or more hours*	15.4	22.5	26.8	17.5
	(1.23)	(4.27)	(8.40)	(1.37)
Number of providers	95	18	11	124
All providers**	7.6	14.0	21.1	9.2
	(0.82)	(3.34)	(7.21)	(0.92)
Number of providers	193	29	14	236

*$p < .05$, 2 or more children > no children.
**$p < .001$, 1 child, 2 or more children > no children.

Table 3.24. *Percentage of Licensed Providers Reporting Completion of College Credits Related to Children with Special Needs, by Number of Such Children Served*

		Percentage of licensed providers, by number of children with special needs (SE)		
		None	1 or more	All providers
Providers with some college or higher	0 credits	55.8 (4.01)	50.0 (7.93)	54.6 (3.58)
	1 or more credits	44.2 (4.01)	50.0 (7.93)	45.4 (3.58)
Total		100.0	100.0	100.0
Number of providers		154	40	194
All providers	0 credits	65.3 (3.41)	56.3 (7.17)	63.5 (3.09)
	1 or more credits	34.7 (3.41)	43.8 (7.17)	36.5 (3.09)
Total		100.0	100.0	100.0
Number of providers		196	48	244

Table 3.25. *Hours of Training Among Licensed Providers Reporting Completion of Non-Credit Training Related to Children with Special Needs, by Number of Such Children Served*

	Percentage of licensed providers, by number of children with special needs (SE)		
	None*	1 or more**	All providers
0 hours	50.8 (3.61)	32.6 (7.16)	47.5 (3.26)
1 - 7 hours	8.3 (1.99)	7.0 (3.89)	8.1 (1.77)
8 or more hours	40.9 (3.55)	60.5 (7.47)	44.5 (3.24)
Total	100.0	100.0	100.0
Number of providers	193	43	236

Table 3.26. *Educational Attainment of Licensed Providers Serving Children with Special Needs, by Number of Such Children Served*

	Percentage of licensed providers, by number of children with special needs (SE)		
	None	1 or more	All providers
High school diploma or less	18.9 (2.80)	14.6 (5.10)	18.0 (2.47)
Some college	50.0 (3.58)	54.2 (7.21)	50.8 (3.21)
Associate degree	11.2 (2.26)	16.7 (5.39)	12.3 (2.11)
Bachelor's degree or higher	19.9 (2.86)	14.6 (5.10)	18.9 (2.51)
Total	100.0	100.0	100.0
Number of providers	196	48	244

Discussion

This report provides the most recent comprehensive profile of licensed family child care in the City and County of San Francisco. 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 constitutes the licensed family child care workforce in San Francisco?
2. What are the characteristics of children served by San Francisco's licensed family child care providers?
3. What is the level of educational attainment and early childhood development-related training among licensed family child care providers?
4. How do levels of overall educational attainment, and of specific training related to early childhood development, vary among licensed family child care providers?
5. How well prepared are licensed providers to care for and educate children who are dual language learners or have special needs?

1) Who constitutes the licensed family child care workforce in San Francisco?

In San Francisco, the typical licensed family child care provider is a woman of color of about age 50 who has been taking care of children in her home for nearly ten years. She usually works without a paid assistant. She is likely to speak English and one other language, most often Spanish or Cantonese. This profile varies, however, depending on the licensed capacity of her home. Those operating large homes, for example, are likely to be older than operators of small homes, and to have been operating their home business for a longer period of time.

Demographically, San Francisco's licensed family child care workforce is characterized by both diversity and uniformity.

On one hand, licensed providers are an ethnically and linguistically diverse group, more closely approximating the backgrounds of children and families than teachers in the K-12 public school system. This rich diversity in language and culture mirrors the cultural and linguistic makeup of the county, and provides a promising foundation on which to revamp and expand services for young children. But in light of 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, linguistic 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 current and future members of the workforce who are learning English as a second language.

On the other hand, family child care providers are virtually all women, and are in roughly the same age group. Both of these issues speak to potential problems facing the early care and education field.

The age of this workforce raises questions about the supply of child care services in the future. Currently the pool of providers appears to be self-replenishing, with a relatively constant number of providers entering and leaving the field from year to year, as determined by the stability of licensed capacity. But over one-third of the family child care workforce is approaching retirement age, and only one percent of family child care providers are under 30, underscoring the need for more proactive recruitment strategies than are now in place, particularly geared to younger people.

