

# Community Voices

## California Preschool Directors Speak on Policy Options



Policy Analysis for California Education  
University of California and Stanford University  
2007

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California continues to widen access to local child care and preschool programs—albeit in fits and starts—for a variety of families. About 65% of all four year-olds statewide now attend a preschool center. Government spends \$3.6 billion on early care and education programs statewide, including a three-fold increase in state spending since 1996.

Yet preschool access and quality remain unfairly distributed among the state's diverse communities. Four year-olds from poor Latino families remain about half as likely to attend a preschool center, compared with their counterparts from affluent families. Young children from blue-collar and lower middle-class families are slightly less likely to enter preschool, even relative to poor children.<sup>1</sup>

One persisting question is how to grow more plentiful and higher quality preschools, and how to ensure a robust balance between organizations run by schools or community organizations. About three-fifths of California four year-olds enrolled in preschool attended an organization supported through parental fees in 2005. The remaining two-fifths attended a publicly subsidized program.<sup>2</sup> Voters went against Proposition 82 in 2006, which aimed to expand preschools via county education offices.

Despite rising interest among policy makers, we know little about how preschool directors understand and evaluate policy options. This statewide survey of 439 directors of community preschools—those funded outside of school districts—inquired about basic facts and their perceptions of long-term issues. We examined—

- The size, venue, and types of children served by community-based preschools.
- How these local programs are financed, including support from parents and government.
- The extent to which community preschools face excess demand from families, or worry about vacant enrollment slots.
- How preschool directors prefer to improve the quality of their programs, including teacher training options.
- Whether directors welcome or question the possibility of stronger state control over child development practices.
- How directors view the prospect of a unionized teaching staff.

The PACE survey was conducted via the Web and through phone interviews between November 2005 and May 2006. Preschool directors were selected randomly within zip codes earlier drawn by the National Center for Educational Statistics, allowing limited generalization to statewide patterns.

Many thanks are due the busy preschool directors who took time to complete the survey. Katie Gesicki managed the project. The electronic version of the survey process was coordinated by Thea Sweo. Sunyoung Jung assisted with the statistical analyses. The steady work of contacting directors and completing the hundreds of interviews was conducted by Araceli Ayala Espinoza, Vadim Bul, Lilian Garcia, Sarah Gaither, Kate Hart, Jessica Knowles, and Stephanie Lee. Allison Chen provided essential help with logistics.

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## Overview—Learning from Preschool Directors

We aimed to understand the size and scope of community-based preschools, along with how their directors view perennial policy issues. Community-based programs serve over two-thirds of the 334,000 four year-olds who presently attend preschool in California, along with large numbers of three year-olds. The remaining one-third of the state's four year-olds attend programs funded through local school districts.<sup>3</sup>

Many preschools run by community-based organizations (CBOs) receive public funding through federal Head Start or state center-based program dollars. This subsector forms one slice of California's \$3.6 billion network of publicly supported child care and preschool providers. Some CBOs locate their preschool classrooms inside public school facilities, rather than in churches, civic organizations, or storefronts. Community preschools also represent a major share of the 13,000 local nonprofit centers that provide a variety of services to families, spread throughout California.

Yet despite the size of the community-based preschool sector—including subsidized and fee-supported programs—we know little about the scope of these neighborhood organizations or the views held by their directors. Our survey aimed to close this knowledge gap. The survey, completed on the Web or over the phone, focused on these topics:

- The size, venue, and types of children served by community-based preschools.
- How these programs are financed, including support from parents and government.
- The extent to which community preschools face excess demand from families, or worry about vacant enrollment slots.
- How preschool directors prefer to improve the quality of their programs, including teacher training options.
- Whether directors welcome or question the possibility of stronger state control over their child development practices.
- How directors view the prospect of a unionized teaching staff.
- Whether directors would experience sharp market competition if free preschools opened nearby.

### Survey Procedure

Our sampling process first drew on the 319 usable primary sampling units (in this case, California zip codes) from the Early Childhood Longitudinal Study, conducted by the National Center for Education Statistics. These units were randomly drawn, yielding a representative sample of the state's child population.

From each of these zip codes we then randomly drew preschools off the consumer website maintained by the California Department of Social Services, the state's child care licensing agency. This agency inspects and licenses nonprofit and for-profit preschool centers but excludes some run by school districts (since these are not licensed in the same way).

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The count of preschools drawn was proportional to the child population size of each zip code. This random draw of preschools yielded 864 preschool centers which are not funded by school districts and for which valid contact data were available. Sampled preschool directors were immediately asked a screening question to ensure that their funding did not come through a school district.

### **Sample Size and Possible Bias**

Surveys were completed between November 2005 and May 2006 by 439 eligible preschool directors, including questionnaires completed on the web and interviews conducted over the phone by PACE research staff. The response rate equaled 51% of eligible respondents. Many directors responded that they could not afford the time to complete the survey. Given the final sample size, the average percentages (arithmetic means) reported below have a confidence interval of plus or minus five points on either side of each mean value.

Care is advisable in generalizing the findings to the entire state. Our modest response rate may have introduced biases into the pattern of responses. We could detect no differences in response rates based on socioeconomic attributes of the zip codes from which the sample was drawn. Still, unobserved features of the survey participants may differ in non-random ways from the original draw of candidate directors. Additional research with larger samples would be useful in verifying our basic findings.

Figure A displays the geographic location of the sampled preschool directors who participated in the study.

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## **Findings**

### **Features of Preschools**

First, we asked several questions regarding each preschool's size and scope, forms of financing, attributes of families served and their teaching staff, and levels of enrollment demand.

