

# Create a Foundation for Continuous Improvement

Prepare our children for success from the earliest age.

## **Our Vision:**

A student-centered system recognizes that many learning needs are developed before students reach the classroom and ensures that our youngest children receive the quality preschool and kindergarten education that will help them come to school prepared for success.

Improving California children’s educational success demands that the state focus on students — and that includes focusing attention on the youngest children to ensure that they are prepared for success when they enter school, so they can immediately get off to a strong start. Research shows quality preschool programs improve student readiness for school, yield higher academic achievement, reduce special education placements, and produce downstream benefits, such as higher earnings, reduced reliance on social services, and reduced crime. Similarly, research tells us that children make important gains in educational knowledge and skills in kindergarten, even as they are developing emotionally in ways that will support their success.

Yet, too few children arrive at school ready to learn. Expectations for students in kindergarten and the primary grades continue to increase, enhancing the disadvantages of children who begin school without the necessary skills that quality preschools can provide. Many children living in poverty reach 1st grade two years behind their peers — though they are only 6 years old. Only 50 to 60 percent of eligible 4-year-old students are served in some form of child care or preschool program. And even as current programs support some children from low-income families, affordability poses a barrier to effective preschool for many children whose families come from all income levels.

From its review of the research, the Committee is convinced that investing in improving the readiness of students — especially disadvantaged children — as they enter school will improve their overall academic achievement in grades K–12 and will substantially help close the achievement gap among different student subgroups.

In addition to the potential benefits that can be obtained through quality preschool, the Committee believes that ensuring students are emotionally and intellectually ready for school and then providing them — especially disadvantaged students — with enhanced kindergarten programs will further help to improve their success throughout their educational careers and close the gap among different demographic groups. The state can strengthen children’s foundations for success by changing conditions related to participation, duration, and quality of the kindergarten experience.

Research and common sense show that it is educationally foolish and fiscally unwise to wait until 1st grade to begin educating children. Accordingly, although it was outside the scope of its initial charge, the Committee has explored early childhood

education issues in depth and recommends that the state adopt a series of inter-related changes to strengthen preschool and kindergarten services.

## Research Supports Improving and Expanding Preschool

A broad body of academic research has shown the benefits that can result from *quality* preschool programs. A report published in 2007 by RAND summarizes that research — almost all of which pertains to preschool in states other than California.<sup>1</sup> The research suggests that high-quality preschool clearly improves children’s readiness for school. However, it is less clear whether the gains in school readiness continue as children grow older. It is important that the state comes to understand whether and how the positive impacts of preschool can be sustained over time. While there is no one model of a “high-quality” preschool program, several key factors are predictive of higher-quality programs. Those key factors include: (1) teacher and aide qualifications, training, and professional development; (2) staff-child ratios and group size; and (3) structure of the learning environment, including curriculum and instructional materials.<sup>2</sup> Other important factors include staff compensation, internal program standards and evaluation, parental involvement policies, and licensing status and compliance. While these many factors may be predictive of quality programs, direct observation of a program often is necessary to measure the quality of a preschool.

### Small, high-cost pilot programs show promise

Two programs of primary note — Perry Preschool and the Chicago Child-Parent Centers (Chicago CPC) — experimented with “high-quality” preschool in the 1960s through 1980s and monitored the longitudinal impact preschool had on participating students. In total, these studies demonstrated the potential positive impact that preschool can have on children’s lives. The studies followed students who were in the specific preschool program and a similar control group of students that were not in a preschool program and then compared the outcomes for the two groups. The studies found that the preschool students had higher school readiness, higher student achievement in elementary and middle school, and higher high school completion rates. These students also had lower rates of grade retention and lower rates of participation in special education.

The chart “The Effect of Perry Preschool and Chicago CPC on Key Academic Measures” shows the level of the academic impact of these two programs on students, as defined by these academic measures. The findings are based on “effect size,” which measures the difference in the average outcome for the two groups in terms of standard deviations. For example, on average, the school readiness of students that participated in the Perry Preschool or Chicago CPC is between 0.5 and 0.9 standard deviations higher than for those students who did not. (In other words, the average student who had participated as a preschooler in these programs exceeded the performance of 50 to 90 percent of the students who did not attend these programs.) In educational interventions, effect sizes of 0.3 to 0.5 are considered to be reasonably large. (See Jill Cannon and Lynn Karoly [2007] for more details.)

The National Institute for Early Education Research (NIEER), a research and policy enterprise that advocates for the expansion of preschool, has converted the impact of these programs in terms of cost-benefit analyses.<sup>3</sup> These estimated a rate of return on investment from these two programs of 16 to 1 for Perry and 10 to 1 for Chicago. The primary financial benefits result from reduced crime rates and the reduced education costs from lower rates of special education participation and grade retention.

These outcomes must be considered with caution, since they are based on preschool services provided decades ago, and because the number of students tracked in each study was small. For example, the Perry Preschool study began over 40 years ago and included 123 students, of which just over half participated in the program — taught by four highly educated teachers — while the rest were used as a control. The Chicago experiment may be more useful for broad, contemporary extrapolation because it involved 989 students and cost less than the Perry program and other high-cost pilot programs; however, it also was administered decades ago. What the Committee can conclude from these studies is that when administered effectively, *quality* preschool has the potential to dramatically influence student outcomes over time.