With respect to gender, it has been noted repeatedly that the absence of male role models can be detrimental for young children, particularly for those without a constant adult male presence in their lives. While the gender balance of the family child care workforce is not likely to shift dramatically, given the complexity of gender-based discrimination and opportunity, the inclusion of more men in this field is worthy of attention as part of ongoing recruitment strategies. It is also possible that there is a greater male

presence in family child care homes than we could ascertain from our data, but due to the interview length, we did not collect data about the gender of paid assistants or of family members who regularly interact with the children; further research could easily answer this question.

In addition, rising housing costs further underscore the importance of expanded recruitment and retention strategies. Previous research has identified a high level of home ownership among licensed providers (Whitebook et al., 2002), in part necessitated by the challenges renters often face in seeking to operate a family child care business – for example, securing a landlord's cooperation in making the necessary renovations or repairs in order to meet licensing standards. While providers were more likely to own their homes than the average adult in San Francisco, the supply of licensed family child care could be in danger as home ownership grows beyond the reach of new or potential providers in the city's very expensive housing market.

This study breaks new ground by focusing attention on paid family child care assistants, a group not often included in discussions of the early care and education workforce. The finding that most providers do not work with a paid assistant may give the impression that family child care employees (in contrast to licensed providers themselves) play a small role in the delivery of early care and education. Yet our estimate of approximately 375 paid assistants in San Francisco signals that this segment of the workforce deserves greater attention with respect to professional preparation and working conditions. Previous research (Whitebook & Sakai, 2004) has shown that the presence of a greater proportion of highly trained staff within a child care setting contributes to the overall quality of a program and promotes staff retention. Efforts to target and encourage paid assistants, as well as providers, to learn more about early childhood development should be encouraged.

2) What are the characteristics of children served by San Francisco's licensed family child care providers?

In San Francisco County, nearly 1,000 licensed family child care providers and paid assistants care for nearly 4,000 children, mostly in mixed-age groups. More than four-fifths of the children cared for by licensed providers are not yet in kindergarten, and more than one-half of them are age two or younger. Two-thirds of licensed providers report caring for at least one child who receives public child care assistance. One-fifth of licensed providers report caring for at least one child with special needs.

Policy makers and planners typically rely on data about *licensed capacity*, rather than *enrollment*, as a proxy for supply. Previous research has suggested that capacity typically overestimates enrollment (Whitebook et al., 2002), and our study replicated this pattern. Although our data do not permit us to assess why enrollment levels fall below licensed capacity, they nonetheless allow for better-informed calculations by those planning new initiatives or expanding current services. Further research could help clarify the reasons for lower enrollment rates, and could assess whether reaching licensed capacity is actually likely or even desirable. Many providers may wish to care for more children than they do, but others may feel, despite what licensing permits, that their business operates best with smaller numbers of children.

Our study provides a detailed picture of the children in licensed family child care in terms of age, special needs, and whether their families receive public subsidies to cover the cost of their care.

With respect to age, the standard practice among licensed providers statewide is to care for a mixed-age group of children, which almost always includes children between the ages of three and five. Typically, providers care for more children in the three-to-five age range than under age two, largely because of differing staffing requirements for serving infants and toddlers. This mixed-age pattern has evolved as a good business practice, and it raises questions about the possible impact on the age composition and financial stability of family child care homes if more center-based options become available for four-year-olds in publicly funded preschool. Issues to be considered include: the impact of more four-year-olds currently enrolled in family child care attending centers for part of the day; the impact on the supply of infant/toddler care if providers choose to serve four-year-olds exclusively; the extent of career opportunities for family child care providers who meet preschool standards and receive higher reimbursements; and the availability of educational and quality improvement pathways for providers who choose to upgrade their programs to become either publicly funded 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.

Two-thirds of all licensed providers in San Francisco currently care for at least one child who receives a voucher to cover the cost of child care services. This is remarkable, considering that little more than two decades ago, public

dollars were not permitted to be spent in licensed family child care homes. This sea change has gone hand-in-hand with the increase of public vouchers flowing to other previously excluded types of care, including license-exempt home-based care and for-profit center care. In all such cases, the question arises whether public dollars are being used to provide high-quality services to young children, since voucher recipients are not required to meet any standards beyond basic licensing requirements, which are widely acknowledged as minimal at best. 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 homes 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 San Francisco's licensed family child care providers?