#### **Financing and Venue**

The final sample of neighborhood programs included those mainly funded through parental fees (69% of the sample), along with preschools supported by state or county funds (21%), or by federal Head Start dollars (10%).

The progressive flow of public funds can be seen when splitting the sample among four quartiles of zip codes, defined in terms of median household income within each zip. We report in Figure 1 the share of sampled preschools that report receiving public dollars from any source for the poorest and richest quartiles of zip codes, and for the two quartiles in between.<sup>4</sup>

This distribution of sponsorship generally matches statewide enrollment figures. Of the state's 523,000 four year-olds, about 334,000 presently attend a preschool center. Of this count, about

FIGURE A





60% (193,000) attend preschools funded primarily through parental fees. The remaining 40% of preschoolers, aided by subsidies, are distributed between community- and school-based programs.<sup>5</sup>

Returning to our sample of community preschools, 33% were housed in church facilities, yet these religious institutions do not necessarily govern the preschool (Figure 2). Of the remaining preschools, 13% were housed in other community agencies, 32% were situated in a public or private school (but not funded by a school district), and 22% were run by a private company.

### Size and Scope

Sampled preschools were small in scope overall. The median preschool enrolled 57 children between 0-5 years of age of whom 26 were four year-olds. Just over half of all preschools operated just one or two class groups for four year-olds. Almost one-third ran four or more class groups for four year-olds.

Participating preschools had been in operation for 17 years, on average (median). The median director had worked in the early childhood field for 19 years.

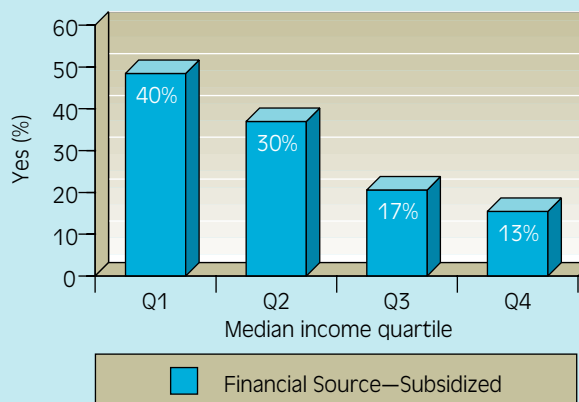
### Uneven Enrollment Demand

Preschool advocates often cite the count of families appearing on waiting lists as a gauge of excess demand. Less well documented is the count of vacant enrollment slots observed among other preschools.<sup>6</sup>

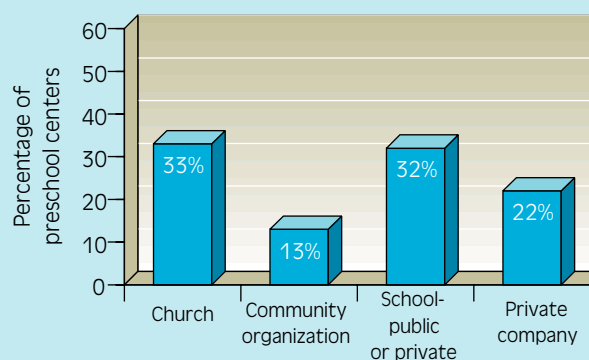
About 53% of participating directors reported that they maintained a waiting list. Just 31% said that their list contained 10 or more names. Directors of subsidized programs reported 21 more names on their waiting list, compared with directors of fee-support preschools (after statistically controlling on other features of the preschool and community).

At the same time, 42% of the directors indicated that their preschool currently had vacant enrollment slots for four year-olds. When estimating the likelihood of vacant slots within a regression model, we found that preschools with more class groups, those housed in a school facility, or located in a zip code with higher per capita supply were significantly more likely to report vacant enrollment slots (Appendix 1).

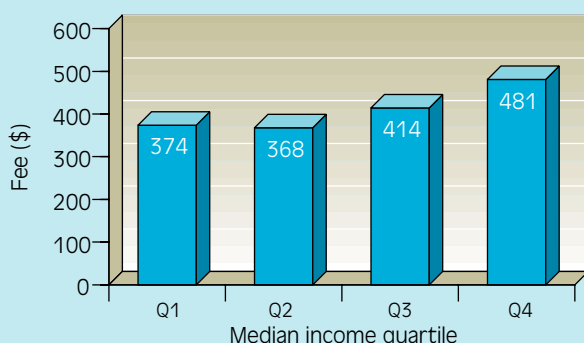
**FIGURE 1.** Percentage of Community preschools receiving subsidies as reported by directors, by zip code quartile (household income)



**FIGURE 2.** Organizational host of preschools as reported by directors



**FIGURE 3.** Mean fee levels paid by parents for half-day program by zip code quartile (household income)



### Fee Levels and Differences between Subsectors

As we turn to key issues facing these preschool directors, we will hear differing views between the two groups of programs: the 69% financed through parental fees versus the 31% supported by public funds.

Fee levels varied widely among the 7 in 10 programs financed by families. Among these preschools, the median preschool charged \$399 per month for a half-day segment for four year-olds running five days a week.

Splitting the sample into income quartiles in Figure 3, we see that fee levels differ by wealth or poverty of their local communities. Directors in

the poorest quartile of zip codes—for those charging fees—reported that they charge \$374 per month, compared with \$481 per month for a half-day program in the wealthiest quartile of zip codes. Revenues from fees appear to be responsive to families relative purchasing power.

