California Early Care and Education Workforce Study

Licensed Family Child Care Providers

Santa Clara County 2006

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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 Santa Clara 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 Santa Clara 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 Santa Clara County policymakers 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 Santa Clara County's children and families.

This report contains study findings for licensed family child care providers in Santa Clara 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.)

Santa Clara County

The most populous of the Bay Area Counties, Santa Clara County includes San Jose, Santa Clara, and Sunnyvale, among other cities. The County is the center of Silicon Valley and its high technology industry. Manufacturing, along with information, professional, and technical services, remain major economic sectors.

In 2004, Santa Clara County's population of 1,731,400 represented a 2.9 percent increase over the 2000 Census (US Census Bureau, 2000a). The county is projected to increase in population by 9.0 percent between 2000 and 2010, with a 1.2 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; 25.2 percent Hispanic; 24.8 percent Asian; 2.7 percent Black; 2.3 percent Multiethnic; and 0.3 percent Pacific Islander or American Indian (California Department of Finance, 2005). At the time of the 2000 Census, over half (55.4 percent) of county households were estimated to be speaking English, 15.3 percent as speaking Spanish, and 18.6

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 Santa Clara County:

- Median family income in 1999 was $81,717 (California Department of Finance, 2003).
- In 1999 7.5 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 $15,756 (US Department of Housing and Urban Development, 2005).
- At the time of the 2000 Census, 8.3 percent of children 0-5 years of age lived in poverty[2] (California Child Care Resource and Referral Network, 2003).
- In 2000, 330,451 children under the age of 14 resided in the county, over half (54.9 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 143,338 children under age six, 49.7 percent of whom had working parents[4] (California Child Care Resource and Referral Network, 2003).
- 13.1 percent of children ages 0-5 resided in a single-parent household[5] (California Child Care Resource and Referral Network, 2003).

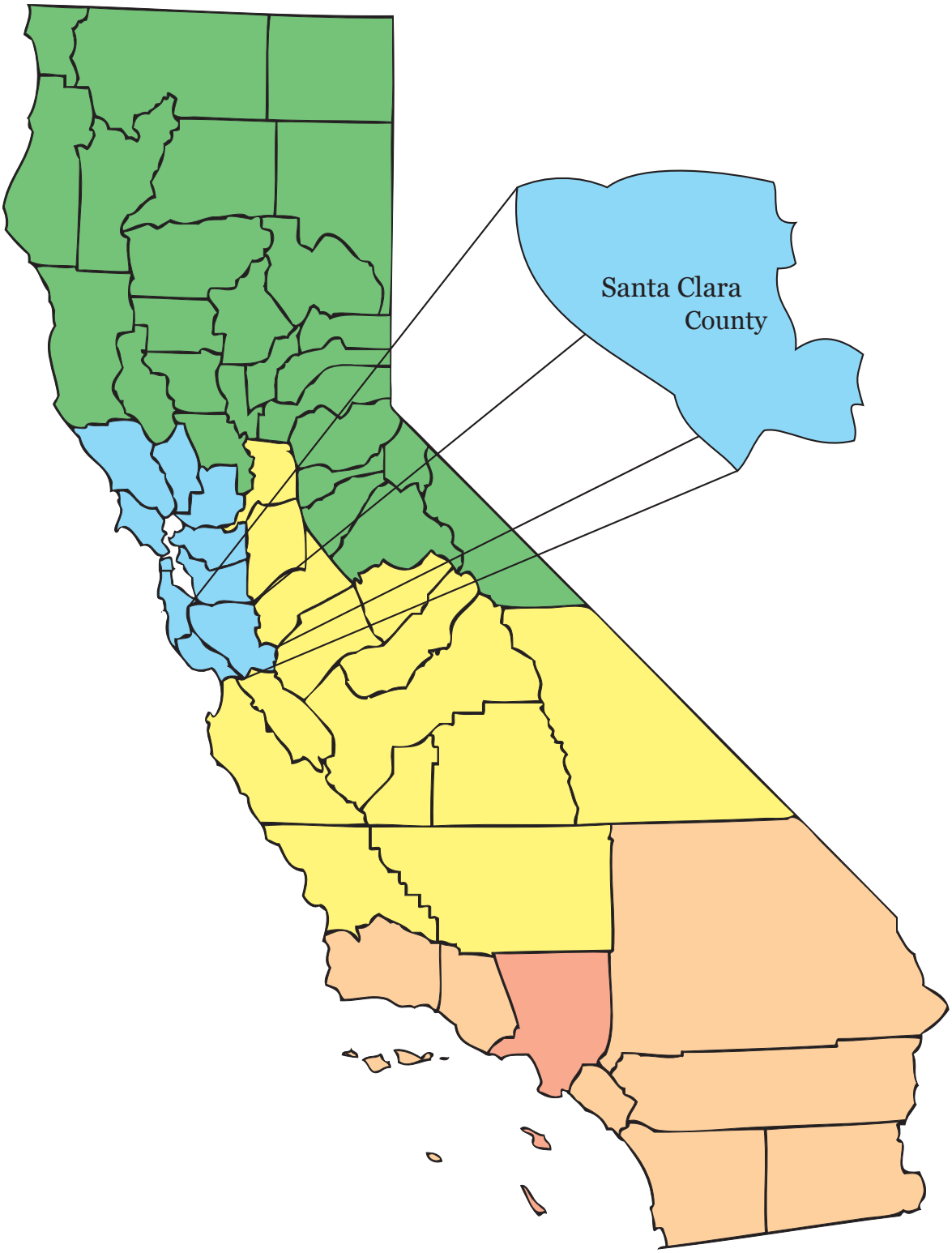
In 2004, 50,559 licensed child care slots were available in Santa Clara County, one-quarter (27.3 percent) were in family child care homes, and three-quarters in child care centers (California Child Care Resource and Referral Network, 2005).

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).


Santa Clara
County

Study Design

Survey Population and Study Sample

The Institute of Advancing Early Education at West Ed, a program of First 5 Santa Clara County, sought information about licensed family child care providers in the county as a whole. The survey population included all 1,329 active, licensed family child care homes that were listed as of January 2004 with the state-funded child care resource and referral (R&R) program, Community Child Care Council of Santa Clara County, Inc. These data were aggregated, cleaned and verified by the Network, and updated in late fall 2004 and early winter 2005. Due to cost and time constraints, we surveyed a random sample of 402 licensed providers across the county. (See Table 2.1.) Random sampling is the best way to obtain a sample that is representative of the entire population, and is a process that ensures that each provider has an equal chance of being selected for the sample.

The Santa Clara County study builds upon the previously described statewide study of licensed family child care providers commissioned by First 5 California. Sixty interviews conducted as part of the statewide study were added to the 342 surveys conducted for the county study to build a sample of 402 licensed family child care providers. Random sampling was used for all interviews, both those collected in Santa Clara County for the statewide study and those collected during the county study.

Survey Instrument

Telephone interviews were conducted in English or Spanish with the owner of the family child care home. A small percentage of providers (5.5 percent of eligible providers in the county) were unable to complete an interview because of a communication barrier. The results reported below, therefore, provide a portrait of providers who speak either English 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 and English language learners; accreditation status; and participation

Table 2.1. *Santa Clara County Sample Composition*

	Santa Clara County licensed providers	Percentage of final sample
Quota target	400	
Completed interviews: statewide study	60	14.9%
Completed interviews: county study	342	85.1%
Final sample	402	100.0%

in the Santa Clara 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.

Data Collection Procedures

The Network mailed a notification letter, describing the purpose of the survey and encouraging participation, to all providers likely to be interviewed based on their order in the random sample. 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 342 interviews over a six-week period beginning in 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 10.8 minutes to complete. FRC made up to eight attempts to complete an interview with each provider.

Survey Completion and Response Rate

FRC successfully completed the target number of interviews, dialing 1,011 provider names to reach this goal. Of these contacts, 27.5 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 after the sample was updated before the survey began. For that reason, we assume that many of the providers with "unresolved phone numbers" were actually out of business. Among those eligible, 46.7 percent completed the survey. Those who did not complete the survey included 17.7 percent who refused, and another 17.3 percent whose answering machine or voice mail prevented successful contact. Twelve percent of the providers contacted were not available to complete the survey, or the target number of interviews had been reached during the study period, 5.5 percent presented communication barriers we were unable to surmount, and less than one percent reported some other reason for not completing the survey.

To assess our sample, we compared the provider population of Santa Clara County to the providers who completed interviews. We calculated the extent to which providers participating in our study

6 Santa Clara County was one of the first of over 40 in California to implement 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 2.2. *Survey Response Rate*

	Santa Clara County number of providers	Percentage of sample	Percentage of eligible
Sample released and dialed	1,011	100.0%	
Ineligible: out of business	112	11.1%	
Presumed ineligible*	166	16.4%	
Eligible	733	72.5%	100.0%
County surveys completed	342	33.8%	46.7%
No response, presumed eligible**	127	12.6%	17.3%
Refusals	130	12.9%	17.7%
Respondent not available/ target reached***	88	8.7%	12.0%
Communication barrier	40	4.0%	5.5%
Other reasons for non-completion	6	0.6%	0.8%

* Disconnected, wrong number, changed phone number, or no answer.
** Anwering machine, voice mail, or busy phone.
*** In Santa Clara county, some providers coded as "respondent unavailable" did not receive the maximum number of eight interview attempts because the target number of interviews had been reached and the provider interview was no longer needed.

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

	County population (N=1,329)	Survey completed (N=402)
LICENSED CAPACITY		
Small homes	64.3%	59.2%
Large homes	35.7%	40.8%
CITY		
Alviso	0.1%	0.0%
Campbell	2.3%	1.7%
Cupertino	2.6%	2.7%
Gilroy	6.7%	8.5%
Los Altos	0.8%	0.7%
Los Gatos	0.8%	1.0%
Milpitas	4.4%	5.0%
Morgan Hill	1.8%	1.7%
Mountain View	2.4%	2.5%
Palo Alto	1.9%	2.0%
San Jose	62.3%	60.2%
San Martin	0.3%	0.3%
Santa Clara	6.3%	5.2%
Saratoga	0.6%	0.5%
Sunnyvale	6.7%	8.0%
Total	100.0%	100.0%

were representative of the entire county in terms of geographical distribution and licensed capacity. As shown in Table 2.3, our survey closely approximates the countywide distribution and licensed capacity of licensed family child care homes.

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 402 licensed family child care providers in Santa Clara County who spoke English or Spanish 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 Santa Clara County?

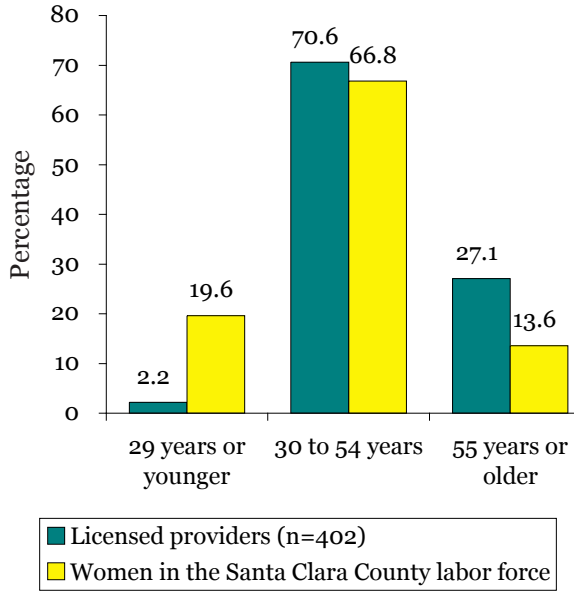
In Santa Clara County, the typical licensed family child care provider is a woman of color in her late forties who has been taking care of children in her home for eleven years, and works without a paid assistant. This profile varies, however, depending on the licensed capacity of her home. Those operating large homes, for example, are more likely than operators of small homes to be 55 or older, and to have worked longer in child care. Santa Clara County providers are likely to speak English and an additional language, most often Spanish.