Compared to San Francisco's overall female population, licensed family child care providers are more likely to have attended college and/or completed a two-year college degree. At either end of the educational spectrum, they are less likely to have completed high school only, or to have obtained a four-year or higher college degree.

Nearly one-third of providers have obtained a two-year, four-year or graduate degree, typically not related to early childhood development. Nearly all providers report having completed at least one college credit related to early childhood development, and approximately three-fourths report participating in non-credit-bearing training related to that subject. More than one-half of providers report that their paid assistants have participated in some early childhood-related non-credit training or college courses.

People hold conflicting images of the educational and professional preparation of the licensed family child care workforce. Some see family child care providers as a group with no or limited college-level experience or training, and others point to the increasing numbers of providers with relatively high levels of educational attainment and involvement in early childhood-related training.

Our data suggest that both these images reflect the reality of the current workforce. Nearly all San Francisco providers have at least one college-level training in early childhood education, while one-third have earned an AA or a BA degree or higher. With respect to proposed educational requirements for participating as a teacher in publicly funded preschool, it is difficult to speak of providers as a uniform group. For some, the proposed new requirements may be within reach or may have been already met, while others may not find it realistic to pursue this new opportunity.

In contrast to the pattern for providers across the state, licensed providers were less likely to have participated in non-credit training related to early childhood development than college courses, suggesting that San Francisco's professional development system is making efforts to help providers access higher education and to pursue professional opportunities that require college-based benchmarks, such as San Francisco CARES. Currently, City College of San Francisco, in collaboration with the local resource and referral agency, like many community colleges across the state, is working to make its course offerings more useful and available to family child care providers, and this is a positive development that other counties in California can learn from.

4) How do levels of overall educational attainment, and of training related to early childhood development, vary among licensed family child care providers?

Overall educational attainment among providers varies by the number and characteristics of children served. Providers licensed to care for 14 children report higher levels of educational attainment than those licensed to care for eight children. Providers caring for children ages three to five report higher levels of educational attainment than those who care exclusively for younger or older children. Providers caring for at least one subsidized child are not likely to have attained higher levels of education than providers who do not care for any such children, but providers caring for at least one subsidized child are more likely to have participated in non-credit training related to early childhood development in the last twelve months.

Educational attainment also varies by ethnicity. Compared to their proportion of the overall sample, White, Non-Hispanic providers are over-represented among BA degree holders; Latinas are over-represented among those who report high school or less as their highest level of education; African American providers are concentrated among those with AA degrees; and Asian/Pacific Islanders are concentrated among those who have completed some college. Across all ethnic groups, providers report lower levels of BA or higher degree attainment than the average adult in San Francisco County. Providers speaking Spanish or Cantonese but not English have less education, on average, than those who speak English only, or English and a language other than Spanish or Cantonese.

Regardless of educational level, the average family child care provider is about 50 years old.

A well-trained, culturally diverse and competent workforce serving young children 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.

With regard to educational attainment by ethnicity, our data suggest that it is hard to generalize across minority groups, since Asian/Pacific Islander, African American and Latina providers demonstrate very different patterns. Across ethnic groups, the overall educational attainment of San Francisco's family child care workforce is less than that of the local adult population. Latina providers who spoke Spanish only, and Asian/Pacific Islander providers who spoke Cantonese only, were concentrated at the lowest level of the educational spectrum. Current efforts in the county to expand higher education offerings, and to engage community agencies in offering credit-bearing training, should be strengthened and expanded. Many in San Francisco recognize this phenomenon and are engaged in efforts to make college more accessible to Latina and

Asian/Pacific Islander providers, in part by providing entry-level early childhood courses in Spanish and Cantonese, and intentionally using early childhood-related content as a vehicle for helping Spanish speakers build the English skills necessary to complete college degrees.

Our findings confirm that almost all family child care providers serve children across the 0-5 age span, and thus they underscore how important it is for early childhood-related training to focus on infants and toddlers as well as preschoolers. At the same time – since many licensed providers, whether they choose to become publicly funded preschool sites or not, are likely to continue caring for preschool 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 for four-year-olds in publicly funded preschool.