We will see below differing organizational attributes and director opinions between subsidized and fee-supported preschools. When responses differ significantly between the two subsectors we note these contrasts, based on simple chi-square or t-tests. Multivariate regression results are detailed in the text and the appendix.

### Views of State Control—Child Development Philosophy and Classroom Practices

Some advocates and policy makers argue that healthier public funding and tougher quality standards should be accompanied by more centralized state control. The recent ballot initiative, Prop. 82, would only have funded preschools that met learning goals set by the state education department, “aligned with statewide academic standards for elementary education.”

We asked directors several questions regarding their philosophies of child development and how they viewed the possibility of greater control from Sacramento. We sought to contextualize their views by learning about their current relationships with local education agencies.

#### Contact with School Authorities

Community preschool directors reported little contact with school authorities when it comes to harmonizing their learning objectives. Just under 40% of the directors surveyed said they “rarely communicate about these kinds of issues.” Another 31% said they meet about “once a year” to coordinate activities with elementary schools.

Directors running subsidized preschools and those located within a school facility reported having more frequent contact with school staff, compared with fee-supported programs and those situated in their own facility (regression estimates appear in Appendix Table 2).



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Less than one-third of the directors knew where the county office of education is located, the conduit of new funding under recent policy proposals. Just one quarter of directors surveyed felt that it was a “good idea” to send new preschool funding through the county education office. This response might be interpreted in the context of little historical contact with county offices, except for county superintendents who administer federal Head Start programs.

### **Child Development and State Control**

When asked about their philosophy of child development, just over two-thirds of the directors ranked as number one the following position: “I believe that four year-olds best learn through structured play and age-appropriate activities.”

The second most frequently endorsed approach, reported by 35% of the directors: “I believe that children should focus on language, pre-literacy, and numeracy skills by directly teaching these topics.”<sup>7</sup>

We then asked directors whether they felt that classroom activities should be fused more tightly to state-set curricular aims. Responding affirmatively, 38% said, “yes, our classroom learning goals should fit the state’s.” But 52% opposed this position, and 10% said they weren’t sure.

The directors’ wariness of state controls was stronger when we asked, “Do you think classroom activities for four year-olds should aim to raise their standardized test scores once they enter elementary school?” Some Prop. 82 adherents argued that state-run preschools would close achievement gaps, as measured by testing in the elementary grades.

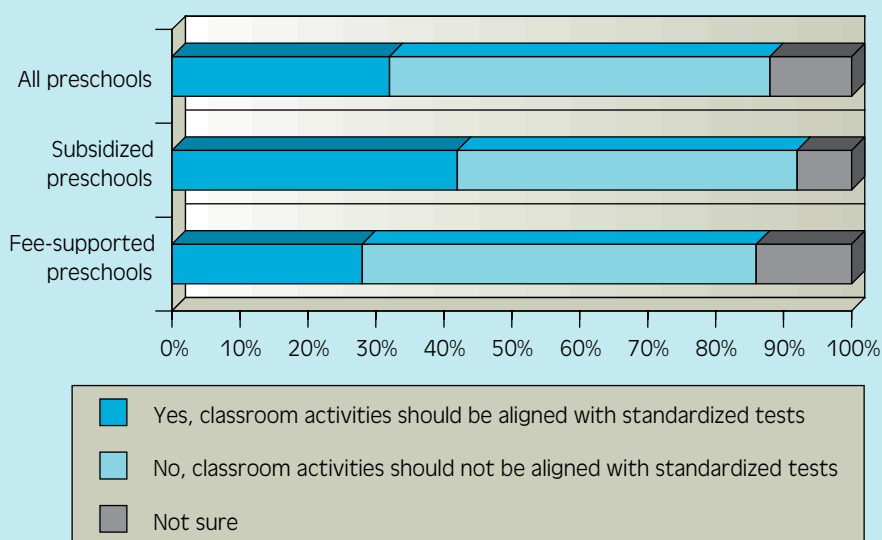
Just over 55% disagreed, while 32% agreed that classroom activities should be aligned with state learning standards and testing at the elementary school level, as shown in Figure 4. Among directors of fee-support programs, 58% were opposed to alignment with elementary school tests, and 28% expressed support (a statistically significant between-group difference,  $p < .011$ ). Directors of subsidized programs were more open to intensifying the degree of state control.

After taking into account the type of preschool program, directors working in middle-class and affluent communities were slightly less likely to endorse alignment with state testing, compared with directors in poor communities. This difference was statistically significant, yet only 3% less likely (although 17% less likely without controlling for type of preschool, subsidized or fee-supported).

### **Teachers and Classroom Qualities**

Some preschool advocates argue that all teachers attain a bachelor’s degree. This kind of mandate has proven controversial within the federal Head Start program, and debates persist among scholars as to whether this level of training actually raises children’s development.<sup>8</sup>

**FIGURE 4.** Percentage of preschool directors who agreed that “classroom activities... should aim to raise standardized test scores”



Participating directors were split over the desirability of the BA degree requirement. Overall 43% recommended that teachers complete a two-year community college program, specializing in child development, while 37% preferred the BA degree.