Gender and Age

Santa Clara County's licensed family child care workforce is overwhelmingly female. To ascertain gender, since the interview did not specifically include this question, we analyzed the names of providers in our sample. Seventy-nine percent of the names in our sample were female, less than one percent were male, and 11 percent of the listings contained two names, typically a man and a woman.

This almost exclusively female workforce is typically middle-aged. Compared to women in the Santa Clara County labor force overall, licensed family child care providers were less likely to be younger than 30 (2.2 percent vs. 19.6 percent) and more likely to be over 55 (27.1 percent vs. 13.6 percent). (See Figure 3.1.) On average, licensed providers were 48 years of age, with the youngest provider 22 years old and the oldest 76. New entrants (those who had been serving children in their homes for 24 months or less) were, on average, seven years younger than providers who had been serving children in their homes longer than 24 months. (See Table 3.1.) Four percent of new entrants were age 55 or older, compared to 29 percent of those who had been in business two years or more.

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



[a] US Census Bureau (2000a).

Providers licensed to care for eight children were slightly younger (46.8 years, SE=0.7) than providers licensed to care for 14 children (49.4 years, SE=0.7). The age distribution of licensed providers differed by their licensed capacity. (See Figure 3.2.) Providers operating smaller licensed family child care homes were less likely to be 55 years old or older than were providers licensed to operate larger homes. Twenty-seven percent of all licensed providers were age 55 or older;

providers licensed to operate large homes were more likely to be 55 years or older (33.5 percent) than were those licensed to operate smaller homes (22.7 percent).

Ethnic Background

Compared to Santa Clara County's adult female population, Latinas were more represented, and Asian Americans and White, Non-Hispanics were less represented, in the licensed family child care population. (See Figure 3.3.) Because interviews were conducted only in Spanish or English, however, it is likely that Asian American licensed providers were under-represented in this study, due to language barriers.

We found that almost two-thirds of licensed family child care providers in Santa Clara County (61.4 percent) were people of color. (See Figure 3.3.) Latina providers (41.7 percent) constituted a plurality among licensed providers in the county. White, Non-Hispanics were the second largest group (38.6 percent). As shown in Figure 3.3, Asians/Pacific Islanders (12.5 percent) were the next largest group of providers, followed by those identifying themselves as Multiethnic (3.6 percent) and African American (2.8 percent). Those identifying as American Indian or Alaskan Native comprised one percent of licensed providers.

Licensed family child care providers were more diverse, and more closely reflected the ethnic distribution of children ages birth to five in Santa Clara County, than teachers of Grades K-12 in Santa Clara County public schools. (See Figure 3.4.) Nearly three-quarters of public school K-12 teachers (73.1 percent) were White, Non-Hispanic, compared to 37.6 percent of licensed family child care providers and 32.5 percent of children ages birth to five. Licensed family child care providers were more than three times as likely to be Latina (40.5 percent) than were K-12 teachers (11.1 percent), and were also more likely to be Latina than were children ages birth to five (33.4 percent). Providers were about half as likely to be Asian/Pacific Islander (12.2 percent) as were children ages birth to five (27.4 percent).

Linguistic Background

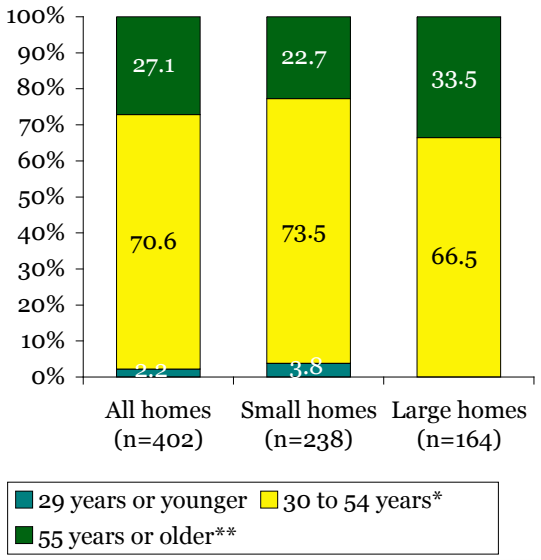
Seventy-seven percent of interviews were conducted in English, with the remainder conducted in Spanish. As stated earlier, a small percentage of providers (5.5 percent) were unable to complete the interview in either English or Spanish. Results reported below, therefore, provide a portrait of Santa Clara County providers who speak either English or Spanish, and do not extend to those who speak neither language.

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 Santa Clara County's adult population as a whole.[7] As shown in Figure 3.5, licensed providers were less

7 The most recent data available at the county level on the language background of Santa Clara 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 3.2. *Estimated Age Distribution of Licensed Providers, Countywide and by Licensed Capacity*



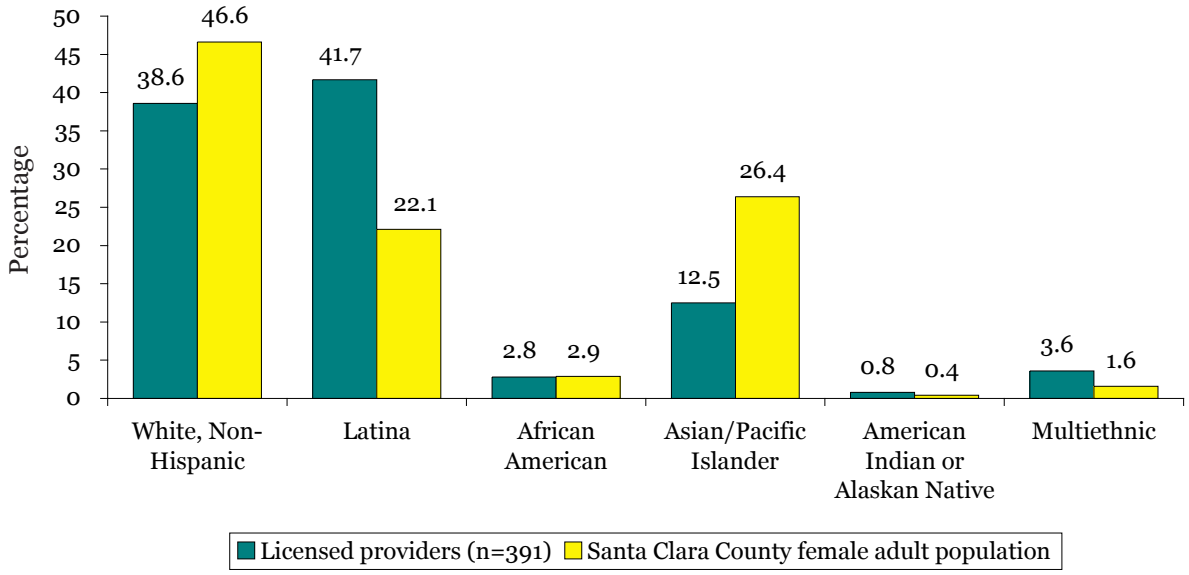
*p < .05, Small homes > large homes.
**p < .05, Large homes > small homes.

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*	41.1 (1.67)	48.3 (0.53)
Number of providers	27	373
Number of children served*	5.3 (0.50)	8.0 (0.23)
Number of providers	27	369

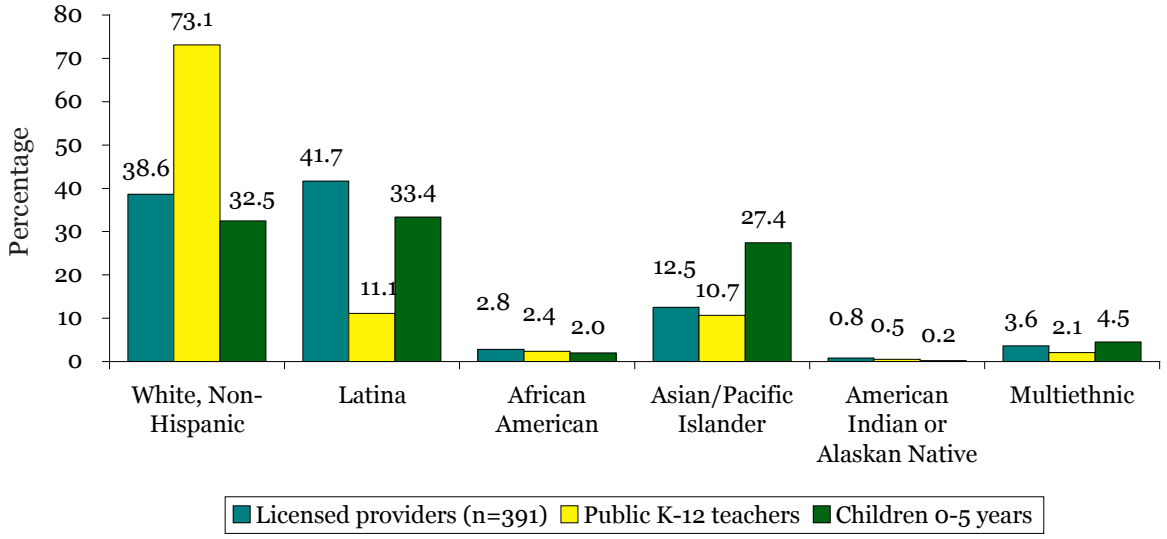
*p < .001, 24 months or less < over 24 months.

Figure 3.3. *Estimated Ethnic Distribution of Licensed Providers Compared to the Santa Clara County Female Adult Population*[a]



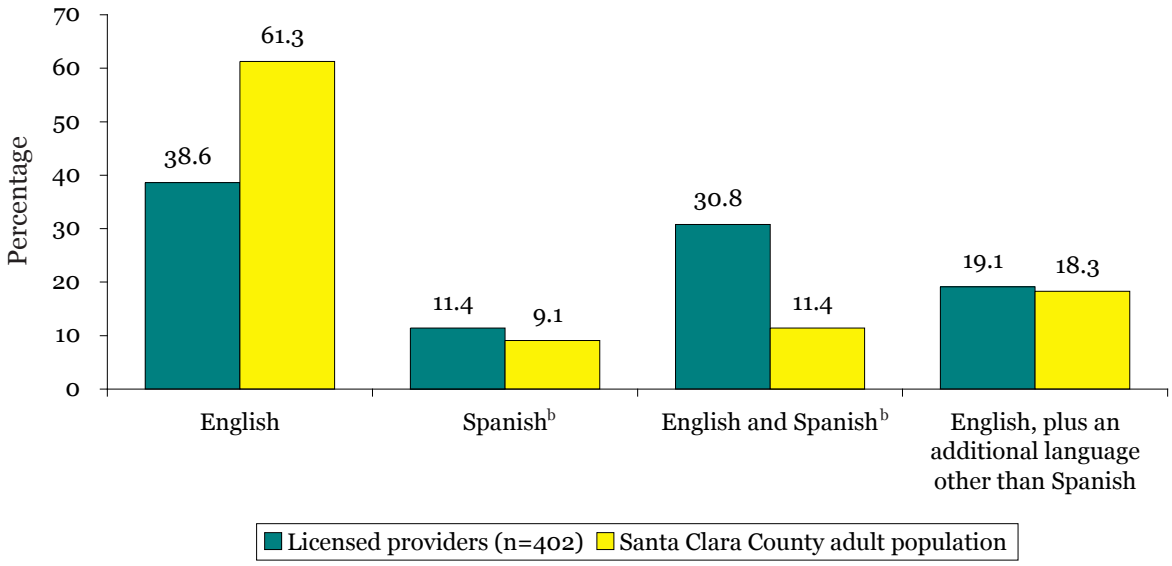
[a] California Department of Finance (2004)

Figure 3.4. *Estimated Ethnic Distribution of Licensed Providers Compared to Santa Clara 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 Santa Clara County Adult Population[a]*



[a] US Census Bureau (2000b).
[b] Provider may speak an additional language other than English.

likely than other adults in Santa Clara County to speak only English, and were more likely than the average Santa Clara County adult to speak English and Spanish. Slightly more than one-third of licensed providers (38.6 percent) spoke only English. Nearly 12 percent of those interviewed (11.4 percent) spoke only Spanish, or Spanish and another language besides English. Another 30.8 percent reported speaking English and Spanish fluently, or speaking English, Spanish and at least one additional language.