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

Only one in five licensed providers have participated in non-credit training or have completed college coursework focused on dual language learning in young children, despite the growing numbers of young children in San Francisco County who speak a language other than English in their homes. Providers who speak English only are less likely to have participated in such training than providers who speak another language besides or in addition to English.

Many more providers are trained to work with children with special needs. More than one-half of all providers have participated in non-credit training, and nearly one-half have completed college credits, related to children with special needs. Those caring for at least one such child are more likely to be trained in this area, and those with college degrees who have participated in courses have completed more credits than those with some college, short of a degree.

Our data show that the vast majority of family child care providers in San Francisco have not engaged in 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 providers in the county 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, extended this training program. In San Francisco, these funds combined with local public dollars, are being used to support the Child Care Inclusion Challenge Project. This program has the potential to reach even more of the provider population 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 San Francisco's young children.

* * * * *

In the last five years, with the availability of more resources for children ages birth to five flowing through local and state First 5 Commissions and other sources, there has been a concerted effort to expand professional development opportunities for licensed family child care providers, 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 San Francisco embarks on publicly funded preschool for four-year-olds, there is an opportunity to develop comprehensive plans for professional development that are inclusive of teachers and providers 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.

This study has provided a snapshot of the licensed family child care provider 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 San Francisco's young children.

Appendix A: Additional Tables

Table A1. *Age Distribution of Licensed Providers Compared to Women in the San Francisco County Labor Force*[a]

	Percentage (SE)	
	Licensed providers	Women in the San Francisco County labor force
29 years or younger	1.2 (0.71)	26.5
30 to 54 years	60.9 (3.14)	61.2
55 years or older	37.9 (3.12)	12.3
Total	100.0	100.0
Number of providers	243	193,541

[a] US Census Bureau (2000a).

Table A2. *Age Distribution of Licensed Providers, Countywide and by Licensed Capacity*

	Percentage (SE)		
	All homes	Small homes	Large homes
30 to 54 years	61.7 (3.14)	63.7 (3.57)	55.2 (6.54)
55 years or older	38.3 (3.14)	36.3 (3.57)	44.8 (6.54)
Total	100.0	100.0	100.0
Number of providers	240	182	58

Table A3. *Ethnic Distribution of Licensed Providers Compared to the San Francisco County Female Adult Population,*[a] *Public K-12 Teachers,*[b] *and Children 0-5 Years*[a]

	Percentage (SE)			
	Licensed providers	San Francisco County female adult population	Public K-12 teachers	Children 0-5 years
White, Non-Hispanic	16.0 (2.38)	47.2	54.3	48.5
Latina	23.9 (2.77)	12.5	9.3	17.5
African American	21.4 (2.67)	6.1	5.9	5.4
Asian/Pacific Islander	34.5 (3.09)	32.0	23.2	22.7
American Indian or Alaskan Native	0.4 (0.42)	0.3	0.4	0.1
Multiethnic	3.8 (1.24)	1.9	6.9	5.8
Total	100.0	100.0	100.0	100.0
Number of providers	238	244,639	3,371	491,197

[a] California Department of Finance (2004).
[b] California Department of Education (2005b).

Table A4. *Reported Language Fluency of Licensed Providers Compared to the San Francisco County Adult Population*[a]

	Percentage (SE)	
	Licensed providers	San Francisco County adult population
English	36.9 (3.09)	68.7
Spanish[b]	8.6 (1.80)	7.0
Cantonese[a]	22.5 (2.68)	-
English and Spanish[a]	15.6 (2.33)	7.4
English and Cantonese[a]	7.4 (1.68)	-
English, plus an additional language other than Spanish or Cantonese	9.0 (1.84)	17.0
Total	100.0	100.0
Number of providers	244	464,261

Note: Based on the self-assessment of a sample of 155 providers.
[a] US Census Bureau (2000b).
[b] Provider may speak an additional language other than English.

Table A5. *Percentage of Licensed Providers with Paid Assistants, Countywide and by Licensed Capacity*

	Percentage (SE)		
	All homes	Small homes	Large homes
No paid assistants*	54.1 (3.20)	65.1 (3.50)	19.0 (5.16)
1 paid assistant**	31.6 (2.98)	27.4 (3.28)	44.8 (6.54)
2 or more paid assistants**	14.3 (2.25)	7.5 (1.94)	36.2 (6.32)
Total	100.0	100.0	100.0
Number of providers	244	186	58

*$p < .001$, Small homes > large homes.
**$p < .001$, Large homes > small homes.