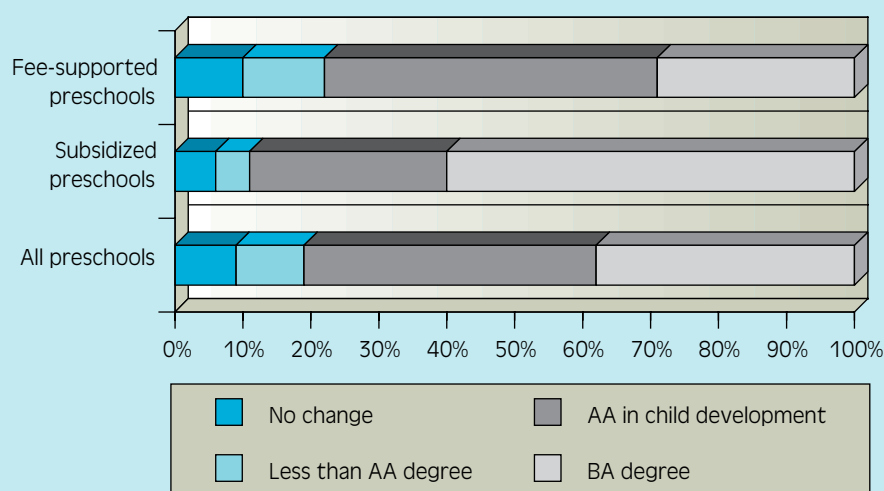
Directors of subsidized programs were more favorable toward the BA standard, with 59% preferring this option, compared with only 29% of the directors in fee-supported preschools favoring the BA mandate, as shown in Figure 5.

We asked whether requiring a bachelor’s degree “would ensure that new teachers care more deeply about children,” a statement with which only 15% of all directors agreed. Directors of subsidized programs were slightly more optimistic about the BA mandate, with 21% believing it would deliver more caring teachers (but the between-group difference was not statistically significant).

When we asked whether requiring that new teachers hold a bachelor’s degree would bring “smarter people to the field, including graduates with richer language skills,” 35% agreed, while 53% said they disagreed and 12% were not sure.

We also asked whether a BA mandate by the state would reduce the supply of teachers who come from linguistic or ethnic minority groups. The rate of affirmative responses varied by the wealth of the preschool’s community, as shown in Figure 6. One-third of directors working in the poorest quartile of zip codes reported that the BA requirement would shrink the pool of available teachers. But this worry was expressed by only one-sixth of directors in lower middle-class communities (the second quartile).

**FIGURE 5.** Directors' preference for teachers with a two- or four-year college degree by type of preschool



When estimating the probability of a preference for the BA requirement (within a multivariate regression model), we found that more highly educated directors were about three times more likely to support this mandate ( $p < .001$ ), as shown in Appendix Table 3.

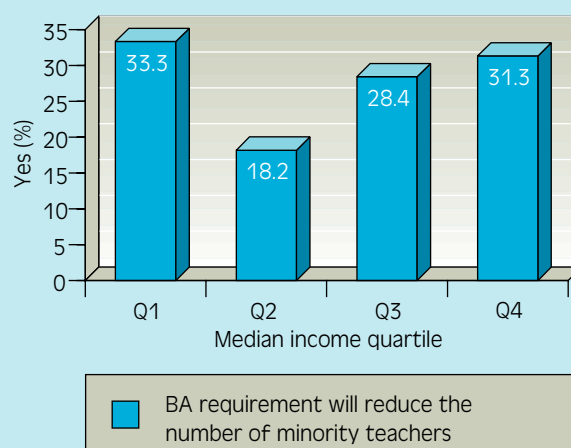
### Language in the Classroom

Almost 54% of directors surveyed reported that at least one-tenth of their four year-olds come from non-English speaking families. Among these directors, 41% said that home language should be included in classroom discourse (Figure 7).

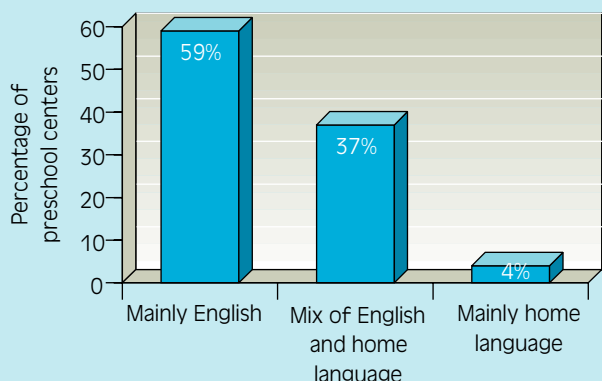
We posed the question, “Some policy makers believe that English should be required within almost all preschool classrooms. Do you support or oppose this viewpoint.” Prop. 82 would have required that funded preschools ensure that children are “making progress in learning the English language.” Some worry that the push for so-called content standards for preschool implies a more intense push for English proficiency.

Just over 63% of all directors said they support the idea that “English should be the main language spoken in preschool classrooms,” while 25% opted for the position, “Local preschools should set their own language policies” (12% were unsure).

**FIGURE 6.** Percentage of preschool directors reporting that a bachelor's degree mandate would reduce the number of teachers from ethnic minority groups, by zip code quartile

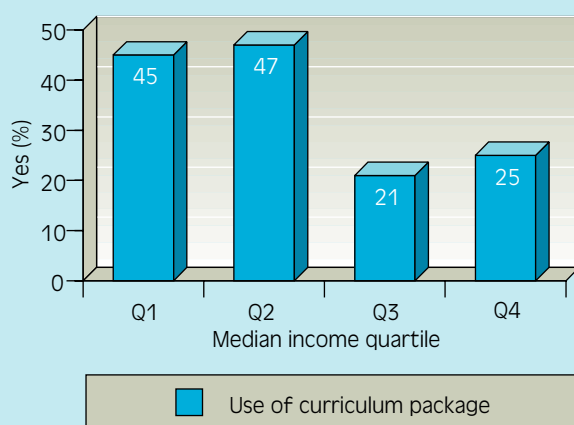


**FIGURE 7.** Percentage of preschool directors preferring home language in preschool classrooms, among those with non-English speaking children (n=289 directors)



When estimating the probability of using a curriculum package, we found that subsidized preschools and those with a unionized teaching force were more likely to have installed this structure inside their classrooms. Those directors who reported a free, subsidized preschool nearby also had moved to utilize a curriculum package. This suggests that the landscape in which a given preschool operates is influenced by neighborhood conditions, accompanying regulatory structures, and the practices of nearby programs. This regression model appears in Appendix Table 4.