Nearly one-fifth of interviewed providers (19.1 percent) reported self-assessed fluency in languages other than English or Spanish. In order of frequency, these other languages included Hindi, Farsi, French, Italian, Marathi, German, Arabic, Gujarati, Indian, Persian, Portuguese, Russian, Amharic, and Armenian. No single language other than English or Spanish, however, 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 or Spanish spoken by licensed providers would increase somewhat from this list if interviews had been conducted in additional languages.

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

Language	Percentage
Spanish	59.9
Vietnamese	15.1
Mandarin (Putonghua)	5.2
Filipino (Pilipino or Tagalog)	2.8
Cantonese	2.2
Korean	1.6
Japanese	1.5
Punjabi	1.2
Hindi	0.7
Khmer (Cambodian)	0.6
Russian	0.6
Farsi (Persian)	0.6
Arabic	0.5
French	0.5
Hebrew	0.4
N	8,505

Source: California Department of Education (2006).

We also found that the population of children served by Santa Clara County's licensed providers was characterized by great linguistic diversity. The best estimate available of the language backgrounds of young children is based on 2004-05 data from the California Department of Education (CDE), which reports that 44.2 percent of kindergarteners attending Santa Clara County public schools in 2004-2005 spoke a language other than English and were classified as English Learners. Of the more than 47 different languages spoken by English Learners in Santa Clara County's public kindergarten classrooms, Table 3.2 lists the 15 most commonly spoken.

We found no overall differences in linguistic background between providers licensed to care for eight children or for 14 children. Compared to providers who spoke English only, those speaking English and Spanish, or English and another language besides Spanish, were more likely to operate large homes.

Linguistic background varied among licensed providers serving particular groups of children. Providers who reported serving at least one child who received public child care assistance were more likely to speak English and Spanish, and less likely to speak English only, or

English and another language, than were providers not caring for such children. (See Table 3.3.) Providers who cared for at least one child with special needs did not vary linguistically from those who did not. (See Table 3.4.)

Tenure

Providers were asked how long they had been taking care of children in their homes on a *paid* basis; the average reported was 11.2 years. (See Table 3.5.) Tenure varied greatly, however; one-quarter of providers reported offering child care in their homes for three years or less, and one-quarter reported offering care for 16 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 2.4 years, while mean reported tenure of providers 55 or older was 16.9 years. (See Table 3.5.)

Tenure varied by ethnicity. (See Table 3.5.) White, Non-Hispanic providers reported significantly more years (M=14.7) than did providers of other ethnic backgrounds (Latina, M=9.0, and Asian/Pacific Islander, M=7.0). 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 25 percent longer than those licensed to care for eight. (See Table 3.5.) Countywide, providers licensed to serve eight children reported significantly fewer years offering child care (M=9.8 years) than did providers licensed to care for 14 children (M=13.1 years).

Seven 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 two years or more. Newer providers were more likely to be 29 or younger, and less likely to be over 55, than those who had been caring for children for two years or more. These newer providers were considerably more likely to be Latina (69 percent, SE=9.05) than White, Non-Hispanic (11.5 percent, SE=6.27) or African American (19.2 percent, SE=7.73). Not unexpectedly, since Latina providers were younger on average, newcomers (M=41.1 years, SE=1.67) were significantly younger on average than more tenured providers (M=48.3 years, SE=0.53). As with the provider population as a whole, the vast majority of newcomers were over 30 years old. On average, these newer providers cared for significantly fewer children (M=5.3 children, SE=0.50) than did their more experienced counterparts (M=8.0 children, SE=0.23), in part, perhaps, because their businesses were new. All Santa Clara County providers licensed to care for 14 children had been in business for two years or longer. There were no differences between newer providers and those caring for children for two years or longer in terms of whether they cared for children with special needs or those who received public child care assistance.

Home Ownership

Approximately four-fifths (84.0 percent) or providers reported that they owned their own homes, compared to 59.8 percent of adults in the county as a whole (US Census Bureau, 2000).[8] There

8 As described in the Study Design section of this report, only 342 of the 402 providers interviewed for this study were asked this question.

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*	47.1 (3.64)	31.1 (3.18)	38.7 (2.43)
Spanish[a]**	7.9 (1.97)	14.6 (2.43)	11.5 (1.59)
English and Spanish[a]**	17.5 (2.76)	42.9 (3.40)	30.9 (2.31)
English, plus an additional language other than Spanish*	27.5 (3.25)	11.3 (2.18)	18.9 (1.96)
Total	100.0	100.0	100.0
Number of providers	189	212	401

Note. Based on the self-assessment of 401 providers.
[a] Provider may speak an additional language other than English.
*$p < .001$, None > 1 or more.
**$p < .001$, 1 or more > none.

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

	Percentage of licensed providers by number children with special needs (SE)		
	None	1 or more	All providers
English	37.0 (2.74)	43.8 (5.27)	38.5 (2.44)
Spanish[a]	12.2 (1.86)	9.0 (3.04)	11.5 (1.60)
English and Spanish[a]	29.6 (2.59)	34.8 (5.06)	30.7 (2.31)
English, plus an additional language other than Spanish	21.2 (2.32)	12.4 (3.49)	19.3 (1.97)
Total	100.0	100.0	100.0
Number of providers	311	89	400

Note. Based on the self-assessment of 400 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		11.2 (0.43)
Number of providers		400
By age*	29 years or younger	2.4 (0.39)
	30 to 54 years	9.3 (0.42)
	55 years or older	16.9 (0.95)
Number of providers		400
By ethnicity**	White, Non-Hispanic	14.7 (0.77)
	Latina	9.0 (0.61)
	Asian/Pacific Islander	7.0 (0.79)
Number of providers		361
By licensed capacity***	Small homes	9.8 (0.59)
	Large homes	13.1 (0.61)
Number of providers		400

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

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

	Percentage (SE)
3 years or less	24.3 (2.15)
4 - 15 years	48.2 (2.50)
16 years or more	27.5 (2.23)
Total	100.0
Number of providers	400

were no differences in home ownership by licensed capacity, educational attainment, ethnicity, or age. Providers who owned their homes reported longer average tenure (11.7 years, SE=0.5) than providers who rented (8.1 years, SE=1.0).

Paid Assistants

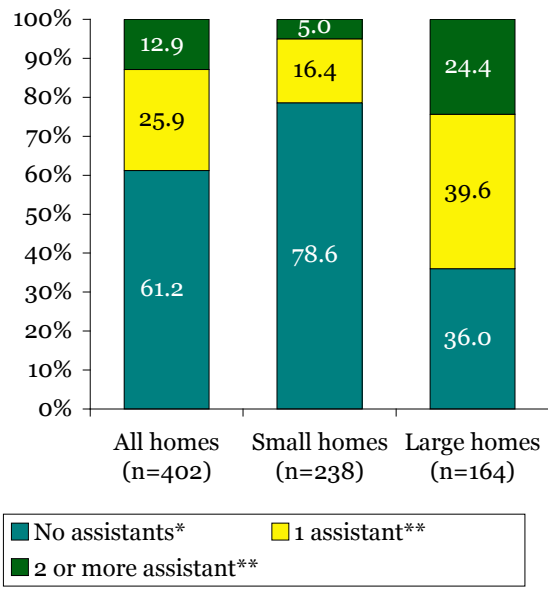
Many providers involve other adults in their family child care businesses. Spouses, older children and other relatives may assist providers, often in an unpaid capacity. In addition, many providers employ paid assistants. Providers were asked how many assistant caregivers, if any, they *paid* to help them with the children in their care. As shown in Figure 3.6, 61.2 percent of providers reported working without any paid assistants; 25.9 percent reported paying one assistant; and 12.9 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, 21.4 percent of providers licensed to care for eight children reported employing one or more paid assistants, compared to 64.0 percent of providers licensed to care for 14 children. Providers with a larger licensed capacity were also significantly more likely than other providers to employ one or more paid assistants.

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 home-based 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 data set permitted a calculation of the number of paid family child care assistants. Using these data, we estimate that between 671 and 757 paid assistants were employed in Santa Clara County licensed family child care homes in 2005. (For a full discussion of how these estimates were calculated, see Appendix B.) Added to the 1,329 active licensed providers from which our sample was drawn, we estimate that the county's entire licensed family child care workforce in 2005, including licensees and any paid assistants, totaled between 2,000 and 2,086. (See Table 3.7.)

Figure 3.6. *Estimated 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	1,329	1,329
Number of paid assistants	671	757
Total family child care workforce (paid assistants plus active providers)	2,000	2,086

*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.

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

In Santa Clara County, more than 2,000 licensed family child care providers and paid assistants care for approximately 10,000 children, mostly in mixed-age groups. Approximately 80 percent of the children cared for by licensed providers are not yet in kindergarten, and nearly 50 percent of them are age two or under. Approximately 50 percent of licensed providers report caring for at least one child who receives public child care assistance. Nearly 25 percent of licensed providers report caring for at least one child with special needs.

As shown in Table 3.8, Santa Clara County's licensed family child care workforce provided services in 2005 to an estimated 9,600 to 10,496 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-third of these children were preschoolers, ages three to five, and nearly 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	2,246	2,509
Age 2	1,995	2,254
Ages 3 to 5, not in kindergarten	3,080	3,487
Ages 5 or older, in kindergarten	2,279	2,247
All ages	9,600	10,496

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 59.1 percent of the estimated population of providers in the county; on average, they reported caring for 6.4 children across all age spans, of whom 4.9 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 9.9 children across all age spans, including 7.9 children age five or younger, 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, Santa Clara County's licensed capacity is 13,804 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:

- 31.2 percent (SE=2.32) reported caring for children across the entire age span from infancy to school age;
- only 1.5 percent of providers (SE=0.61) cared exclusively for children ages three to five but not yet in kindergarten;
- many providers serving children ages three to five also served younger (92.4 percent, SE=1.45) and older children (62.5 percent, SE=2.66), but 39.5 percent (SE=2.66) reported serving no children of kindergarten age or older;
- only 8.5 percent of providers (SE=1.40) reported caring exclusively for children age two and younger; and
- only 3.0 percent (SE=0.86) 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 22.2 percent of Santa Clara County's licensed family child care providers care for such children.[9] Providers licensed to serve eight children were less likely to report caring for at least one child with special needs (18.2 percent) than were providers licensed to care for 14 children (28.0 percent). (See Figure 3.7.) Further, more providers who were licensed to operate a large home (14.0 percent) reported caring for two or more children with special needs than did those who were licensed to care for fewer children (6.8 percent).

Providers who reported caring for at least one child with special needs and had been in business for two years or more cared for more children with special needs than providers newer to caring for children in their homes. No significant difference was found by age, language, or ethnicity with respect to caring for children with special needs. (See Table 3.10 for percentage of children with special needs by ethnicity.)

Providers were also asked how many of the children they served, if any, received public child care assistance,[10] and more than one-half (53.4 percent) reported caring for at least one such child (See Table 3.11.). We then calculated the percentage of subsidized children cared for by licensed family child care 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, 62.1 percent reported that 50 percent or less of the children enrolled in their homes received such assistance (SE=3.35), and on average, 47.7 percent (SE=2.01) of enrolled children received public assistance. Among all providers, including those who did not care for any

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 Santa Clara 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.

children receiving public assistance, as well as those who cared for at least one such child, 11.5 percent reported that 75 percent or more of the children enrolled in their programs received assistance.