## The Effect of Perry Preschool and Chicago CPC on Key Academic Measures

*(The impact of these programs as measured in “effect size”<sup>a</sup>)*

	Perry Preschool	Chicago CPC
School readiness	0.8–0.9*	0.5–0.8*
Third grade achievement	0.3*	0.1–0.2*
Grade 6 or grade 8 achievement	0.3*	0.2*
High school completion	0.4*	0.2*
Grade retention	-0.2	-0.3*
Special education use	-0.3*	-0.3*

a. These impacts are measured in terms of “effect size” to provide a standardized measure across all outcomes. Effect size allows researchers to quantify how well the intervention works. It does so by emphasizing the scope of difference between two groups and is particularly useful in comparing impacts across different studies. The “effect size” generally is calculated as the ratio of the program effect (the difference in the average between the treatment and control groups in the case of an experimental evaluation) divided by the standard deviation.

\* indicates that the impact was statistically significant at the 5 percent level or better.

Source: Barnett, Steven (2007) *Investing in Quality Preschool*, National Institute for Early Education Research

## Recent state programs show that preschool improves school readiness

In addition to these studies of focused programs, the effects of preschool delivered on a much larger scale similarly have been demonstrated to deliver significant benefits for children. Recent studies of state preschool efforts in five different states and the federal Head Start program — which also are summarized by Cannon and Karoly — have shown that preschool clearly improves school readiness. Evaluations have been conducted on preschool programs in Michigan, New Jersey, Oklahoma, South Carolina, and West Virginia. Across these states, assessments have shown increased school readiness in print awareness, vocabulary and applied problems by children who participated in preschool programs. The effect sizes for these findings vary from no effect to as high as 1.0, the latter being well above the range considered high-impact. Preschool in these states appears to have a more significant impact on children’s print awareness and a smaller effect on applied problems and vocabulary. These state preschool programs are targeted to economically disadvantaged students, and the studies generally monitored programs involved in federal Head Start.

## The Effect of Preschool Programs in Various States

*(The impact of these programs as measured in “effect size”)*

	Print awareness	Vocabulary	Applied problems
Michigan	1.0	-0.2	0.5
New Jersey	0.5	0.4	0.2
Oklahoma	0.4	0.3	0.4
South Carolina	0.8	0.1	N/A
West Virginia	0.8	0.1	0.1

Source: Cannon, Jill, and Lynn Karoly (2007) *Who Is Ahead and Who Is Behind? Gaps in School Readiness and Student Achievement in the Early Grades for California’s Children*, RAND Technical Report

Just as these programs have demonstrated success for targeted students, a recent study of the universal preschool program operating in Tulsa, OK, suggested that *universal* preschool programs can have positive effects on school readiness.<sup>4</sup> This study tracked student assessments of letter-word identification, spelling, and applied problems and found that the program had significant positive impact on these measures of school readiness: Its effect sizes were very high, ranging from 0.4 to 0.8. Thus, this study provides initial evidence that all students can benefit from preschool.

From the combined research, the Committee has concluded that providing quality preschool to students — and most especially to those who are economically disadvantaged — will help prepare students for school and, over time, will help to mitigate the achievement gap. The Committee recognizes the need to focus on quality preschool and not just any early education opportunities. The Committee also is not alone in recognizing the benefits of quality preschool. For example, Federal Reserve Chairman Ben Bernanke recently stated, “The payoff from high-quality preschool and home-visitation programs is likely very high, especially for children born into poor or otherwise disadvantaged families.”<sup>5</sup>

The Committee next looks at the early childhood education system in California to identify the extent to which the state is sufficiently taking advantage of the potential academic benefit that these programs can provide.

Even with the state’s convoluted early childhood education systems — which will be discussed at length in the pages that immediately follow — the Committee notes that numerous communities throughout California are attempting to expand access to high-quality preschool services. The state and local First 5 commissions, county offices of education, school districts, private providers, and other technical assistance entities are piloting and implementing numerous approaches to blend funding streams, train teachers, and ensure that a broad array of quality preschool options exist for families. These experiences provide a wealth of information about best practices on which the state can build. For example, wide-ranging programs such as the Los Angeles Universal Preschool (LAUP), as well as those offered in San Diego, San Francisco, and San Mateo, provide incentive funding to centers that improve the quality of their programs beyond the standards required of them by state or federal regulations.

## **California’s Current Reality**

The delivery systems for preschool in California experience issues similar to those of the K–12 system that the Committee has addressed in other sections of this report — namely, significant shortcomings in governance, finance, data, and teacher training. At the same time, the problems in the current preschool system are distinct from those in the K–12 system, and thus, the Committee addresses them here independent from the K–12 recommendations.