**FIGURE 8.** Percentage of preschool directors reporting use of a curriculum package by zip code quartile (household income)



## Curriculum and School Contacts

We talked with directors about whether they had installed a curriculum package of some kind, be in constructivist or traditionally scripted, in their classrooms. First 5 children and family commissions and other agencies have encouraged stronger articulation in the learning aims of preschool centers and elementary schools.

The use of curriculum packages was highly related to the wealth of the community in which a preschool operated, as shown in Figure 8. Between 45% and 47% of directors in the lowest two quartiles of zip codes reported using a structured program of some kinds, compared with just 21% and 25% in the third and fourth (better-off) quartiles.

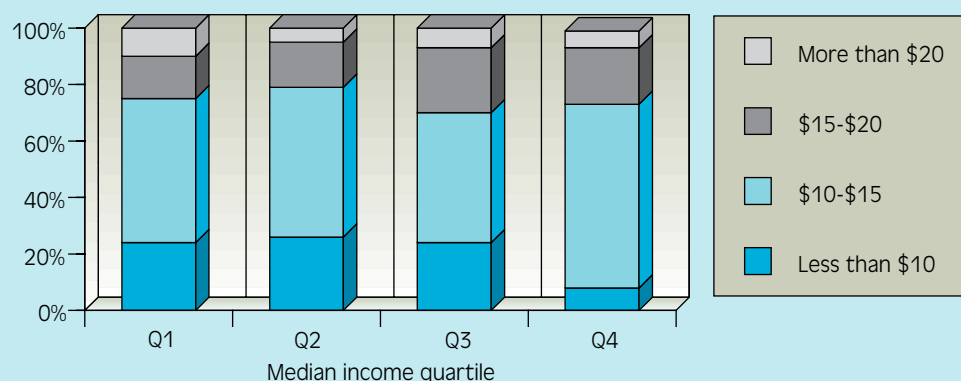
## Teacher Salaries and Views of Unions

The desire to bring preschool staff into labor unions is not surprising, given how low teacher salaries remain. Among directors surveyed, 74% reported that their teachers earn less than \$15 per hour.

Teacher salaries vary only slightly across differing neighborhoods, as seen in Figure 9. Among preschools situated in the poorest quartile of zip codes, only 27% of the directors reported that the average teacher wage exceeded \$15 per hour, compared with 26% of the directors in the richest quartile.

A significantly greater share (65%) of preschool directors in the wealthiest quartile reported paying the mid-range wage of \$10 - \$15 per hour, compared with 51% of the directors in the poor-

**FIGURE 9.** Mean hourly wages of teachers by zip code as reported by directors by zip code quartile (household income)



est quartile. While wages are low overall, public subsidies appear to ensure competitive salaries in preschools serving predominately low-income families.

Two preschool initiatives, including Prop. 82, have attempted to ease the route toward unionizing the preschool workforce. Some programs already are staffed by teachers that belong to a labor organization. One in six preschool directors reported that their staff members belong to a union.

Almost one-fifth of preschools situated in the poorest quartile of zip codes have already been organized, split among a teachers association, the Service Employees International Union (SEIU), or another labor organizations. Just over 5% of preschool directors situated in the wealthiest quartile of zip codes reported that their staff had joined a union.

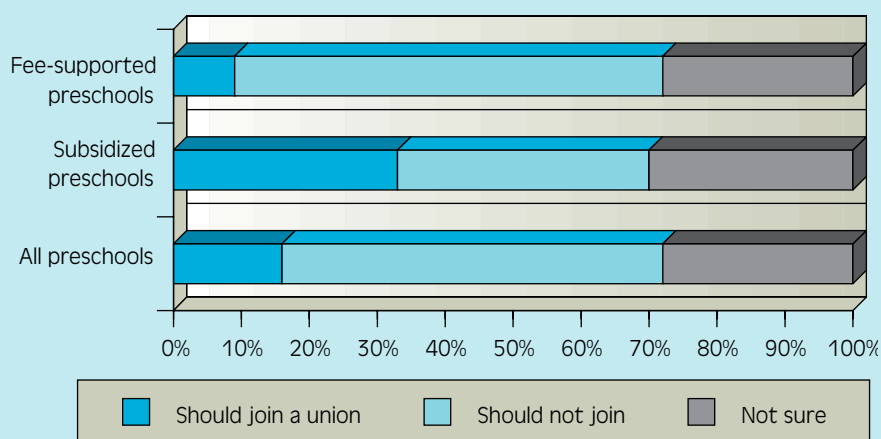
We then asked directors whether they believed that their teachers should join a union. Just under 16% said, yes, as seen in Figure 10. Yet just under one-third of directors running publicly supported preschools backed the idea of unionization (between-group difference significant,  $p < .001$ ). This may be due to the fact that these directors had more experience in working with a union, compared with directors in fee-supported programs. Directors of preschools housed within a public or private school also were more supportive of labor organizations (Appendix Table 5).

Just 11% of all directors surveyed said that unionization “would probably improve the quality of our program,” whereas 37% indicated that it would “not change quality.”