Table A6. *Percentage of Licensed Providers Serving Children with Special Needs, Countywide and by Licensed Capacity*

	Percentage (SE)		
	All homes	Small homes	Large homes
No children with special needs	80.3 (2.55)	81.7 (2.84)	75.9 (5.63)
1 or more children with special needs	19.7 (2.55)	18.3 (2.84)	24.1 (5.63)
Total	100.0	100.0	100.0
Number of providers	244	186	58

Table A7. *Educational Attainment of Licensed Providers Compared to the San Francisco County Female Adult Population*[a]

	Percentage (SE)	
	Licensed providers	San Francisco County female adult population
High school diploma or less	18.0 (2.47)	27.5
Some college	50.8 (3.21)	16.5
Associate degree	12.3 (2.11)	6.5
Bachelor's degree or higher	18.9 (2.51)	49.5
Total	100.0	100.0
Number of providers	244	230,967

[a] US Census Bureau (2000a).

Table A8. *Percentage of Licensed Providers, by Degree Attainment Related to Early Care and Education*

	Percentage (SE)		
	All providers with an AA or higher degree	Associate degree	Bachelor's degree or higher
Degree related to ECE	38.2 (5.61)	46.7 (9.17)	32.6 (6.96)
Degree unrelated to ECE	61.8 (5.61)	53.3 (9.17)	67.4 (6.96)
Total	100.0	100.0	100.0
Number of providers	76	30	46

Table A9. *Mean Number of Credits Among Licensed Providers Reporting Completion of College Credits Related to Early Care and Education, by Educational Level*

	Estimated mean (SE)	
	San Francisco County	*Number of providers*
Some college	16.3 (1.37)	103
Associate degree	33.5 (5.31)	24
Bachelor's degree or higher	27.7 (3.67)	41

*$p < .001$, Some college < Associate degree, Bachelor's degree or higher.

Table A10. *Percentage of Licensed Providers Reporting Completion of Non-Credit Training Related to Early Care and Education, by Educational Level*

	Percentage (SE)	
	San Francisco County	*Number of providers*
High school diploma or less	69.8 (7.02)	43
Some college	76.6 (3.81)	124
Associate degree	63.3 (8.82)	30
Bachelor's degree or higher	78.3 (6.09)	46
All providers	74.1 (2.82)	243

Table A11. *Percentage of Licensed Providers who Employed At Least One Paid Assistant with College Credits, by Provider Education*

	Percentage (SE)	
	San Francisco County	*Number of providers*
High school diploma or less	33.3 (12.23)	15
Some college	62.5 (7.02)	48
Associate degree	61.1 (11.54)	18
Bachelor's degree or higher	75.0 (8.22)	28
All providers who employed at least one paid assistant	61.5 (4.68)	109

Table A12. *Educational Attainment of Licensed Providers, Countywide and by Licensed Capacity*

	Percentage (SE)		
	All homes	Small homes	Large homes
High school diploma or less*	18.0 (2.47)	21.5 (3.02)	6.9 (3.33)
Some college*	50.8 (3.21)	54.8 (3.66)	37.9 (6.38)
Associate degree**	12.3 (2.11)	9.1 (2.12)	22.4 (5.49)
Bachelor's degree or higher**	18.9 (2.51)	14.5 (2.59)	32.8 (6.18)
Total	100.0	100.0	100.0
Number of providers	244	186	58

*$p < .05$, Small homes > large homes.
**$p < .05$, Small homes < large homes.

Table A13. *Percentage of Licensed Providers Reporting Completion of Non-Credit Training in the last 12 Months Related to Early Care and Education, by Number of Publicly Subsidized Children Served*

	Percentage of licensed providers, by number of publicly subsidized children (SE)		
	None	1 or more	All providers
No non-credit training	58.5 (5.45)	45.2 (4.01)	49.8 (3.25)
1 or more hours*	41.5 (5.45)	54.8 (4.01)	50.2 (3.25)
Total	100.0	100.0	100.0
Number of providers	82	155	237

*$p < .05$, 1 or more > none.