### **Current early education system is confusing and complex**

California’s current early childhood education (ECE) programs easily rival the K–12 system in their complexity and irrationality. Another 2007 RAND report characterized the current system as follows: “The system of publicly funded ECE programs that has evolved over time represents a complex set of programs that vary in terms of their objectives, eligibility requirements, the range of services provided, and requirements for program features and funding levels ... As the menu of programs has evolved over time, there is no guarantee that the system operates efficiently in terms of effectively using resources to deliver high-quality programs that benefit participating children and families.”<sup>6</sup> Researchers at the University of California, Berkeley, are less kind in describing California’s current ECE offerings, calling it “a crazy quilt of disparate funding streams, regulations, and family eligibility requirements.”<sup>7</sup>

As is the case in many states, California’s ECE “system” is not a true system but a hodgepodge of programs and funding sources. Three separate agencies — the California Department of Education (CDE), the Department of Social Services, and the federal government — provide governance at the “state” level, plus many local agencies also have governance responsibilities. The largest of the ECE programs, the state preschool program, is one of the key components of California’s ECE efforts, but numerous other programs play a role in preparing these children for school. Some of these programs are more focused on the education program provided to the children, while others are more focused on meeting families’ child care needs, so the parents can work. Each of these separate programs has a different set of program requirements, a different set of funding rates, and a different contracting and oversight approach. Even the state programs are subject to two completely separate sets of state regulation — those for Title 5 and Title 22 — as a result of the multiple purposes they serve, bringing together both educationally developmental programs and child care.

The diverse funding mechanisms of multiple programs are not only cumbersome, but — just as the Committee observed with the K–12 system — they can provide reverse incentives that reward lower educational quality and/or impede the enhancement of higher-quality educational programs. For example, State Preschool and Child Development programs are subject to Title 5. For these programs, the state directly funds slots at specific centers through numerous different direct contracts. These programs are reimbursed using a standardized reimbursement rate (SRR), which provides the same funding rate statewide. For these programs, there is no incentive to provide higher-quality services beyond the minimum requirements because providers receive no additional reimbursement — yet these programs are likely to incur additional costs, such as higher staff salaries, if they employ better-trained personnel.

For programs that are operated pursuant to Title 22, the state provides a voucher to the parents and allows them to choose the setting that best meets their needs. The programs or centers they choose are reimbursed based on a regional market rate (RMR) funding system, which reimburses the center up to the 85th percentile of the “cost of care” of non-subsidized providers in that geographic region. At times, the difference between the SRR and the maximum RMR is significant and results in real or perceived inequities. For example, reviewing CDE data, the Committee found that in 22 counties, children in Title 22-supported programs — which have less stringent requirements pertaining to staff qualifications, group size, and other key indicators of quality — generate much higher financial support for their child-care-focused programs than do children in educationally developmental programs under Title 5.

### **Current program requirements and incentive structure lead to variable quality**

In addition to differences in governance oversight and the funding rates, the current programs available to families also operate pursuant to very different program requirements. And while some outstanding ECE programs exist in the state, they are the exception rather than the norm. The chart “State-Subsidized Child Care Providers’ Safety and Educational Requirements” shows the requirements for the various state-run programs. Some have literally no specification for the education and training that must be possessed by those who teach children in these settings, while others require as many as 24 college units focused on ECE or child development. Providers face variable health and safety standards, and the programs only require minimal, if any, health and safety training. The ratios that restrict the number of children per adult, and more specifically per teacher, vary wildly for those programs subject to any such restriction. Furthermore, programs are reviewed sporadically — only every five years or more — and they sometimes receive prior warning of the pending review. Despite the array of research demonstrating the impacts of each of these characteristics on preschool program quality, California’s programs are allowed to deviate from best practice in ways that expose some children to programs that are dramatically weaker than those experienced by others.

## State-Subsidized Child Care Providers' Safety and Educational Requirements

### Current law for preschool-aged children

	Voucher providers			CDE contractors
	License-exempt providers	Title 22 FCCHs	Title 22 centers	Title 5 providers, including preschool
Provider/teacher education and training	None.	None.	Child Development Associate Credential or 12 units in ECE/CD.	Child Development Teacher Permit (24 units of ECE/CD plus 16 general education units).
Provider health and safety training	Criminal background check required (except relatives). Self-certification of health and safety standards.	15 hours of health and safety training. Staff and volunteers are fingerprinted.	Staff and volunteers fingerprinted and subject to health and safety standards.	Staff and volunteers fingerprinted and subject to health and safety standards.
Required ratios	None.	1:6 adult-child ratio.	1:12 teacher-child ratio or 1 teacher and 1 aide for 15 children.	1:24 teacher-child and 1:8 adult-child ratio.
Accountability, monitoring, and oversight	None.	Unannounced visits every five years or more, frequently under special circumstances.	Unannounced visits every five years or more, frequently under special circumstances.	Onsite reviews every three years. Annual outcome reports, audits, and program information.

a. FCCHs = family child care homes; CDE = California Department of Education; and ECE/CD = Early Childhood Education/Child Development  
Source: Legislative Analyst's Office (2007)

Although the Committee is able to comment generally on the variable quality of ECE and child development programs offered with state support, it is not possible to definitively describe those differences. RAND currently is conducting a study that will provide a snapshot of the quality of publicly and privately provided preschools in the state. This will be the first comprehensive assessment of the quality of services for the state.

The Legislative Analyst's Office recently reported on the lack of measurement of quality in preschool and child care programs.<sup>8</sup> Its report revealed that the state lacks any systemic ability to monitor the quality of existing programs beyond their compliance with regulatory minimum requirements. This report offers an array of options to begin to monitor both the quality and the safety of the existing providers and ways to offer this information to consumers in a user-friendly and accessible way. (The Committee notes that CDE has piloted and begun implementing "Desired Results" to provide some measure of quality; even when operational, however, the Committee believes it will not be sufficient to ensure quality in a comprehensive manner. And since none of the information from "Desired Results" is publicly available, it provides little assurance of quality to the public and does not help parents find the type of quality they demand.)