### Competition from Free Preschools

Community preschools that charge parental fees may face price competition as public subsidies grow, creating additional preschool slots that are free to parents. One exception is where child care vouchers move to preschools that serve a mix of subsidized and fee-paying families.

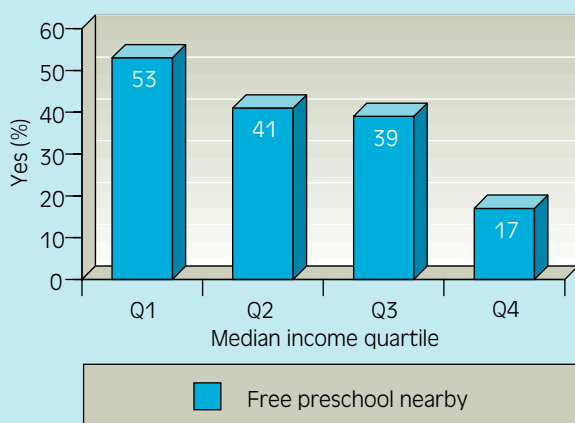
**FIGURE 10.** Percentage of preschool directors who believe that their teachers should join a labor union



One-third of all directors indicated that a “nearby elementary school presently offer(s) a preschool program for four year-olds that’s free to all parents.” Remember that 31% of directors surveyed run preschools that do not charge fees. So, they likely operate in lower-income areas in which local elementary schools operate free programs as well.

Figure 11 shows how the presence of free preschools varies by community income levels. In the poorest quartile of zip codes, 53% of the directors indicated that a nearby public school operates or hosts a free preschool program. While in the richest quartile, just 17% of the directors were aware of a free preschool close-by.

**FIGURE 11.** Percentage of preschool directors reporting that a nearby public school runs or hosts a free preschool



We then asked about the likelihood of closing their doors if a “local elementary school started or expanded a free program for four year-olds.” Just over one-fifth (21%) of the directors said that it was “very” or “somewhat likely” they would be forced to shut down. This proportion was statistically identical for directors of fee-supported and subsidized programs.

Just over a third (37%) indicated that they would try to serve more younger children, age 0-3 years, if a free program was expanded or opened for the first time. About half (51%) said they could survive without making changes to their current program.

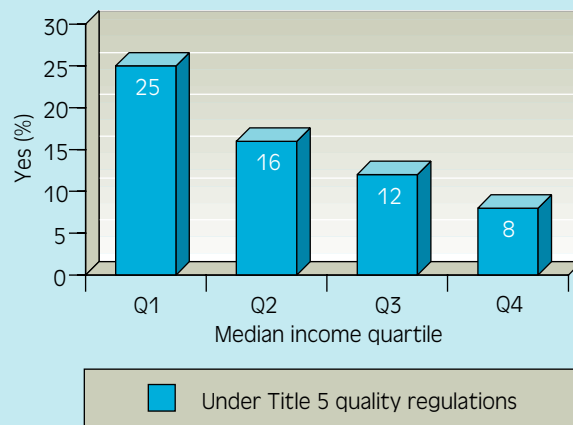


## Auspice and State Regulation

One feature of sampled preschools pertained to whether their quality was regulated under the more stringent Title 5 or weaker Title 22 standards. Figure 12 reports the share of preschools who reported falling under Title 5 regulations. As expected, directors situated in poor communities were more likely to report being regulated under Title 5. In California, most preschools receiving public funds, with some exceptions, do fall under Title 5 regulatory practices.

Site directors surveyed may under report coverage under Title 5, given that a higher administrative office may liaise with state or local licensing agencies. Directors of federal Head Start preschools may be unaware of state regulatory requirements, attending more keenly to federal requirements.

**FIGURE 12.** Percentage of directors reporting that their preschool falls under Title 5 quality regulations by zip code quartile (household income)



## Policy Implications

These findings reveal significant diversity in the features of community preschools, along with differing opinions when it comes to persisting policy issues. At the same time, overall patterns help to inform current policy debates:

- The community-based preschool sector remains larger than its public school counterpart in terms of children served. Programs supported by parental fees serve about three in five of the state's 334,000 four year-olds who currently attend preschool.
- Community preschools are small organizations; they are experiencing uneven family demand across the state's diverse neighborhoods; most report insufficient resources to pay livable wages to many teachers.
- Community preschool directors worry about proposals that would require alignment of their child development philosophy and classroom practices to state curricular standards and testing regimes.
- Directors are supportive of efforts aimed at improving the quality of the teaching force. Yet they are split over whether mandating a bachelor's degree would deliver new teachers with caring qualities and stronger skills.
- The directors overall are not eager to see their teachers join a labor union. At the same time, they seem quite aware of how depressed teacher salaries remain. Directors with unionized

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staff held more favorable views of labor organizations, compared with directors reporting no experience with unions.

- About one in five directors fear they would shut down if a free preschool opened in a nearby public school. The majority, however, reported that they would probably survive by adjusting their program, for example, serving younger children.

Overall, we found systematic differences between preschools that are subsidized by government, serve lower-income families, and operate under more stringent Title 5 regulations, compared with those financed by parental fees. Directors of the former preschools, running programs within a more rationalized and regulated environment, are more likely to use a formal curriculum in their classrooms, are more supportive of statewide standards, and report more contacts with elementary schools. They are more than twice as likely to favor a bachelor's degree requirement for all teachers.