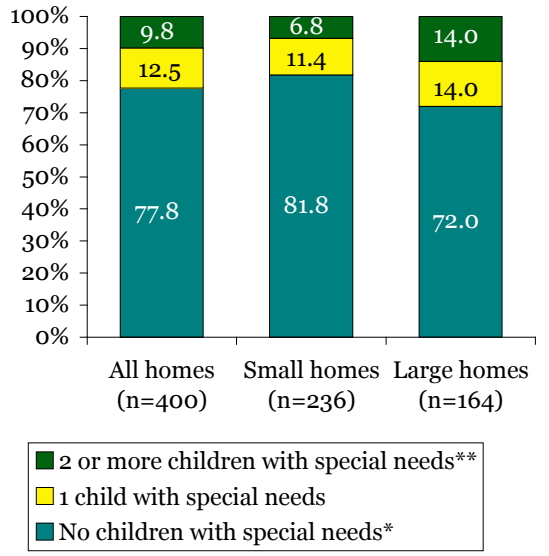
Those licensed to care for 14 children were more likely than those licensed to care for eight children to care for at least one subsidized child. White, Non-Hispanic and Asian/Pacific Islanders were less likely than African American or Latina providers to care for at least one child receiving public child care subsidies. (See Table 3.11.)

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*	1.9 (0.08)	1.6 (0.09)	2.3 (0.14)
Age 2*	1.7 (0.09)	1.3 (0.10)	2.3 (0.14)
Ages 3-5, not yet in kindergarten*	2.6 (0.13)	2.1 (0.16)	3.4 (0.20)
Ages 5 or under, not in kindergarten*	6.1 (0.19)	4.9 (0.22)	7.9 (0.29)
Ages 5 and older**	1.7 (0.11)	1.5 (0.13)	2.0 (0.19)
All age spans*	7.8 (0.22)	6.4 (0.25)	9.9 (0.33)
Number of providers	402	237	164

*$p < .001$, Large homes > small homes.
**$p < .05$, Large homes > small homes.

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



*$p < .05$, Large homes < small homes.
**$p < .05$, Large homes > small homes.

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	76.0 (3.49)	78.4 (3.24)	63.6 (14.52)	87.8 (4.69)	78.2 (2.14)
1 or more*	24.0 (3.49)	21.6 (3.24)	36.4 (14.52)	12.2 (4.69)	21.8 (2.14)
Total	100.0	100.0	100.0	100.0	100.0
Number of providers	150	162	11	49	372

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 Multi-Ethnic providers were not included in the tests of significance due to their small numbers within the sample.

Table 3.11. *Comparison of Licensed Providers Serving Children Receiving Publicly Subsidized Child Care, by Ethnicity*

	Percentage of licensed providers by number of children receiving publicly subsidized child care (SE)				
	White, Non-Hispanic	Latina	African American	Asian/Pacific Islander	All providers
None	62.3	25.8	18.2	75.0	46.6
	(3.95)	(3.43)	(11.64)	(6.26)	(2.59)
1 or more*	37.7	74.2	81.8	25.0	53.4
	(3.95)	(3.43)	(11.64)	(6.26)	(2.59)
Total	100.0	100.0	100.0	100.0	100.0
Number of providers	151	163	11	48	373

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

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

Compared to Santa Clara County'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.

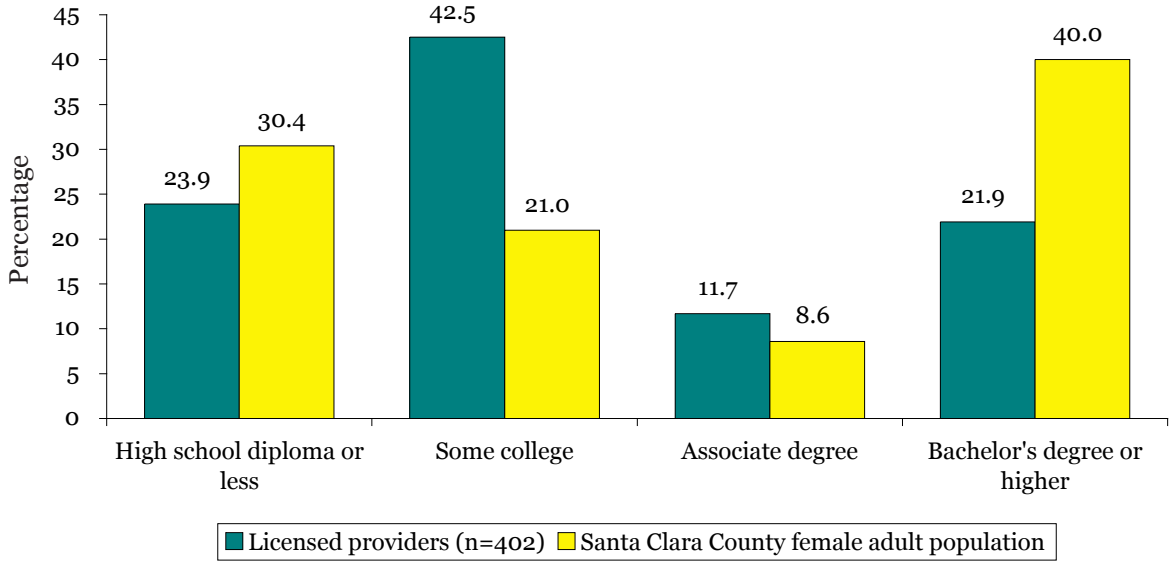
One-third of providers have obtained a two-year, four-year or graduate degree, typically not related to early childhood development. Approximately three-fifths (62 percent) of all providers report having completed at least one college credit related to early childhood development, and approximately two-thirds (67.8 percent) report participating in non-credit-bearing training related to that subject. Approximately one-half of providers reported 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, California communities 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), family child care providers in Santa Clara County typically have completed some college credits, and are more likely than the average adult woman in the county to have done so. As shown in Figure 3.8, 76.1 percent of licensed providers reported completing some college-level work, compared to 51.4 percent of adult women in Santa Clara County. Providers reported a higher completion rate for an associate (AA) degree (11.7 percent) than is true for the average adult female in the county (8.6 percent). Providers' completion rate for BA or higher degrees, however (21.9 percent), was approximately one-half that of women in the county as a whole (40.0 percent). Only three percent of providers

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



[a] US Census Bureau (2000)

reported completing a graduate degree beyond the BA. Nearly one-half of licensed providers with a BA or higher degree[11] (48.3 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.

1) Degrees Related to Early Childhood Development

We examined the percentage of

11 Only 8.9 percent of all 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.

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

Overall, 33.6 percent of all providers had completed an AA or BA degree or higher. Among those who had completed a degree, 20.0 percent reported that their highest degree was related to early childhood development. We found that 18.2 percent of providers with a BA or higher degree and 23.4 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. Over four-fifths of providers with education beyond high school (81.3 percent, SE=2.23) 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 61.8 percent (SE=2.43).

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.

Those who had completed some college or an AA or a BA degree were equally likely to have completed courses related to early childhood development. Those who had completed a BA degree reported completing, on average, more college credits in early childhood development than those for whom "some college" or an AA degree was the highest level of educational attainment. The mean number of college credits related to early childhood development was 29.7 units for providers with a BA degree, and 21.6 units for those who had obtained an AA degree and 17.4 units for those with some college classes but had not completed a degree. (See Figure 3.10.)

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. Two-thirds (67.8 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 most common among providers who had attended "some college," compared to those with high school or less. As shown in Figure 3.11, 59.4 percent of providers who reported high school or less as their highest level of education, and 59.6 percent who had obtained an AA degree, had participated in non-credit training, compared to 75.4 percent of providers with "some college.

Next, we examined how many providers had participated in non-credit training *during the last 12 months*,

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

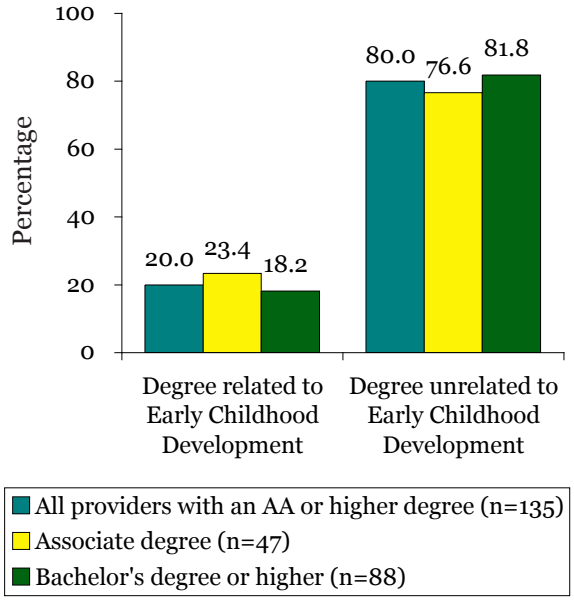
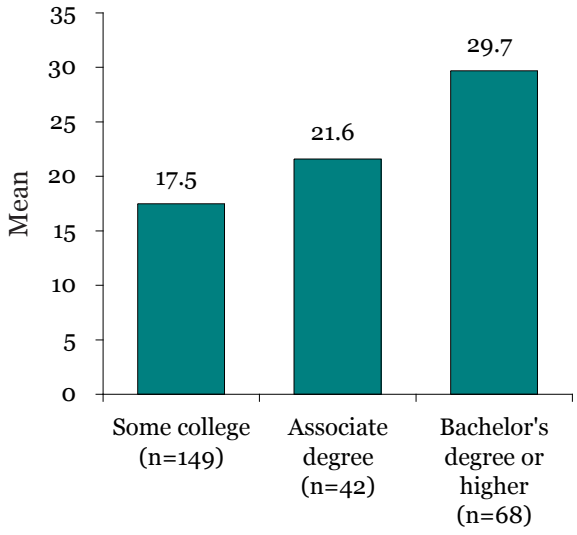
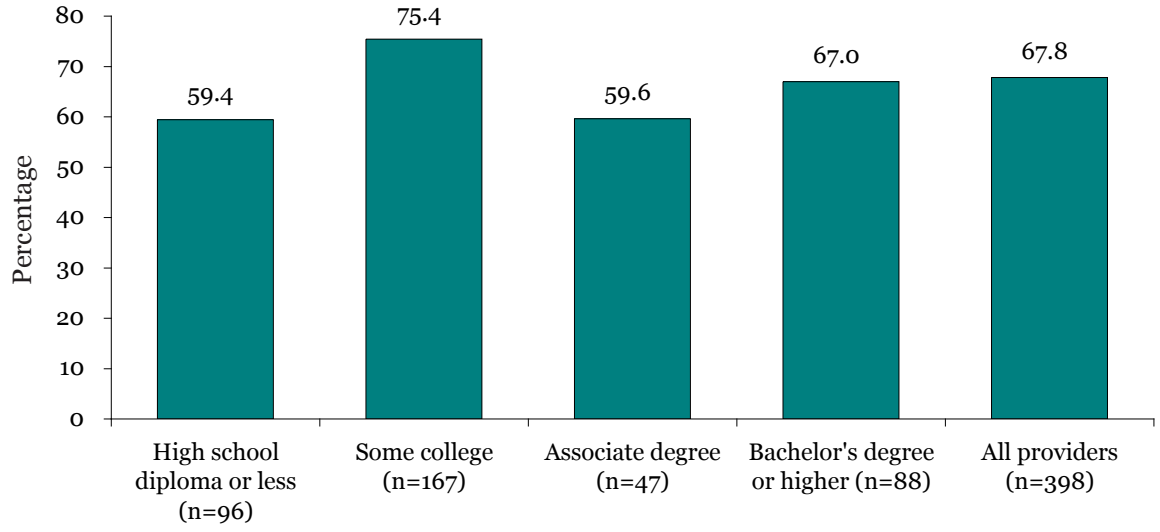


Figure 3.10. *Mean Number of Credits Among Licensed Providers Reporting Completion of College Credits Related to Early Care and Education, by Educational Level*



*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*



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

the amount of such training, and whether this amount varied by level of educational attainment. Three-quarters of all providers (74.8 percent, SE=2.53) had participated in non-credit-bearing training related to early childhood development during the last 12 months. Providers reported participating, on average, in 31.2 hours of training during the last 12 months (SE=1.9). 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 the Santa Clara County CARES program;
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
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 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 the Santa Clara County CARES program, based on provider reports, for example, exceeds the enrolled number of family child care providers in the program. Our estimate of provider participation in NAFCC accreditation, based on providers' reports, was double the number of NAFCC-accredited providers in Santa Clara County indicated in NAFCC records. In addition, respondents reporting that they possessed a Child Development Permit included some who had not taken any credit-bearing college 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 California teaching credential or one issued by another state. Among the 21.9 percent of providers (SE=2.06) who had completed a BA or higher degree, 14.8 percent (SE=3.80) reported holding a California credential and 1.8 percent (SE=0.66) reported holding one from another state. Based on these findings, we estimate that only 3.2 percent (SE=0.89) of all providers in the county (including those with BA degrees, as well

as those with lower levels of educational attainment) hold a California public school teaching credential.