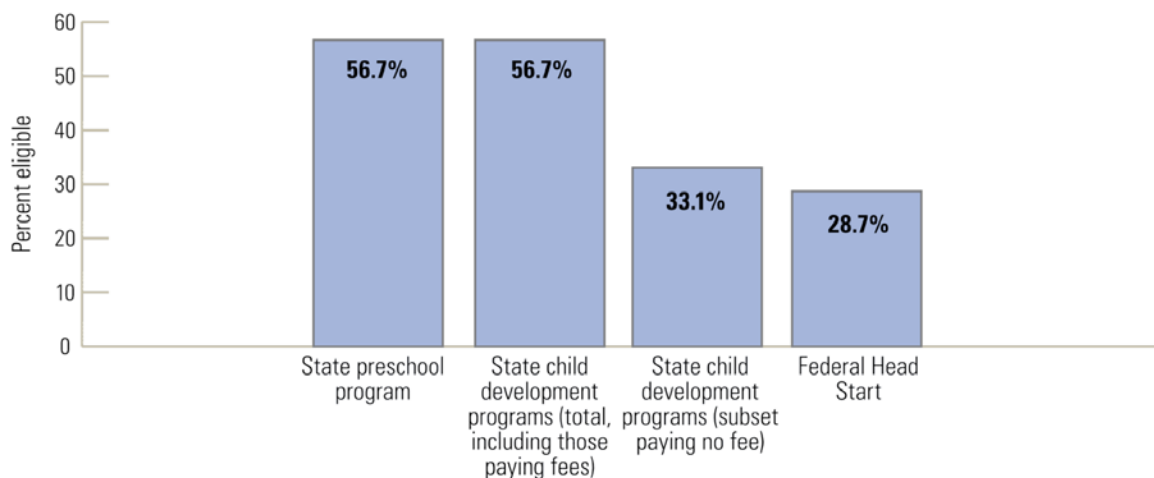
The LAO report also investigates options to create incentives to reward centers that provide a higher level of quality and safety. The state supports a network of intermediary Resource and Referral agencies that assist low-income families in finding preschool and

child care services. However, the level of data on quality is so nonexistent that the Resource and Referral agencies cannot provide any information on the quality of the programs that the state spends billions of dollars supporting. The first step to improving the quality of the existing system is to begin to measure and monitor key indicators that are generally linked to quality preschool.

### Current system results in many eligible students not being served

Based on the income eligibility requirements for participation in the different programs, RAND estimates that approximately 57 percent of children ages 3–5 are eligible for a subsidized early education program.<sup>9</sup> (The chart “Percentage of 3- to 5-Year-Olds Eligible for Early Education Programs” shows the different eligibility thresholds for the various programs.) In addition, the state is required to provide preschool to students with special needs; this would further increase these eligibility percentages. Finally, since students in the public school system are generally from lower-income families than students in private schools, the percentage of students who will soon enter the public school system who are eligible for subsidized preschool services is even higher.

**Percent of 3- to 5-Year Olds Eligible for Early Education Programs**



Source: Karoly, Lynn, Elaine Reardon, and Michelle Cho (2007) *Early Care and Education in the Golden State*, RAND Policy Brief

The state Department of Finance estimates that the number of 4-year-olds in California in 2006 was almost 540,000. Assuming the RAND eligibility estimates are accurate, approximately 300,000 of those 4-year-olds would be eligible for subsidized preschool or child care.

It is difficult to determine the exact number of children being served by California’s various early education programs, particularly because some students may be in more than one program, e.g., a morning preschool class and an evening child care program. RAND has estimated the number of 4-year-olds being served was approximately 167,000 in 2005, as detailed in the chart “Enrollment of 4-Year-Olds in ECE Programs.” The chart shows enrollment for early education programs administered by the CDE, Department of Social Services, or the federal government, including preschool, child development, or child care programs; it is possible that some additional children are being served by a local government, as well. To show the level of investment the state is making in these students, RAND includes all of these children, whether they are in a preschool program or another type of program. Since these numbers do not include children who will be served by the new Governor-sponsored Pre-kindergarten and Family Literacy program, the number of students served by the array of state programs will increase somewhat. However, even accounting for those new program slots, the state still has a significant gap between the number of students served and the number of students eligible for preschool services.