Table A14. *Ethnic Distribution of Licensed Providers, by Educational Level*

	Percentage (SE)				
	All providers	High school diploma or less*	Some college**	Associate degree	Bachelor's degree or higher***
White, Non-Hispanic	16.7 (2.47)	7.0 (3.89)	7.8 (2.50)	25.0 (8.18)	45.2 (7.68)
Latina	25.0 (2.87)	65.1 (7.27)	15.7 (3.39)	17.9 (7.24)	14.3 (5.40)
African American	22.4 (2.76)	13.9 (5.29)	25.2 (4.05)	35.7 (9.06)	14.3 (5.40)
Asian/Pacific Islander	36.0 (3.18)	13.9 (5.29)	51.3 (4.66)	21.4 (7.76)	26.2 (6.79)
Total	100.0	100.0	100.0	100.0	100.0
Number of providers	228	43	115	28	42

Tests of significance were only performed for White, Non-Hispanic, Latina, African American, and Asian/Pacific Islander provider groups.
*p < .001, Latina > White, Non-Hispanic, African American, Asian/Pacific Islander.
**p < .001, Asian/Pacific Islander > White, Non-Hispanic, Latina, African American.
***p < .001, White, Non-Hispanic > Latina, African American, Asian/Pacific Islander.

Table A15. *Educational Level of Licensed Providers, by Ethnic Distribution*

	Percentage (SE)				
	All providers	White, Non-Hispanic	Latina	African American	Asian/Pacific Islander
High school diploma or less*	18.9 (2.59)	7.9 (4.38)	49.1 (6.62)	11.8 (4.51)	7.3 (2.88)
Some college**	50.4 (3.31)	23.7 (6.90)	31.6 (6.16)	56.9 (6.94)	71.9 (4.96)
Associate degree	12.3 (2.17)	18.4 (6.29)	8.8 (3.75)	19.6 (5.56)	7.3 (2.88)
Bachelor's degree or higher***	18.4 (2.57)	50.0 (8.11)	10.5 (4.07)	11.8 (4.51)	13.4 (3.76)
Total	100.0	100.0	100.0	100.0	100.0
Number of providers	228	38	57	51	82

Tests of significance were only performed for White, Non-Hispanic, Latina, African American, and Asian/Pacific Islander provider groups.
*p < .001, Latina > White, Non-Hispanic, Asian/Pacific Islander.
**p < .001, Asian/Pacific Islander > White, Non-Hispanic, Latina; African American > White, Non-Hispanic.
***p < .001, White, Non-Hispanic > Latina, African American, Asian/Pacific Islander.

Appendix B:

Methodology for Estimating the Number of Children Served in Licensed Family Child Care and the Size of the Family Child Care Workforce in the City and County of San Francisco

Overview

In San Francisco, because of the relatively small size of the licensed family child provider population, we attempted to interview all providers. As anticipated, we were unable to do so, since some providers were out of business and others could not or chose not to complete an interview. Our sample of interviewed providers gives us sound information about the percentages of the provider population with specific characteristics. To obtain actual numbers, however, such as the number of children served in licensed family child care and the size of the county's family child care workforce, it was necessary to compute estimates from the sample of interviewed providers, taking into account various factors related to the entire provider population.

In the normal course of events, providers go out of business and new providers replace them, and a description of the "universe" (or total provider population), if continually updated, will adjust for these changes. Because there was a gap of several months between the last point at which we updated the survey universe and the time at which we began interviews, however, our universe included providers who were out of business, but did not include the newest providers who had started their businesses in the interim.

The total universe of providers in San Francisco was 590, and we interviewed 244 providers. During the interviewing process, approximately 29 percent of the providers contacted were out of business, but were not replaced with new providers. Our estimates for the total number of children served and the size of the family child care workforce take both of these factors (sample size and percentage out of business) into account.

We calculated the estimate of the total number of children served and the size of the provider workforce in two ways, a high and low calculation. The high estimate treated all providers alike. The low estimate assumed that the new providers who would have replaced the out-of-business providers in the universe would have characteristics similar to the providers in the sample who had been in business for one year or less. These newer providers typically operated homes with smaller licensed capacity and with fewer paid assistants. There were 16 providers in the San Francisco sample who had been in business for one year or less.