Professional Preparation of Family Child Care Paid Assistants

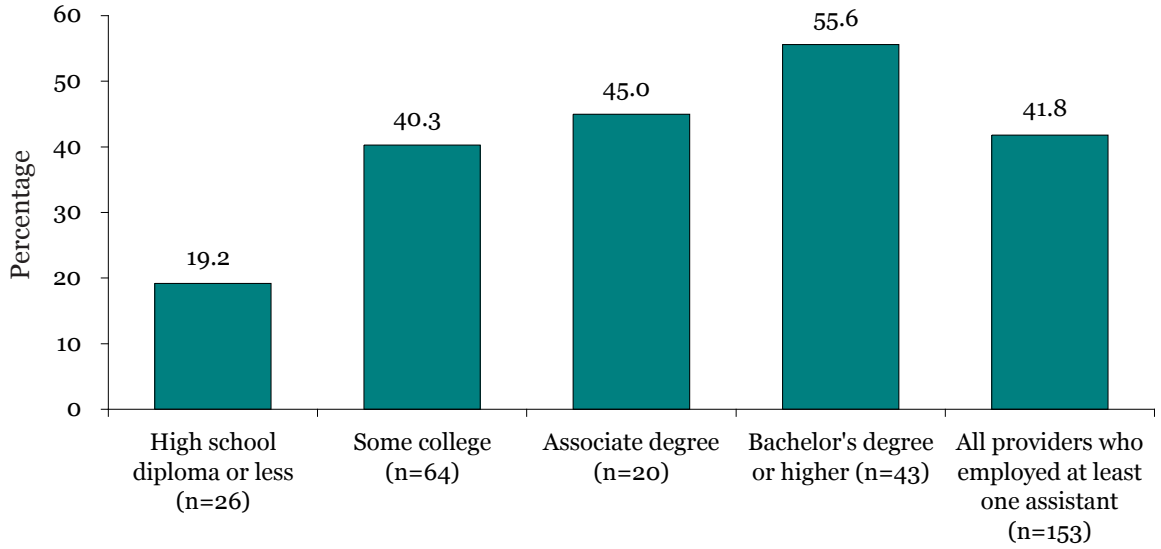
To further explore the educational background of adults in licensed family child care homes, we examined two issues:

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, 33.9 percent (SE=3.4) of their paid assistants had earned college credits, and 49.2 percent (SE=3.8) had received non-credit training related to early childhood development. More than one-half (58.2 percent, SE=4.0) of providers with paid assistants reported that *none* of their paid assistants had earned such college credits, and 43.1 percent (SE=4.02) reported that *none* of their paid assistants had received non-credit training in this field. Approximately one-quarter of providers (25.5 percent, SE=3.53) reported that *all* of their paid assistants had received college credits related to early childhood development, and 41.8 percent (SE=4.00) 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 that providers who themselves were better educated and trained were also more likely to employ paid assistants with more training and education. As shown in Figure 3.12, providers whose highest level of education was high school or less were less than half as likely to employ at least one paid assistant with college credits related to early childhood development as were providers who had completed a BA degree.

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



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

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

Educational attainment does not vary among providers caring for different numbers of children or children of different ages. Providers licensed to care for 14 children do not report higher levels of educational attainment than those licensed to care for eight children, nor do providers caring for children ages two to five vary in their education or early childhood training from those who care exclusively for younger or older children. Providers caring for at least one subsidized child, however, are less likely to have attained higher levels of education than providers who do not care for any subsidized 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.

Latina providers, on average, have completed less formal education than White, Non-Hispanic, or Asian/Pacific Islander providers. Providers who have obtained a BA or higher degree are more likely to speak English, as well as another language besides Spanish, than providers with less education, while providers with a high school degree or less are more likely to report speaking Spanish only.

Regardless of educational level, the average family child care provider is in her late forties.

In the previous section, we described the educational attainment and specific early childhood related training of licensed family child care providers in Santa Clara County as a whole. In this section, we explore differences in education and training among providers 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.

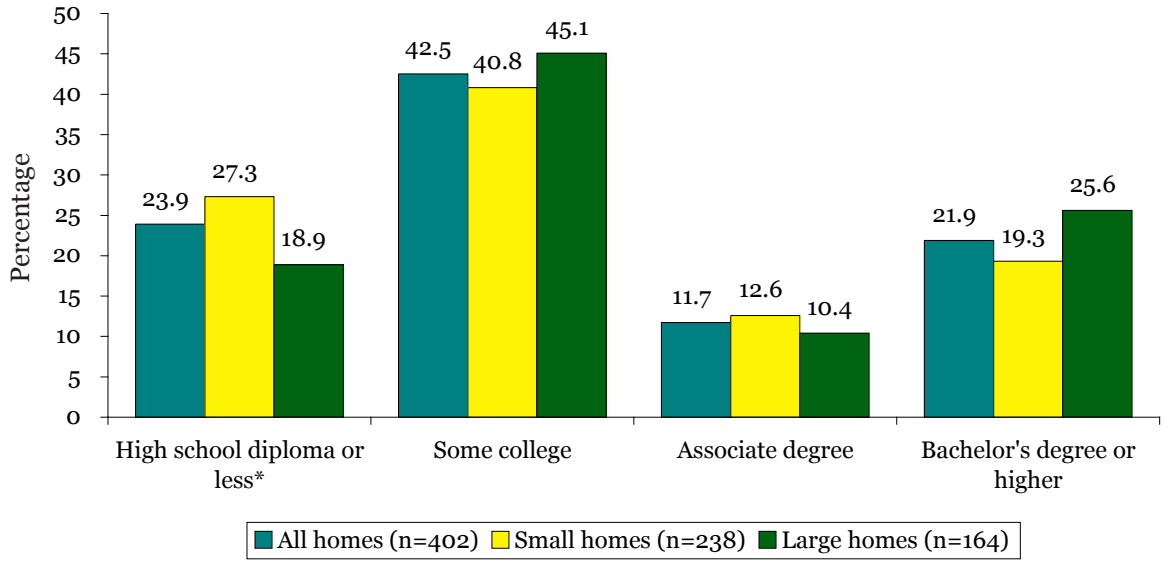
Overall Educational Attainment, by Licensed Capacity

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 no significant differences in this regard, as shown in Figure 3.13.

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

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



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 1.5 percent of providers (SE=0.51) cared exclusively for children between the ages of three and five; overall, 82.5 percent (SE=1.9) cared for children ages three to five, usually with children from another age group as well. We found no differences in educational level among providers serving children of different ages.

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. We found that providers who reported caring for at least one child receiving public child care assistance reported lower levels of education than those who did not care for any children receiving subsidies. (See Table 3.12.) Those caring for subsidized children were less likely to report college degrees 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.

Providers caring for one or more subsidized children, however, were more likely to have participated in non-credit training related to early childhood development than were providers who did not receive some public dollars for their services. Approximately three-quarters of all providers (67.8 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 more likely to have taken such training (75.1 percent) than those not caring for such children (59.6 percent). (See Figure 3.14.) Those caring for at least one child receiving subsidy were also more likely to have completed some non-credit hours related to early childhood development *in the last 12 months* (59.6 percent) than those who did not report caring for any such children (39.2 percent).

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 statewide among groups of providers who reported different educational backgrounds. On average, providers were in their late forties, whether they had completed a college degree, taken some college courses, or reported their highest level of education as high school or less.[13] Across educational levels approximately one-quarter of providers were 55 years of age or older. Providers' tenure in caring for children in their homes for pay varied by educational level. Providers with a high school diploma or less were more than twice as likely to have been in the field for 24 months or less than were those with some college or an AA or higher degree. (See Figure 3.15.) There were no differences with respect to age or tenure among providers with or without a degree focused on early childhood development.

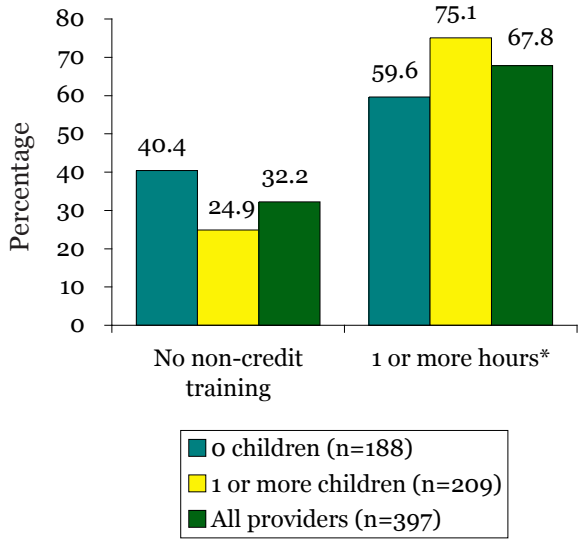
13 On average, those who had completed a graduate degree were 51 years old, with an average tenure in the field of 9.7 years. Only 8.3 percent had been in the field for 12 months or less.

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	22.8	25.0	23.9
	(3.05)	(2.98)	(2.13)
Some college	33.3	50.9	42.6
	(3.43)	(3.44)	(2.47)
Associate degree	15.3	8.5	11.7
	(2.62)	(1.92)	(1.61)
Bachelor's degree or higher	28.6	15.6	21.7
	(3.29)	(2.49)	(2.06)
Total	100.0	100.0	100.0
Number of providers	189	212	401

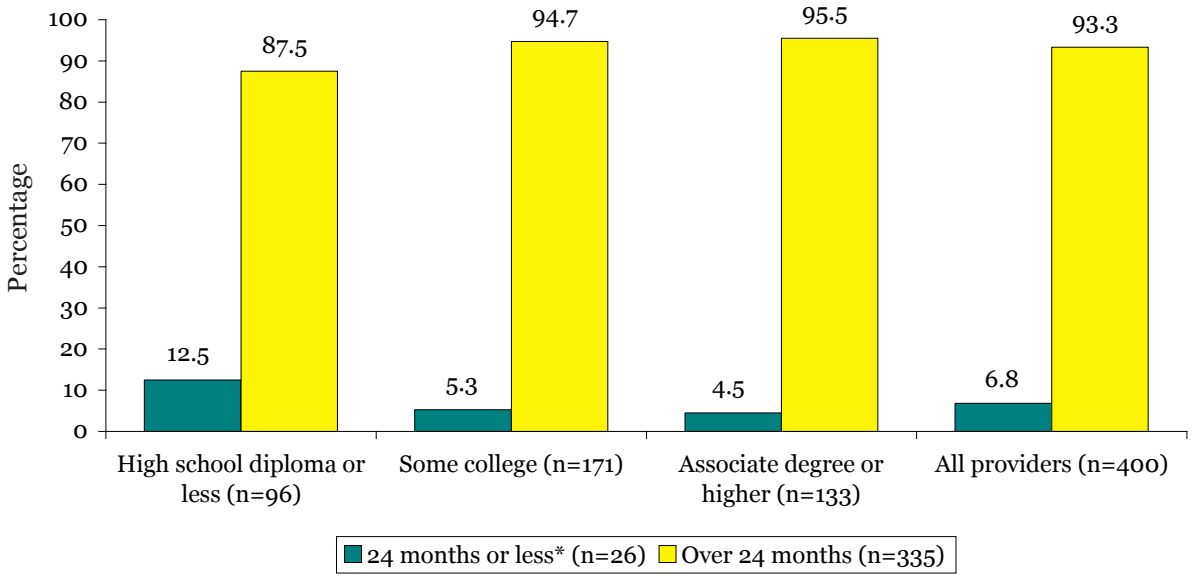
*$p < .05$, High school diploma or less > Bachelor's degree or higher; some college > Associate degree, Bachelor's degree or higher.