In contrast, directors who remain independent of the subsidy system are more suspicious of state mandates, including curriculum standards and credential requirements. Directors running fee-supported programs report having less contact with elementary schools, compared with directors of subsidized preschools. This corresponds to directors' variable openness to unions: those running subsidized programs are far more supportive of labor organizations.

Directors in the most affluent two quartiles of zip codes were much less likely to have adopted a formal curriculum package, compared with directors operating in the poorest two quartiles. These contrasts between subsidized and fee-supported programs may challenge the advocates and policy makers who aim to weave together these two segments of the preschool sector.

We have much to learn about patterns of family demand for preschool, and how pent-up demand may vary among communities. Less than a third (31%) of all directors reported maintaining a waiting list that contained 10 or more names. Two in five directors reported vacant slots in their classrooms for four year-olds. Vacant slots, not surprisingly, are reported more frequently by directors situated in zip codes with more ample supplies of enrollment slots. Vacancies are comparatively rare in subsidized centers, those housed in public schools, and in larger programs (those operating more class groups).

Overall, these results demonstrate the utility of listening carefully to the varying viewpoints of preschool directors—early educators that work in widely diverse communities and differing regulated or market environments. For all the policy talk around preschool reform, we rarely ask front-line directors and teachers how they would make improvements. These results take one small step toward amplifying their voices.

## Appendix

**TABLE 1.** Estimating the probability of preschool center reporting vacant slots for 4-year-old (logistic regression)

	<b>B (S.E.) N=322</b>	<b>Odds Ratio</b>	<b>B (S.E.) N=434</b>	<b>Odds Ratio</b>
<b>Constant</b>	.95 (.51)	2.60	.88 (.52)	2.42
<b>Community context</b>				
Median income of the community†	-.01 (.01)	1.00	-.01 (.01)	.99
Preschool enrollment capacity in zip code	.01(.00)**	1.01	.01(.00)**	1.01
<b>Organizational features</b>				
Subsidized preschool	-.50 (.28)+	.61	-.16 (.34)	.85
Free preschool nearby	-.23 (.25)	.80	-.25 (.26)	.78
Located at public or private school facility	-.63 (.26)*	.53	-.48 (.27)	.62
Number of classes for four-year-olds	-.26 (.10)**	.77	-.26 (.10)**	.77
<b>Staff characteristics</b>				
Education level of the director	-.28 (.25)	.76	-.32 (.25)	.73
<b>Non-native English speakers: more than 10%</b>			.11 (.27)	1.12
<b>Unionized staff</b>			-1.01 (.45)*	.37
<b>Chi-square (df)</b>	30.32 (7)***		34.65(9)***	
<b>R square</b>	.12		.14	

\*\*\* p<.001; \*\* p<.01; \*p<.05; +p<.10

† median household income in \$1,000's.

**TABLE 2.** Estimating the frequency of contact with local elementary schools (OLS regression, n=321)

	<b>B (S.E.) N=321</b>	<b>t</b>	<b>B (S.E.) N=214</b>	<b>t</b>
<b>Constant</b>	1.82 (.25)***	7.21	1.81 (.25)***	7.12
<b>Community context</b>				
Median income of the community†	.001 (.00)	.37	.001 (.00)	.21
Preschool enrollment capacity in zip code	.001 (.00)	.67	.001 (.00)	.82
<b>Organizational features</b>				
Subsidized preschool	.43 (.14)**	3.19	.27 (.17)	1.64
Free preschool nearby	-.21 (.12)	-1.72	-.21 (.12)	-1.71
Located at public or private school facility	.35 (.12)**	2.81	.28 (.13)*	2.14
Number of classes for four-year-olds	-.02 (.05)	-.52	-.03 (.05)	-.67
<b>Staff characteristics</b>				
Education level of the director	.08 (.12)	.69	.10 (.12)	.80
<b>Non-native English speakers: more than 10%</b>			.12 (.13)	.93
<b>Unionized staff</b>			.24 (.20)	1.20
<b>F (df)</b>	3.83 (7)**		2.79 (9)*	
<b>Adjusted R square</b>	.06		.06	

\*\*\* p<.001; \*\* p<.01; \*p<.05

† median household income in \$1,000's.

**TABLE 3.** Estimating the probability of preschool director reporting preference for a bachelor's degree or higher as the minimal training level for teachers (logistic regression)

	<b>B (S.E.) N=322</b>	<b>Odds Ratio</b>	<b>B (S.E.) N=434</b>	<b>Odds Ratio</b>
<b>Constant</b>	-2.01 (.58)**	.14	-2.19 (.59)***	0.11
<b>Community context</b>				
Median income of the community†	.002 (.01)	1.00	.002 (.01)	1.00
Preschool enrollment capacity in zip code	.001 (.00)	1.00	.00 (.00)	1.00
<b>Organizational features</b>				
Subsidized preschool	1.14 (.29)***	3.12	.62 (.35)	1.85
Free preschool nearby	.04 (.27)	1.04	.01 (.27)	1.01
Located at public or private school facility	.62 (.26)*	1.87	.41 (.28)	1.51
Number of classes for four-year-olds	-.02 (.10)	.98	-.01 (.10)	.99
<b>Staff characteristics</b>				
Education level of the director	1.24 (.28)***	3.44	1.26 (.29)***	3.51
<b>Non-native English speakers: more than 10%</b>			.64 (.29)	1.90
<b>Unionized staff</b>			.64 (.43)	1.89
<b>Chi-square (df)</b>	56.00 (7)***		63.53 (9)***	
<b>R square</b>	.22		.24	

\*\*\* p<.001; \*\* p<.01; \*p<.05

† median household income in \$1,000's.