## Enrollment of 4-Year-Olds in ECE Programs

(October 2005)

Program	Enrollment
<b>State child development</b>	
State Preschool (part day)	57,306
State Preschool (full day)	2,108
General child development	23,527
Alternative payment	3,445
Migrant	666
<b>CalWORKS Child Care and Development</b>	
CalWORKS Stage 1	6,092
CalWORKS Stage 2	8,297
CalWORKS Stage 3	4,569
Other state	89
<b>Federal programs</b>	
Head Start	57,197
Title I	4,073
<b>Unduplicated total</b>	<b>167,358</b>

Source: Karoly, Lynn, Elaine Reardon, and Michelle Cho (2007), *Early Care and Education in the Golden State*, RAND

RAND uses these data to estimate the number of eligible children not receiving services from one of these programs. The assumed participation rate is key to determining the gap between those eligible and those served: Even if the state guaranteed that all eligible students would be served, not all families would choose to participate. In analyzing Proposition 82, the Universal Preschool Initiative, the Legislative Analyst's Office assumed that approximately 70 percent of families would opt to participate in a universally available preschool program. Since the current state program is not universal — and the participation rate for lower-income families is likely to be higher than 70 percent — RAND estimates the service gap using an 80 percent participation rate. RAND finds that that state would need to fund approximately 77,000 additional slots for 4-year-olds to serve the remaining, eligible 4-year-olds that would use the service. For 3-year-olds, the service gap is estimated to be 157,000 slots.

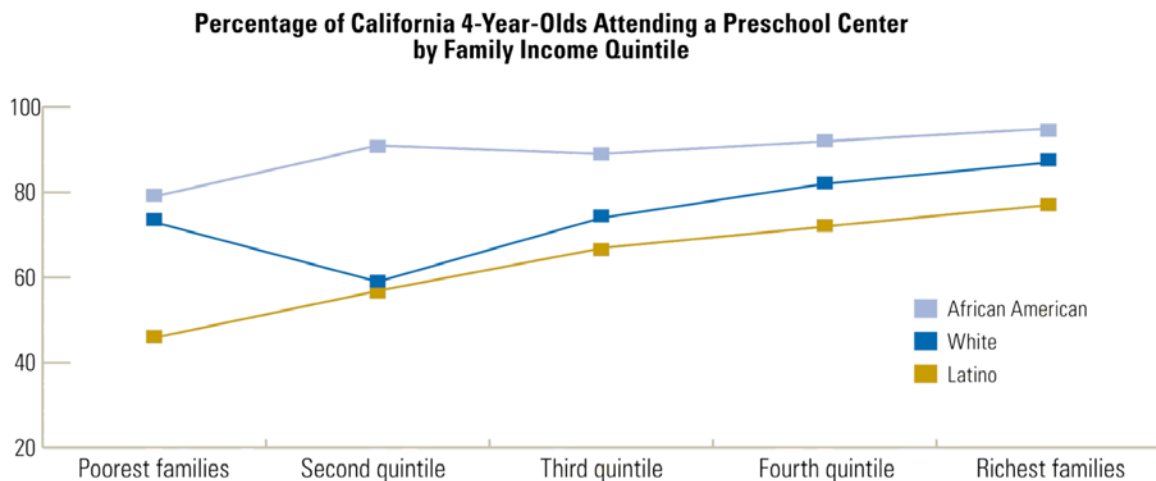
In addition to students who are not receiving service but are clearly eligible, a number of students near the threshold of eligibility may lose their eligibility due to modest income fluctuations. Some argue that it was never the state's intention to serve all eligible students and that, rather, the eligibility threshold is primarily a tool to define an income level at which a family must leave the program. This works differently depending on the program. For State Preschool, a family's income is checked at the beginning of the year to establish eligibility. For the child development and child care programs, the eligibility is checked more regularly. If all eligible families were served, many of the families near the threshold of 75 percent of the state median income (SMI) could, over the course of a year, experience an income variation that eliminates their eligibility for the program. Such instability would be disruptive for the child and for the centers. This concern is not theoretical: In San Mateo County, many families in the program were at income levels near the threshold of 75 percent of SMI, and as a result, these families would quickly lose eligibility for the programs. This volatility became enough of a problem that San Mateo County sponsored legislation to establish different eligibility rules for that county alone. The state may want to consider establishing one income level for the purpose of determining guaranteed eligibility, and a higher income level would be used to require a family to exit the subsidized program.

There exists one additional important consideration in determining the gap between students eligible for preschool services and those receiving them. Bruce Fuller, of the University of California, Berkeley, has demonstrated that participation in preschool varies significantly depending on race or ethnicity and family income level.<sup>10</sup> Data from a federal survey (the Early Childhood Longitudinal Study — Kindergarten Cohort) shows that Latino participation in preschool is lower than that of other racial or ethnic groups.<sup>11</sup> Therefore, as the state considers policies for the expansion of preschool, the needs and predispositions of Latino families should be taken into account.

Researchers have not found a conclusive answer to why Latinos are less likely to attend preschool, however.<sup>12</sup> Part of the answer is that, as state and federal governments made their initial investments in providing preschool to low-income families, the demographics of California were different than they are today, and much of the investment was made in historically Black communities. Since preschool and Head Start centers generally continue to receive funding for a specific number of slots, regardless of changes in demographics, these historically Black communities generally have better access to services. Therefore, communities in the Central Valley and Inland Empire that have comparatively higher proportions of Latinos may have less access to subsidized preschool than do other areas of the state.

Cultural factors also play a role in use of subsidized care by Latino families. In particular: (a) Latino families are more likely to rely on family and community (“kith and kin”) to meet their ECE needs; (b) Latino families are more likely to have grandparents in the household; and (c) Latino mothers are less likely to be in the workforce than White or Black mothers. Language and cultural awareness also can create barriers for Latino families.<sup>13</sup>

A final factor that may significantly impact participation in preschool is the requirement to share family income information to determine eligibility. Some Latino families may be less comfortable sharing this type of information with a government organization than are members of other ethnic communities.