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



*p < .01, 1 or more children > no children.

Figure 3.15. *Educational Attainment of Licensed Providers by Tenure*



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

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 Santa Clara County's adult population.

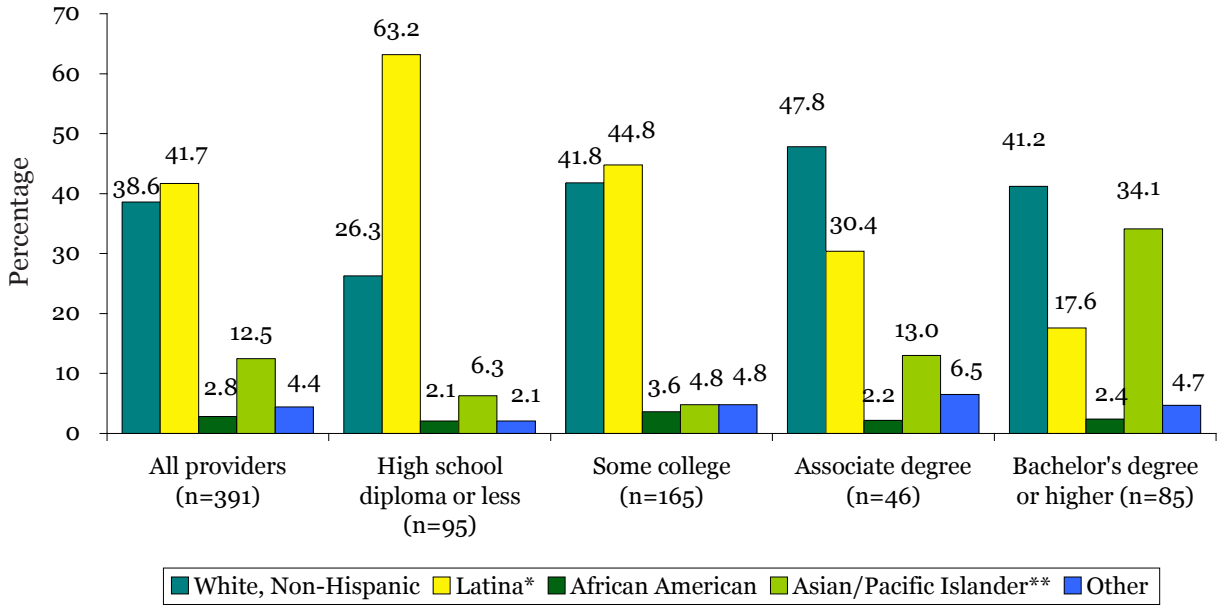
Combined, these analyses provide a picture of how well providers of various ethnic groups are represented at different educational levels, how this distribution reflects general trends in the population, and where direct supports and incentives might be directed toward particular ethnic groups in order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

The ethnic distribution of providers varied across levels of educational attainment, as shown in Figure 3.16. White, Non-Hispanic providers comprised 38.6 percent of all providers, but they comprised 26.3 percent of providers who had completed high school or less, 41.8 percent of those with some college, 47.8 percent of those who had completed an AA degree, and 41.2 percent of those with a BA degree. Latinas comprised 41.7 percent of all providers, but 63.2 percent of those whose highest level of education was high school, and only 17.6 percent of providers who had completed a BA degree or higher. African American providers comprised 2.8 percent of all providers and were proportionally distributed across educational levels, as shown in Figure 3.16.

In determining the distribution of educational attainment (as represented by college attendance and completion of degrees) *within* various ethnic groups, we found that approximately 83.4 percent of White, Non-Hispanic providers reported completing some college-level work, and approximately one-third had completed a two- or four-year degree or higher. Among Latina providers, 63.5 percent reported completing some college-level work, while about 17.8 percent reported completing a two- or four-year degree or higher. Asian/Pacific Islander providers demonstrated a very different pattern: 87.7 percent reported completing some college-level work, and 47.1 percent reported completing a two- or four-year degree or higher. Approximately one-quarter of African American and Multiethnic providers reported completing college degrees. All American Indian providers had completed BA or higher degrees. (See Figure 3.17.) Looking at degree holders by ethnicity, we found no single ethnic group to be more likely to have a degree related to early childhood development. (See Table 3.13.)

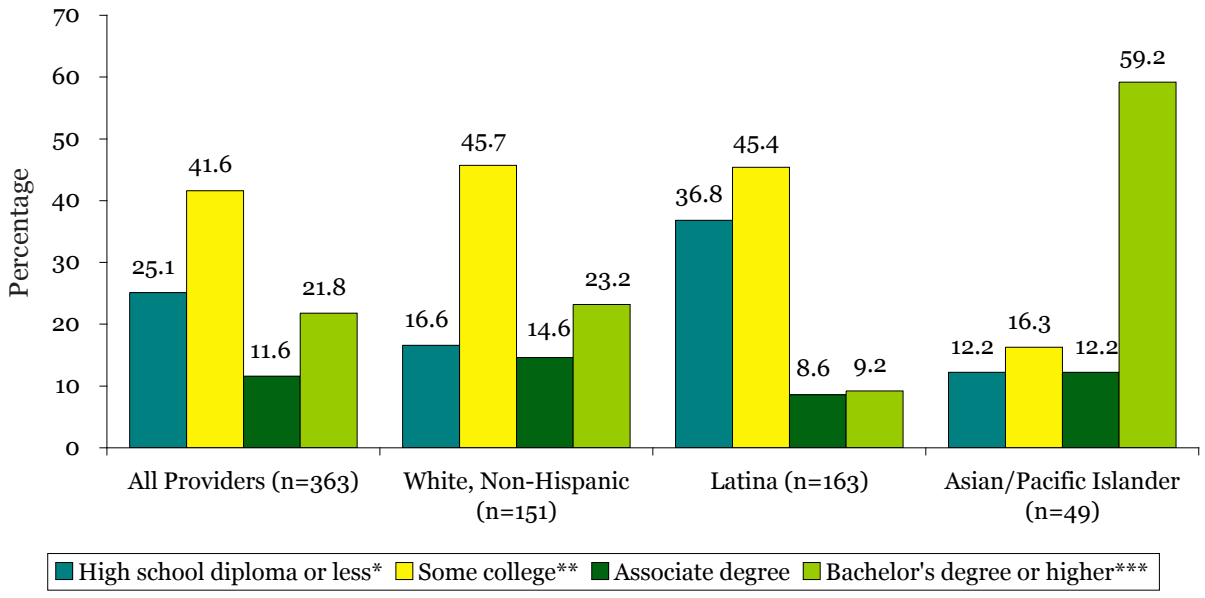
Next, we sought to determine the ethnic distribution of licensed providers at different levels of education, as compared to Santa Clara County's overall adult population. Asian American (59.2 percent) and Native American (100 percent) providers had attained BA or higher degrees at a higher rate than their counterparts in the overall county population, as shown in the 2000 U.S. Census (all Asian American adults, 59.2 percent; all Native American adults, 16.3 percent). Latina providers (9.2 percent) had attained BA or higher degrees at a slightly lower rate than their counterparts

Figure 3.16. *Ethnic Distribution of Licensed Providers, by Educational Level*



Tests of significance were only performed for White, Non-Hispanic and Latina, African American, and Asian/Pacific Islander provider groups. Other includes American Indian or Alaskan Native and Multiethnic provider groups.
*$p < .001$, High school diploma or less > Associate degree, Bachelor's degree or higher.
**$p < .001$, Bachelor's degree or higher > high school diploma or less, some college

Figure 3.17. *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, and Asian/Pacific Islander
**$p < .001$, White, Non-Hispanic, Latina > Asian/Pacific Islander
***$p < .001$, Asian/Pacific Islander > White, Non-Hispanic, Latina.

Table 3.13. *Percentage of Licensed Providers by Degree Attainment Related to Early Care and Education, by Ethnicity*

	Percentage (SE)			
	Degree in unrelated field	Degree in early care and education	*Total*	*Number of providers*
White, Non-Hispanic	77.2 (5.58)	22.8 (5.58)	100.0	57
Latina	79.3 (7.55)	20.7 (7.55)	100.0	29
Asian/Pacific Islander	82.9 (6.40)	17.1 (6.40)	100.0	35
All providers	79.3 (3.70)	20.7 (3.70)	100.0	121

Tests of significance were only performed for White, Non-Hispanic, Latina, and Asian/Pacific Islander provider groups.

in the overall county population (11 percent); African American providers had obtained BA or higher degrees at the same rate as their local counterparts (18.2 percent), and White, Non-Hispanic providers (23.2 percent) were less than half as likely to have earned BA or higher degrees as their local counterparts (47.1 percent).

Although Asian Americans constituted only 12.5 percent of all providers, they comprised 34.1 percent of those who reported a BA or higher degree as their highest level of educational attainment. It is important to note, however, that Asian Americans who do not speak English or Spanish may be under-represented in this study, and thus these findings should be viewed with caution.

Fifty percent of those who had completed a graduate degree were Latina, and 25 percent were Asian/Pacific Islander. White, Non-Hispanic providers (16.7 percent) and American Indian providers (8.3 percent) comprised the other segments of the provider population with graduate degrees.

3) Overall Educational Attainment, by Language

Since many of Santa Clara 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 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 English or Spanish, providers who are fluent in other languages but do not speak English or Spanish 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 three 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; and
3. the self-reported language capacity of providers who had obtained a college degree in a foreign institution.

Approximately one-half 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 (30.9 percent) were somewhat under-represented among those with a BA or higher degree (14.8 percent). Providers who spoke English and a language other than Spanish, however, were more likely than other providers to have a BA or higher degree. Among all providers, 19.1 percent spoke English and another language besides Spanish fluently, but 44.3 percent of providers with a BA degree or higher did so. (See Table 3.14.)

In addition, most providers who spoke only Spanish reported high school or less as their highest level of education. Providers who reported high school or less as their highest level of education were more likely to speak Spanish than providers with some college or a college degree. Providers with a BA degree were less likely to speak Spanish than providers with an AA degree, some college or high school as their highest level of education.

Nearly three-quarters of providers who spoke a language other than or in addition to English had earned their degree from a foreign institution, compared to one-quarter of English-only-speaking providers with a BA or higher. (See Table 3.15.)

Table 3.14. *Reported Language Fluency of English- and Spanish-speaking Licensed Providers, by Educational Level*

	Percentage (SE)				
	High school diploma or less	Some college	Associate degree	Bachelor's degree or higher	All providers
English	32.3 (4.78)	42.7 (3.79)	40.4 (7.17)	36.4 (5.13)	38.6 (2.43)
Spanish[a]*	22.9 (4.29)	9.9 (2.29)	6.4 (3.57)	4.5 (2.22)	11.4 (1.59)
English and Spanish[a]**	36.5 (4.92)	36.3 (3.68)	29.8 (6.68)	14.8 (3.79)	30.9 (2.31)
English, plus an additional language other than Spanish***	8.3 (2.82)	11.1 (2.41)	23.4 (6.18)	44.3 (5.30)	19.1 (1.97)
Total	100.0	100.0	100.0	100.0	100.0
Number of providers	96	171	47	88	402

Note. Based on the self-assessment of 402 providers.
[a] Provider may speak an additional language other than English.
*$p < .001$, High school diploma or less > some college, Bachelor's degree or higher.
**$p < .001$, High school diploma or less, some college > Bachelor's degree or higher.
***$p < .001$, High school diploma or less, some college < Bachelor's degree or higher.