**TABLE 4.** Estimating the probability of preschool director reporting use of curriculum package or structured materials (logistic regression)

	<b>B (S.E.) N=322</b>	<b>Odds Ratio</b>	<b>B (S.E.) N=</b>	<b>Odds Ratio</b>
<b>Constant</b>	-.73 (.56)	.48	-.73 (.57)	.48
<b>Community context</b>				
Median income of the community†	-.02 (.01)	.99	-.02 (.01)	.98
Preschool enrollment capacity in zip code	.01 (.00)*	1.01	.01 (.00)*	1.01
<b>Organizational features</b>				
Subsidized preschool	1.04 (.28)***	2.83	.47 (.35)	1.60
Free preschool nearby	.50 (.26)	1.65	.55 (.27)*	1.73
Located at public or private school facility	.04 (.26)	1.04	-.29 (.29)	.75
Number of classes for four-year-olds	-.06 (.10)	.95	-.08 (.10)	.92
<b>Staff characteristics</b>				
Education level of the director	-.28 (.27)	.75	-.23 (.27)	.79
<b>Non-native English speakers: more than 10%</b>			.27 (.30)	1.31
<b>Unionized staff</b>			1.13 (.42)**	3.08
<b>Chi-square (df)</b>	31.48***		41.19 (9)***	
<b>R square</b>	.13		.17	

\*\*\* p<.001; \*\* p<.01; \*p<.05

† median household income in \$1,000's.



**TABLE 5.** Estimating the probability of preschool director reporting preference for unionized teaching staff (logistic regression)

	<b>B (S.E.) N=322</b>	<b>Odds Ratio</b>	<b>B (S.E.) N=434</b>	<b>Odds Ratio</b>
<b>Constant</b>	-1.87 (.77)*	.15	-1.73 (.85)*	.18
<b>Community context</b>				
Median income of the community†	.001 (.01)	1.00	-.002 (.01)	1.00
Preschool enrollment capacity in zip code	-.01 (.01)	.99	-.01 (.00)	.99
<b>Organizational features</b>				
Subsidized preschool	1.61 (.37)***	5.01	.39 (.52)	1.47
Free preschool nearby	-.53 (.37)	.59	-.82 (.42)	.44
Located at public or private school facility	.93 (.34)**	2.53	.33 (.40)	1.38
Number of classes for four-year-olds	-.16 (.13)	.85	-.30 (.16)	.74
<b>Staff characteristics</b>				
Education level of the director	.29 (.38)	1.34	.67 (.43)	1.95
<b>Non-native English speakers: more than 10%</b>			.31 (.49)	1.36
<b>Unionized staff (already)</b>			2.65 (.52)***	14.13
<b>Chi-square (df)</b>	46.97***		82.22 (9)***	
<b>R square</b>	.23		.39	

\*\*\* p<.001; \*\* p<.01; \*p<.05

† median household income in \$1,000's.

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## Endnotes

- <sup>1</sup> Spending and enrollment data for California are detailed in Fuller, B., Bridges, M., & Livas, A. (2006). *How to expand and improve preschool in California* (second edition). University of California and Stanford University: Policy Analysis for California Education (working paper 05-1). National enrollment trends by family income and ethnicity, compiled by Daphna Bassok, are detailed in Fuller, B. with Bridges, M. & Pai, S. (2007). *Standardized Childhood: The Political and Cultural Struggle over Early Education*. Stanford, Calif.: Stanford University Press.
- <sup>2</sup> Policy Analysis for California Education (2006). Proposition 82: California's 'Preschool for All Initiative'. University of California and Stanford University (PACE ballot initiative brief).
- <sup>3</sup> These enrollment numbers are detailed in Policy Analysis for California Education (2006).
- <sup>4</sup> The 379 preschool cases with complete data, including zip-code level information, were divided into four income groups of equal counts. Zip codes with median household incomes ranging from \$14,847 (poorest zip code) to \$34,069 made up the first quartile; zips from \$34,755 to \$44,440, the second quartile; \$45,137 to \$59,642, the third quartile; and \$60,375 to \$120,117, the fourth quartile.
- <sup>5</sup> Details and sources for these numbers appear in: Policy Analysis for California Education (2006).
- <sup>6</sup> This issue of the distribution of enrollment demand and under utilized capacity did arise when PACE researchers surveyed over 1,000 center directors for Los Angeles County in 1999, as reported within the county's child care needs assessment.
- <sup>7</sup> Directors could rank these philosophies equally, so percentages add to more than 100%.
- <sup>8</sup> For a recent review of the empirical literature, see Fuller, Bridges, and Livas (2005).

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## Additional PACE studies in child development and early education appear below and on the web: [pace.berkeley.edu](http://pace.berkeley.edu)

- Bruce Fuller and Joe Wright (2007) *Parallel Play: Preschool and K-12 Finance Reform*. PACE working paper 07-3.
- Bruce Fuller with Margaret Bridges and Seeta Pai (2007) *Standardized Childhood: The Political and Cultural Struggle over Early Education* (Stanford University Press, [www.sup.org](http://www.sup.org)).
- Susanna Loeb and colleagues (2005). The Influence of Preschool Centers on Children's Development Nationwide—How Much is Too Much? PACE working paper and appears in *Economics of Education Review* (2006).
- Margaret Bridges and colleagues (2004). Preschool for California's Children: Promising Benefits, Unequal Access. PACE policy brief 04-9.
- Bruce Fuller and colleagues (2005). How to Expand and Improve Preschool in California: Ideals, Evidence, and Policy Options. PACE working paper 05-1.