Source: Fuller, Bruce (2007), *Standardized Childhood*

## Recommendation 5.1: Implement a Comprehensive Preschool Package

The Committee recommends that the state set a long-term goal of *universal* access to preschool — because preschool is beneficial to all children — and progressively implement services to achieve that goal. The Committee recommends taking a balanced approach to providing preschool for California children — an approach that reflects the research and best practices that

demonstrate how these services can lead to an improved foundation for successful learning, especially for children who can most greatly benefit. The Committee’s proposed approach would: (1) expand preschool in a targeted way, providing service to low-income communities as a whole and to low-income families living in heterogeneous communities; (2) build on the state’s current mixed delivery system but begin to transition the current “crazy quilt” to a single preschool system of diverse providers; (3) make investments to increase the quality of existing providers; and (4) measure the program quality of each preschool center and then create incentives to improve that quality.

### 5.1.1: Expand preschool using two targeting mechanisms

The Committee recommends that the state move in a targeted way toward making preschool universally available by first making the investments and developing the infrastructure to provide state-supported preschool services to all low-income 4-year-old children within five years, followed by low-income 3-year-old children. The state would use two targeting approaches, and by gradually changing the eligibility criteria, the state would make progress toward the Committee’s long-term goal of providing access to preschool to *all* children.

The Committee specifically recommends the use of a four-part strategy for attaining this goal:

- **Establish short-term targets for preschool expansion.** Currently, about 55 percent of kindergarteners are eligible for a free or reduced-price meal based on their being raised in families with incomes below 185 percent of the federal poverty level (which is described for these purposes as “low-income”). It is estimated, however, that at present, only approximately 33 percent of students participate in a government-subsidized preschool or child care program, meaning that a large number of children from low-income families are not receiving these valuable services. The state should set an interim goal of expanding access to subsidized preschool to all students eligible for a free or reduced-price meal and proposes that this ramp-up occur over five years, a period that would allow the state to address staffing and facility issues gradually, thereby avoiding the type of teacher shortages that were created by the rapid implementation of class size reduction in grades K–3.
- **Target universal access to communities with high concentrations of low-income students.** In some communities with high concentrations of low-income students, it is more cost-efficient to allow *all* students to participate in subsidized preschool to achieve the goal of serving the targeted students. There are two compelling reasons to provide universal access in those communities.

First, the process of determining a student’s family income-based eligibility is costly (15 percent of funding in some programs), and those funds would be better spent serving a student just above the income threshold than funding the administrative costs of both verifying family incomes and placing the students in appropriate program settings.

Second, providing universal access may increase participation rates for historically underserved populations, such as Latino families. As discussed, Latinos are the demographic group least likely to access the existing child care system. Because such universal access programs likely would lead to preschool being perceived as part of the K–12 system and as part of the local community, Latino families would be more likely to send their children. In addition, because these programs would avoid the need to verify family income for eligibility, many believe that universal access programs would increase participation by Latino families.

For these reasons, the state should target universal access to communities with high concentrations of low-income students. The target areas for this purpose will be the school attendance areas of those elementary schools with high proportions of students eligible for free or reduced-price meals. During the ramp-up process, the state also should consider where existing preschool centers are located and attempt to target expansion to areas that have historically been underserved. To the greatest extent possible, the state should ensure that families have the widest possible range of programs within a community. The state would establish a concentration threshold as a starting point and then would lower

that threshold over time. For example, California currently has 1,168 schools in which more than 90 percent of students are eligible for a subsidized meal; this would be an appropriate initial target group for eligibility based on high concentrations of low-income students. An appropriate second target pool would be the group of schools in which 80–90 percent of students are eligible for a subsidized meal; the number of schools in this second group would be similar in size to the first target pool.

- **Provide direct grants to low-income students in heterogeneous communities.** In areas of the state that do not receive state support for universal access based on high concentrations of low-income families living there, the state should provide preschool grants directly to families with low incomes and should assist those families in finding preschool providers in their area.
- **Provide start-up grants and facility grants.** The state should provide one-time start-up grants to organizations starting new preschools, similar to charter school start-up grants. The state also would develop a multifaceted approach to address local facility needs. These needs will vary depending on the recent population trends in a community.

### 5.1.2: Use a mixed delivery system with uniform, systemic standards

A recent report from the National Early Childhood Accountability Task Force calls for the creation of a coherent accountability system for preschool.<sup>14</sup> The Committee concurs and recommends that such a system be accompanied by reforms of the ECE finance system that support accountability. All programs should be held accountable, irrespective of how they are delivered. As described, preschool opportunities currently are offered via a mixed delivery system that includes public and private providers funded from a variety of sources (federal, state, and local) and subject to various requirements and standards. While the Committee sees value in the mixed delivery approach — insofar as its diversity affords maximum choice and flexibility to families and communities — the Committee believes that the state needs to begin to move all providers toward a set of high-quality standards, while ensuring that those consistent standards are sensitive to the differing challenges faced by public, private, and faith-based preschool providers. To that end, the Committee recommends that the state do the following:

- **Establish preschool learning standards.** The state should adopt comprehensive standards for preschool that are developmentally appropriate and aligned with California’s K–3 standards. The Committee notes that the Department of Education has developed a comprehensive set of preschool “foundations” that are consistent with the objectives set forth here.
- **Develop one set of regulations for preschool operation.** Currently, providers are subject to different operating regulations depending on the funding source that supports the program in which they participate and the governance entity that manages it. The state should develop a unifying set of regulations that, over time, would apply to *all* preschool providers, without regard to funding source.
- **Overhaul the state’s current finance system for preschool.** The state should transition to a single financing structure, under which providers would receive the same funding rate for the preschool portion of their programs, without regard to funding source.