Table 3.15. *Linguistic Background of Licensed Providers with a Bachelor's Degree or Higher from a U.S. or Foreign Institution*

	Percentage (SE)		
	Speaks English only	Speaks a language other than or in addition to Englsih	All providers with a bachelor's degree or higher
Degree from foreign institution*	3.2 (3.19)	73.2 (5.95)	48.3 (5.39)
Degree from U.S. institution	96.8 (3.19)	26.8 (5.95)	51.7 (5.39)
Total	100.0	100.0	100.0
Number of providers	31	56	87

Note. Based on the self-assessment of 87 providers.
*$p < .001$, Speaks a language other than or in addition to English > Speaks English only.

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

Only a handful of 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 Santa Clara County who speak a language other than English in their homes. Although providers who have participated in training or courses related to dual language learning report higher levels of education, less than one-quarter of those who report earning college credits or degrees have taken such training. Providers who speak English only are the least likely to have participated in such training.

Many more providers are trained to work with children with special needs. Nearly one-half of all providers have participated in non-credit training, and one-quarter 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.

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

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

A pressing question is whether the current early care and education workforce has sufficient skill and knowledge to meet the needs of these children. While it was beyond the scope of this study to assess the overall knowledge and competencies of 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, more than two-fifths of children entering public kindergarten in Santa Clara 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 throughout the state 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 19.2 percent of providers reported that they had received non-credit training, and only 14.9 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 15.4 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 6.9. (See Table 3.19.)

As shown in Table 3.20, providers who spoke English only were less likely than providers who spoke Spanish only or who were bilingual – whether they spoke English and Spanish, or English and at least one other language – to have participated in any training or coursework related to dual language learning. Providers who spoke Spanish were more likely than those who did not to have participated in training or courses related to dual language learning. As shown in Table 3.20, providers who had participated in training or courses relevant to the needs of dual language children were more likely to report having a BA degree or some college, and were less likely to report high school or less as their highest educational level, than were providers who had received no professional development related to dual language learners.

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,[14] 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.

14 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	81.2 (2.01)
1 or more hours	18.8 (2.01)
Total	100.0
Number of providers	385

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	15.4 (1.65)
Number of providers	72

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	85.1 (2.10)
1 or more credits	14.9 (2.10)
Total	100.0
Number of providers	289

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	6.9 (1.20)
Number of providers	43

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 Educational Attainment*

		Percentage of licensed providers, by number of credits or hours in dual language learning (SE)			
		None	1 or more	*Total*	*Number of providers*
By language fluency*	English	89.5 (2.48)	10.5 (2.48)	100.0	153
	Spanish[a]	74.4 (6.66)	25.6 (6.66)	100.0	43
	English and Spanish[a]	62.9 (4.49)	37.1 (4.49)	100.0	116
	English, plus an additional language other than Spanish	70.8 (5.36)	29.2 (5.36)	100.0	72
	All providers	76.3 (2.17)	23.7 (2.17)	100.0	384
By educational attainment**	High school diploma or less	92.7 (2.66)	7.3 (2.66)	100.0	96
	Some college	68.9 (3.65)	31.1 (3.65)	100.0	161
	Associate degree	82.6 (5.60)	17.4 (5.60)	100.0	46
	Bachelor's degree or higher	67.9 (5.19)	32.1 (5.19)	100.0	81
	All providers	76.3 (2.17)	23.7 (2.17)	100.0	384

Note. Language fluency based on the self-assessment of 384 providers.
[a] Provider may speak an additional language other than English.
**p* < .001, English < Spanish, English and Spanish , English plus an additional language other than Spanish. (1 or more).
***p* < .01, Some college, Bachelor's degree or higher > high school diploma or less. (1 or more)

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 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 about one-half of all providers, whether they served any children with special needs or not, had participated in non-credit training or college coursework related to special needs. (See Table 3.21.) Approximately two-fifths of all providers (43.7 percent) reported that they had participated in non-credit training related to special needs, and their average number of training hours was 24.1. (See Tables 3.22 and 3.23.) Far fewer providers (24.0 percent) had participated in college credit-bearing courses in this subject, and among them, the average number of credits was 7.7. (See Table 3.24.)

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

Overall, 22.2 percent of providers reported caring for at least one child with special needs. We examined what percentage of providers who cared for at least one child with special needs reported having participated either in non-credit training or in college coursework related to special needs, and found that nearly three-quarters of them had done so. Providers caring for at least one child with special needs were more likely to have participated either in non-credit training or in college coursework related to special needs than were providers caring for no such children.

Among those who had at least one child with special needs in their care, 69.9 percent had participated in relevant non-credit training, and 62.7 percent had completed at least eight hours of such training, whereas only 36.3 percent of providers serving no children with special needs had received such non-credit training, and 29.8 percent had completed at least eight training hours. (See Tables 3.22 and 3.25.) Those who served at least one child with special needs were also more likely to have completed one or more college credits (47.8 percent, SE=6.11) than were providers who did not serve any such children (16.7 percent, SE=2.52).

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

Providers serving children with special needs did not 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*	60.8 (2.84)	25.0 (4.73)	52.9 (2.56)
1 or more credits or hours**	39.2 (2.84)	75.0 (4.73)	47.1 (2.56)
Total	100.0	100.0	100.0
Number of providers	296	84	380

*$p < .001$, No children > 1 or more children.
**$p < .001$, 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*	63.7 (2.82)	30.1 (5.04)	56.3 (2.57)
1 or more hours**	36.3 (2.82)	69.9 (5.04)	43.7 (2.57)
Total	100.0	100.0	100.0
Number of providers	292	83	375

*$p < .001$, No children > 1 or more children.
**$p < .001$, 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)			
	None	1	2 or more	All children
Providers with 1 or more hours*	18.7 (1.83)	38.3 (7.01)	30.7 (6.08)	24.1 (2.08)
Number of providers	105	25	32	162
All providers**	6.7 (0.84)	21.3 (4.81)	26.6 (5.53)	10.5 (1.09)
Number of providers	291	45	37	373

*$p < .01$, None < 1, 2 or more.
**$p < .001$, None < 1, 2 or more.

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	83.3 (2.52)	52.2 (6.11)	76.0 (2.52)
	1 or more credits	16.7 (2.52)	47.8 (6.11)	24.0 (2.52)
Total		100.0	100.0	100.0
Number of providers		221	67	288
All providers*	0 credits	88.1 (1.84)	65.2 (5.06)	83.0 (1.88)
	1 or more credits	11.9 (1.84)	34.8 (5.06)	17.0 (1.88)
Total		100.0	100.0	100.0
Number of providers		311	89	400

*$p < .001$, 0 credits > 1 or more credits (None).

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)		
	0 children	1 or more children*	All providers
0 hours	63.7 (2.82)	30.1 (5.04)	56.3 (2.57)
1 - 7 hours	6.5 (1.45)	7.2 (2.85)	6.7 (1.29)
8 or more hours	29.8 (2.68)	62.7 (5.32)	37.1 (2.5)
Total	100.0	100.0	100.0
Number of providers	292	83	375

*$p < .001$, 0 hours > 8 or more hours.

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)		
	0 children	1 or more children	All providers
High school diploma or less	26.4 (2.50)	14.6 (3.75)	23.8 (2.13)
Some college	41.2 (2.79)	47.2 (5.30)	42.5 (2.47)
Associate degree	11.9 (1.84)	11.2 (3.35)	11.8 (1.61)
Bachelor's degree or higher	20.6 (2.30)	27.0 (4.71)	22.0 (2.07)
Total	100.0	100.0	100.0
Number of providers	311	89	400

Discussion

This report provides a current, comprehensive profile of licensed family child care in Santa Clara County. 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 current licensed family child care workforce in Santa Clara County?
2. What are the characteristics of children served by Santa Clara County'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 level 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 Santa Clara County?

In Santa Clara County, the typical licensed family child care provider is a woman of color in her late forties who has been taking care of children in her home for eleven years, and works without a paid assistant. This profile varies, however, depending on the licensed capacity of her home. Those operating large homes, for example, are more likely than operators of small homes to be 55 or older, and to have worked longer in child care. Santa Clara County providers are likely to speak English and an additional language, most often Spanish.

Demographically, the licensed family child care workforce in Santa Clara County 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 the continuing efforts to upgrade the knowledge and skills of California's early care and education workforce – in particular, the proposed increase in educational standards for teachers in publicly funded preschool – the challenge will be to intentionally maintain and expand this workforce diversity. This can only be done by investing in a range of appropriate supports that will truly allow people from a wide spectrum of cultural, educational and financial backgrounds to access professional development opportunities. A proactive strategy will be essential, including scholarships, tutoring, conveniently scheduled and located classes, and resources for students learning English as a second language.

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 nearly one-quarter of the family child care workforce is approaching retirement age, and less than five 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. On a more promising note, some of the highest-growth communities in the state appear to have a somewhat younger workforce, reflecting in part such ongoing efforts as the statewide Child Care Initiative Project, a public-private partnership seeking to expand the supply of licensed child care, and recent county-based efforts focused on increasing the supply of providers who speak Spanish, Vietnamese, Chinese, Russian, Hmong, Farsi and other languages.

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. Particularly in Santa Clara County's expensive housing market, the supply of licensed family child care could be in danger as home ownership grows beyond the reach of new or potential providers.

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 670 to 760 paid assistants in Santa Clara County 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. Our finding that providers who themselves have engaged in more education and training are more likely to employ paid assistants with some education or training is a positive sign, and 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 Santa Clara County's licensed family child care providers?

In Santa Clara County, more than 2,000 licensed family child care providers and paid assistants care for approximately 10,000 children, mostly in mixed-age groups. Approximately 80 percent of the children cared for by licensed providers are not yet in kindergarten, and nearly 50 percent of them are age two or under. Approximately 50 percent of licensed providers report caring for at least one child who receives public child care assistance. Nearly 25 percent 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, and our data replicated this pattern (Whitebook et al., 2002). 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 two and five. Typically, providers care for more children in the two-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 publicly funded preschool options become available for four-year-olds. 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 publicly funded 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.

About one-half of all licensed providers in Santa Clara County 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 licensed family child care providers?

Compared to Santa Clara County'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.

One-third of providers have obtained a two-year, four-year or graduate degree, typically not related to early childhood development. Approximately three-fifths (62 percent) of all providers report having completed at least one college credit related to early childhood development, and approximately two-thirds (67.8 percent) report participating in non-credit-bearing training related to that subject. Approximately 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 without 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. About two-thirds of providers have some college-level training in early childhood education, and a fifth segment have earned BA degrees, and in those cases, they tend to hire at least one paid assistant with some training. On the other hand, many providers have no college-level experience, particularly related to early childhood. 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.

It is important to note that many licensed providers have participated in non-credit training related to early childhood development as well as college courses, suggesting that this form of training may be more accessible and relevant to them. When providers accumulate non-credit training, however, their efforts often do not lead to professional opportunities that require college-based benchmarks, such as CARES. Currently, many community colleges are working to make their course offerings more useful and available to family child care providers, and this is a positive development. Additionally, efforts to provide some standards for non-credit training may help to improve articulation between the non-credit and for-credit worlds, and therefore expand the professional opportunities available to providers.

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

Educational attainment does not vary among providers caring for different numbers of children or children of different ages. Providers licensed to care for 14 children do not report higher levels of educational attainment than those licensed to care for eight children, nor do providers caring for children ages two to five vary in their education or early childhood training from those who care exclusively for younger or older children. Providers caring for at least one subsidized child, however, are less likely to have attained higher levels of education than providers who do not care for any subsidized 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.

Latina providers, on average, have completed less formal education than White, Non-Hispanic, or Asian/Pacific Islander providers. Providers who have obtained a BA or higher degree are more likely to speak English, as well as another language besides Spanish, than providers with less education, while providers with a high school degree or less are more likely to report speaking Spanish only.

Regardless of educational level, the average family child care provider is in her late forties.

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.

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.