Methodology: High Estimate

1. Calculate a ratio to create a multiplier for the sample to the universe: 590/244 = 2.4.[17] Multiply the sum of children in the sample by the multiplier (2.4) to calculate the estimated total number of children served.
2. Multiply the sum of paid assistants in the sample by the multiplier (2.4) to calculate the estimated total number of paid assistants.
3. Add the estimated number of paid assistants to the total number of family child care providers in the survey universe (590) to calculate the size of the county's licensed family child care workforce.

17 The sample size was 244 for paid assistants but 242 for children served, as two providers did not answer the questions on the number of children served. Thus, the ratio varies very slightly for the number of children served and the number of paid assistants.

Methodology: Low Estimate

1. Estimate the number of new providers in the universe. As stated above, 29 percent of providers in the universe were out of business, and, in the normal course of events, would have been replaced with new providers. Multiply the universe (590) by the percentage out of business (29%). This would be the number of new providers in the universe: 590 x .2857 = 169.
2. Estimate the number of more tenured providers in the universe. Seventy-one percent of the providers in our sample were in business. Multiply the universe (590) by the percentage in business (71%). This would be the number of more tenured providers in the universe: 590 x .7143 = 421.
3. Create a ratio of the new providers in the universe to the new providers in the sample (providers in business one year or less, N=16) to create a multiplier for the sample to the universe for new providers: 169/16 = 10.5.
4. Create a ratio of the more tenured providers in the universe to the more tenured providers in the sample (providers in business more than one year, N=228) to create a multiplier for the sample to the universe for more tenured providers: 421/228= 1.8.[18]
5. Multiply the sum of children served by new providers (in business one year or less) in the sample by the "new provider" multiplier (10.5) to calculate an estimated total of children served by providers in business one year or less.
6. Multiply the sum of children served by providers in business more than one year in the sample by the "more tenured provider" multiplier (1.8) to calculate an estimated total of children served by providers in business more than one year.
7. Add the two estimates together to estimate the total number of children served.
8. Multiply the sum of paid assistants employed by providers in business one year or less in the sample by the "new provider" multiplier (10.5) to calculate an estimated total of paid assistants employed by providers in business for one year or less.
9. Multiply the sum of paid assistants employed by providers in business for more than one year in the sample by the "more tenured provider" multiplier (1.8) to calculate an estimated total of paid assistants employed by providers in business for more than one year.
10. Add the two estimates together for an estimated total of paid assistants.
11. Add the estimated total of paid assistants (Step 10) to the total number of family child care providers in the survey universe (590) to estimate the size of the county's licensed family child care workforce.

18 The sample size of more tenured providers was 228 for paid assistants but 226 for children served, as two providers did not answer the questions on the number of children served. Thus, the ratio varies very slightly for the number of children served and the number of paid assistants.

References

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.

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 & Referral Network (2003). *The 2003 California Child Care Portfolio*. Data retrieved March 17, 2005, from http://www.rrnetwork.org/rrnet/our_research/2003portfolio.php.

California Child Care Resource & Referral Network (2005). *The 2005 California Child Care Portfolio*. San Francisco: California Child Care Resource & 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 (2006). *Number of English learners by language, 2004-05*. Data retrieved May 4, 2006, from http://data1.cde.ca.gov/dataquest/.

California Department of Finance (2003). *California Statistical Abstract*. Data retrieved January 1, 2005, from http://www.dof.ca.gov/HTML/FS_DATA/STAT-ABS.

California Department of Finance (2004). *Population Projections by Race/Ethnicity, Gender and Age for California and Its Counties 2000-2050*. Data retrieved January 19, 2005, from http://www.dof.ca.gov/html/Demograph/DRU_datafiles/Race/RaceData/20000-2050/.

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/20000-2050/.

California Employment Development Department (2005). Data retrieved January 14, 2005, from http://www.labormarketinfo.edd.ca.gov.

Center for the Child Care Workforce (2001). *Family child care provider income and working conditions survey*. Washington, DC: Center for the Child Care Workforce.

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.

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.

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.

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.

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.

U.S. Census Bureau (2000b). *Census 2000 Summary File 3*. Data retrieved March 3, 2005, from 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., 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., & Howes, C. (1997). *NAEYC accreditiation as a strategy for improving child care quality: An assessment. Final report*. 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).

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.