### 5.1.3: Make strategic investments in improving the quality of preschool

As discussed, research has shown that high-quality preschool can have a dramatic impact on students, especially students from lower-income families. However, these impressive results have been shown only for *high-quality* preschool programs (as described at the beginning of this chapter). The benefits that may result from lower-quality preschool are unclear. While there is no comprehensive measurement of the quality of the current subsidized preschool programs in California, it is likely that many or even most of them do not meet a high-quality threshold, since many are not subject to assurances of the components of quality that research demonstrates matter most. To get a return on the state’s current investment in preschool and the expansion of preschool proposed by the Committee, the state would need to take action to systematically improve the quality of preschool services that students receive. To improve the quality of the state’s preschool program offerings, the Committee recommends the following:

- **Make investments in preschool staff training.** To support the recommended initiatives to enhance preschool program quality and to expand preschool availability, the state should invest in additional training capacity to develop the personnel who will provide preschool education to the state’s children. The expansion the Committee envisions will require attracting significant numbers of people to the profession and will require the provision of training to those candidates, as well as to many currently in the profession.

Furthermore, it will be essential to ensure easy access to that training throughout the state, thereby mitigating one of the most evident impediments to attracting candidates; this can be met through expansion of providers and by ensuring that providers are responsive to the needs of candidates. Therefore, multiple entities — which might include the state’s public, independent, and private colleges and universities, school districts, county offices of education, and nonprofit providers — should be authorized to prepare preschool teachers and other personnel, and those entities should compete, based on the quality of their program offerings, for funding to provide training programs. The goal of easy access to training also will be promoted if providers offer instruction at alternative hours and diverse locations (for example, evening courses taught at a local high school); therefore, selection and funding of programs should consider this factor.

The Committee further notes that traditional enrollment patterns suggest that authorizing the widest array of preparers is likely to improve the diversity of preschool staff and build the teaching pool within those communities that would most greatly benefit from high-quality preschool services yet face the most difficult challenges in attracting preschool personnel who have the qualifications demonstrated by research to enhance teaching effectiveness. The state should encourage candidates to pursue training beyond the current minimum requirements by building incentives into the funding system to promote centers’ hiring more staff members who have earned a baccalaureate degree in ECE.

- **Standardize training course requirements.** Many preschool teacher candidates attend school part time over the course of many years to complete the ECE credits required to attain certification. Unfortunately, due to the length of the training, some candidates relocate before completing their preparation and often must take a portion of the course requirements again because courses do not transfer from one institution to another. The result delays a candidate’s completion of preparation or even discourages some from finishing altogether. To streamline the process for more qualified candidates to become well-trained preschool teachers, the state, in collaboration with the primary preschool training providers, should develop a common ECE curriculum and course descriptions so that ECE training credits are transferable across institutions.
- **Make investments in data and reporting.** The state should incorporate preschool students into the evolving longitudinal student data system. In addition, the state should invest in improved data collection and analysis to support the quality rating reports.

#### **5.1.4: Promote preschool quality through measurement and incentives**

No sufficient measures of the quality of preschool programs exist in the current system. Moreover, no fiscal incentives exist to improve the quality of centers. The number of families wanting placement in preschool centers greatly exceeds the available space; when combined with the imperatives for child care that many working families face, the result is that no matter the quality of the program, the center likely will be full. And the state’s current, low reimbursement rate precludes most centers that wish to improve their quality from having the resources needed to do so. The Committee believes that the state must begin to invest in quality improvements if it is to experience the type of returns that preschool promises. The Committee specifically recommends that the state:

- **Develop a standards-based quality rating system.** The state should develop a rating system based on statewide standards, as described above, that provides a quality rating for each preschool serving publicly subsidized students. This rating would be comprised of a combination of outcome and input measures and would be phased in throughout a three-year period (Year 1 — development; Year 2 — field testing; Year 3 — full implementation). In addition to directly supporting the

improvement of preschool quality over time by assessing each center’s quality, these ratings will help parents make difficult decisions about which preschool center is best for their child. The ability of such a rating system to empower parents to make wise choices will serve as further incentive for centers to improve program quality.

- **Provide tiered reimbursement to help finance investments in enhanced quality.** The Committee further recommends that the state provide increased funding to centers receiving higher-quality ratings. Building on the current funding levels, this leveling-up approach will help preschool providers to increase salaries as teacher training experience increases, as well as to make other strategic investments.