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. To a great extent Asians/Pacific Islanders comprise a higher proportion of providers with college degrees than of providers as a whole. Latinas, however, are under-represented among degree holders and over-represented among those for

whom high school is the highest level of education. Many communities recognize this phenomenon and are engaged in efforts to make college more accessible to Latina providers, in part by providing entry-level early childhood courses in Spanish, and intentionally using early childhood-related content as a vehicle for helping Spanish speakers build the English skills necessary to complete college degrees. Current efforts in various parts of the state to expand higher education offerings to more remote communities without college campuses, to utilize distance learning, and to engage community agencies in offering credit-bearing training, should be strengthened and expanded.

Our finding that bilingual degree holders were more likely to have completed a degree from a foreign institution points to the importance of providing resources for transcript translation and review. This may enable providers who seek certification to reduce the likelihood of having to repeat classes, which is now common for foreign degree holders.

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

Only a handful of 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 Santa Clara County who speak a language other than English in their homes. Although providers who have participated in training or courses related to dual language learning report higher levels of education, less than one-quarter of those who report earning college credits or degrees have taken such training. Providers who speak English only are the least likely to have participated in such training.

Many more providers are trained to work with children with special needs. Nearly one-half of all providers have participated in non-credit training, and one-quarter 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.

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

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

* * * * *

In the last five years, with the availability of more resources for children ages 0 to 5 flowing through local and state First 5 Commissions 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 county's current professional development infrastructure have become more visible.

Now, as Santa Clara County and others throughout the state embark on publicly funded preschool for four-year-olds, there is an opportunity to develop comprehensive state and local 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 Santa Clara County's young children.

Appendix A: Additional Tables

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

	Percentage (SE)	
	Licensed providers	Women in the Santa Clara County labor force
29 years or younger	2.2 (7.39)	19.6
30 to 54 years	70.6 (2.27)	66.8
55 years or older	27.1 (2.22)	13.6
Total	100.0	100.0
Number of providers	402	351,827

[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
29 years or younger	2.2 (7.39)	3.8 (1.24)	0.0 (0.0)
30 to 54 years*	70.6 (2.27)	73.5 (2.86)	66.5 (3.69)
55 years or older**	27.1 (2.22)	22.7 (2.72)	33.5 (3.69)
Total	100.0	100.0	100.0
Number of providers	402	238	164

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

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

	Percentage (SE)			
	Licensed providers	Santa Clara County female adult population	Public K-12 teachers	Children 0-5 years
White, Non-Hispanic	38.6 (2.47)	46.6	73.1	32.5
Latina	41.7 (2.50)	22.1	11.1	33.4
African American	2.8 (0.84)	2.9	2.4	2.0
Asian/Pacific Islander	12.5 (1.68)	26.4	10.7	27.4
American Indian or Alaskan Native	0.8 (0.44)	0.4	0.5	0.2
Multiethnic	3.6 (0.94)	1.6	2.1	4.5
Total	100.0	100.0	100.0	100.0
Number of providers	391	473,460	12,770	155,736

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

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

	Percentage (SE)	
	Licensed providers	Santa Clara County adult population
English	38.6 (2.43)	61.3
Spanish[b]	11.4 (1.59)	9.1
English and Spanish[b]	30.8 (2.31)	11.4
English, plus an additional language other than Spanish	19.1 (1.97)	18.3
Total	100.0	100.0
Number of providers	402	957,266

Note: Based on the self-assessment of a sample of 402 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*	61.2 (2.43)	78.6 (2.66)	36.0 (3.75)
1 paid assistant**	25.9 (2.19)	16.4 (2.40)	39.6 (3.82)
2 or more paid assistants**	12.9 (1.68)	5.0 (1.42)	24.4 (3.36)
Total	100.0	100.0	100.0
Number of providers	402	238	164

*$p < .001$, 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*	77.8 (2.08)	81.8 (2.52)	72.0 (3.51)
1 child with special needs	12.5 (1.66)	11.4 (2.07)	14.0 (2.71)
2 or more children with special needs**	9.8 (1.49)	6.8 (1.64)	14.0 (2.71)
Total	100.0	100.0	100.0
Number of providers	400	236	164

*$p < .05$, Large homes < small homes.
**$p < .05$, Large homes > small homes.

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

	Percentage (SE)	
	Licensed providers	Santa Clara County female adult population
High school diploma or less	23.9 (2.13)	30.4
Some college	42.5 (2.47)	21.0
Associate degree	11.7 (1.60)	8.6
Bachelor's degree or higher	21.9 (2.06)	40.0
Total	100.0	100.0
Number of providers	402	464,153

[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	20.0 (3.46)	23.4 (6.20)	18.2 (4.13)
Degree unrelated to ECE	80.0 (3.46)	76.6 (6.20)	81.8 (4.13)
Total	100.0	100.0	100.0
Number of providers	135	47	88

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)	
	Santa Clara County	*Number of providers*
Some college	17.5 (1.43)	112
Associate degree	21.6 (2.49)	34
Bachelor's degree or higher	29.7 (4.38)	56

*$p < .001$, 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)	
	Santa Clara County	*Number of providers*
High school diploma or less	59.4 (5.02)	96
Some college	75.4 (3.33)	167
Associate degree	59.6 (7.17)	47
Bachelor's degree or higher	67.0 (5.02)	88
All providers	67.8 (2.34)	398

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

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

	Percentage (SE)	
	Santa Clara County	*Number of providers*
High school diploma or less	19.2 (7.75)	26
Some college	40.3 (6.25)	62
Associate degree	45.0 (11.16)	20
Bachelor's degree or higher	55.6 (7.43)	45
All providers who employed at least one paid assistant	56.9 (4.02)	153

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	23.9 (2.13)	27.3 (2.89)	18.9 (3.06)
Some college	42.5 (2.47)	40.8 (3.19)	45.1 (3.89)
Associate degree	11.7 (1.60)	12.6 (2.15)	10.4 (2.38)
Bachelor's degree or higher	21.9 (2.06)	19.3 (2.56)	25.6 (3.41)
Total	100.0	100.0	100.0
Number of providers	402	238	164

Table A13. *Percentage of Licensed Providers Reporting Completion of Non-Credit Training 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	40.4 (3.58)	24.9 (2.99)	32.2 (2.35)
1 or more hours*	59.6 (3.58)	75.1 (2.99)	67.8 (2.35)
Total	100.0	100.0	100.0
Number of providers	188	209	397

*$p < .01$, 1 or more children > no children.

Table A14. *Ethnic Distribution of Licensed Providers, by Tenure*

	Estimated percentage (SE)		
	24 months or less*	Over 24 months**	All providers
White, Non-Hispanic	11.5 (6.27)	44.2 (2.72)	41.8 (2.60)
Latina	69.2 (9.06)	43.3 (2.71)	45.1 (2.62)
Asian/ Pacific Islander	19.2 (7.74)	12.5 (1.81)	13.0 (1.71)
Total	100.0	100.0	100.0
Number of providers	26	335	361

*$p < .01$, Latina > White, Non-Hispanic, Asian/Pacific Islander
**$p < .01$, Asian/Pacific Islander < White, Non-Hispanic, Latina

Table A15. *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	38.6	26.3	41.8	47.8	41.2
	(2.47)	(4.52)	(3.84)	(7.37)	(5.34)
Latina*	41.7	63.2	44.8	30.4	17.6
	(2.50)	(4.96)	(3.88)	(6.79)	(4.14)
African American	2.8	2.1	3.6	2.2	2.4
	(0.84)	(1.47)	(1.46)	(2.15)	(1.65)
Asian/Pacific Islander**	12.5	6.3	4.8	13.0	34.1
	(1.68)	(2.50)	(1.67)	(4.97)	(5.15)
American Indian or Alaskan Native	0.8	0.0	0.0	0.0	3.5
	(0.44)	(0.0)	(0.0)	(0.0)	(2.00)
Multiethnic	3.6	2.1	4.8	6.5	1.2
	(0.94)	(1.47)	(1.67)	(3.65)	(1.17)
Total	100.0	100.0	100.0	100.0	100.0
Number of providers	391	95	165	46	85

Tests of significance were only performed for White, Non-Hispanic, Latina, African American, and Asian/Pacific Islander provider groups.
*$p < .001$, High school diploma or less > Associate degree, Bachelor's degree or higher.
**$p < .001$, Bachelor's degree or higher > high school diploma or less, some college

Table A16. *Educational Attainment of Licensed Providers, by Ethnicity*

	Percentage (SE)			
	All Providers	White, Non-Hispanic	Latina	Asian/Pacific Islander
High school diploma or less*	25.1	16.6	36.8	12.2
	(2.28)	(3.03)	(3.78)	(4.68)
Some college	41.6	45.7	45.4	16.3
	(2.59)	(4.05)	(3.90)	(5.28)
Associate degree**	11.6	14.6	8.6	12.2
	(1.68)	(2.87)	(2.20)	(4.68)
Bachelor's degree or higher***	21.8	23.2	9.2	59.2
	(2.17)	(3.43)	(2.26)	(7.02)
Total	100.0	100.0	100.0	100.0
Number of providers	363	151	163	49

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, and Asian/Pacific Islander
**$p < .001$, White, Non-Hispanic, Latina > Asian/Pacific Islander
***$p < .001$, Asian/Pacific Islander > White, Non-Hispanic, Latina.

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 Santa Clara County

Overview

In Santa Clara County, we interviewed a sample of licensed family child care providers, randomly selected from the provider population. This sample offers 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 random sample of interviewed providers, taking into account various factors related to the entire provider population.

Ideally, the random sample of providers interviewed during the survey would reflect all the characteristics of the "universe" (or total provider population) of family child care homes. In the normal course of events, providers go out of business and new providers replace them, and a description of the universe, 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 Santa Clara County was 1,329, and we completed interviews with a random sample of 402 providers. We were unable to complete interviews with approximately 28 percent of the providers contacted because they 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 an 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 our 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 17 providers in the Santa Clara County 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: 1,329/402 = 3.31.[15]
2. Multiply the sum of children in the sample by the multiplier (3.31) to calculate the estimated total number of children served.
3. Multiply the sum of paid assistants in the sample by the multiplier (3.31) to calculate the estimated total number of paid assistants.
4. Add the estimated number of paid assistants to the total number of family child care providers in the survey universe (1,329) to calculate the size of the county's licensed family child care workforce.

15 The sample size was 402 for paid assistants but 401 for children served, as one provider did not answer the questions about 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, 28 percent of providers in the universe were assumed to be out of business, and, in the normal course of events, would have been replaced by new providers. Multiply the universe (1,329) by the percentage out of business (28%). This would be the number of new providers in the universe: 1,329 x .275 = 365.
2. Estimate the number of more tenured providers in the universe. Seventy-three percent of the providers in our sample were in business. Multiply the universe (1,329) by the percentage in business (73%). This would be the number of more tenured providers in the universe: 1,329 x .725 = 964.
3. Calculate a ratio of the new providers in the universe to the new providers in the sample (providers in business one year or less, N=17) to create a multiplier for the sample to the universe for new providers: 365/17 = 21.5.
4. Calculate 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=383) to create a multiplier for the sample to the universe for more tenured providers: 964/383 = 2.5.[16]
5. Multiply the sum of children served by new providers in the sample (in business one year or less) by the "new provider" multiplier (21.5) to calculate an estimated total of children served by providers who had been in business one year or less.
6. Multiply the sum of children served by providers in the sample in business more than one year by the "more tenured provider" multiplier (2.5) to calculate an estimated total of children served by providers who had been 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 the sample in business one year or less by the "new provider " multiplier (21.5) 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 (2.5) 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 number of paid assistants.
11. Add the estimated total number of paid assistants (Step 10) to the total number of licensed family child care providers in the survey universe (1,329) to estimate the size of the county's family child care workforce.

16 The sample size of more tenured providers was 383 for paid assistants, but 382 for children served, as one provider did not answer the questions about the number of children served questions. Thus, the ratio varies very slightly for the number of children served and the number of paid assistants.

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