## **Kindergarten Continues the Foundation for Learning**

As with preschool, kindergarten affords important opportunities to strengthen children’s foundations for learning. Children develop significant emotional and social competencies during kindergarten, and they simultaneously make measurable gains in core educational skills. High-quality programs that include children who are emotionally ready for participation, offer sufficient periods of instruction and interaction, and are both developmentally appropriate and aligned with preschool and 1st grade programs improve the social and educational performance of children in ways that prepare them to do better in the primary grades, and the positive effects of those programs have been demonstrated to be longer-term. The state must capitalize on this critical year to provide children the maximum opportunity to succeed.

Moreover, for those children who participate in high-quality preschool programs, the kindergarten year forms a critical transition stage, during which, as discussed previously, the early gains from preschool can easily be lost. The state should protect and enhance the preschool investment the Committee proposes by ensuring that all children participate in kindergarten programs that are aligned with preschool to build on the social, emotional, and educational foundations of preschool while simultaneously promoting children’s transitions to the more rigorous academic programs of the primary grades.

## **Children should begin kindergarten at the appropriate age**

To take full advantage of the benefits of the kindergarten experience, a child must have the emotional and intellectual maturity when he or she begins school. Children in California begin kindergarten at a younger age than children in almost every other state — possibly before they have the maturity needed to succeed. While the question of what age is appropriate has been settled as a policy matter in most other states, for many years now California policymakers have debated changing the early age when children in the state are allowed to begin kindergarten. Several legislative proposals have attempted to require that children be slightly older before entering kindergarten: The Committee believes that these proposals have merit. Currently, a child who turns age 5 on or before December 1 of any school year may attend kindergarten that year. In most other states, the cutoff date of birth for starting kindergarten falls around September 1. This earlier date ensures that the child is age 5 throughout virtually the entire school year, resulting in children generally being more mature and ready to take on a kindergarten curriculum that is increasingly academic — which leads to greater success than is seen with younger children. Often, families are driven by the underlying, intuitive logic of this argument to choose to delay their children’s entrance into kindergarten. It is troubling, however, that this practice is more prevalent in middle- and upper-income families who can afford to pay for the additional child care or preschool costs they may incur for the children whose entry into kindergarten is delayed.

### ***Older children may do better***

A summary of the relevant research conducted by the Education Commission of the States (ECS) suggests that, when students are tested at the end of kindergarten, those students who were older when they started kindergarten appear to score higher on standardized assessments.<sup>15</sup> A similar summary of the academic research, by Deborah Stipek of Stanford University, suggests a more nuanced, less conclusive answer, revealing that many additional factors contribute to these positive outcomes — especially

the characteristics of the children whose families self-select to delay their kindergarten entrance, as compared to the characteristics of the entire group of children who are eligible to attend in a given year.<sup>16</sup> But, students have not been randomly selected as to when they start school, and the reasons that a parent might delay a student starting school may impact the outcomes for that student. As an example, grade retention of students whose entry was delayed is less frequent on average than for students who were not delayed. It also is unclear whether a teacher may be more inclined to advance, for social reasons, an older child who has been held out a year, whereas the same teacher might have retained a younger child who exhibited the same performance.

A related set of research suggests that within a class, school, district, or state, being an older student in the class appears to positively impact student achievement.<sup>17</sup> Regardless of the specific start date, the students in a class will usually vary in age by 12 to 15 months, and this variance will continue to impact relative achievement levels. The benefit to older children appears to be stronger in the early grades and plays a smaller role in later years. The fading of these benefits over time may be more reflective of the capacity of elementary school to maintain early gains than it is of the favorable impact of increased age on kindergarteners' initial success. Moreover, even though the research is somewhat mixed on the factors that contribute to the overall, positive impacts of delayed entry into kindergarten, there is no academic research that suggests that changing the age for entry into kindergarten could negatively impact achievement.

Given these types of findings, it is not surprising that according to ECS, since 1984, 14 states have raised the entrance age to ensure that more children are 5 years old, or older, before entering kindergarten. This trend suggests that other states have decided that having students wait to attend kindergarten is a worthwhile policy.

### ***Delaying the age of kindergarten entry may help close the achievement gap***

Currently, families of children whose birthdays occur in autumn (September through the beginning of December) generally have the option to start those children in kindergarten before they reach 5 years of age; alternatively, families may wait one year until the children are almost 6 years old to begin kindergarten. Often, the decision to enter a child before his or her 5th birthday depends on the financial status of the family: More affluent families are more likely to delay their child's entrance into school. Clearly the decision that more affluent families make is based on their belief that waiting a year to start school will make their children more competitive relative to their fellow students; but finances are an important factor in these decisions, because families who voluntarily hold their children out of kindergarten must bear that additional year's costs of preschool or child care. If known, positive educational benefits occur for students who start school later — and more of these families are affluent — then California's current kindergarten entry policy likely contributes to the achievement gap. Thus, changing the policy could reduce the achievement gap. This could be especially true if the state combines this policy with the preschool recommendations discussed above — which would ensure that state-subsidized preschool opportunities would be available to lower-income families whose children's kindergarten entry is delayed.

### ***State costs would be reduced***

In addition to the educational benefits of delaying kindergarten entry, changing the qualifying date of birth for entry into kindergarten would have significant fiscal implications on the state budget. First, the cost of revenue limits, special education, K–3 class size reduction, and other categorical programs that are driven by attendance or enrollment would decrease, resulting in approximately \$700 million in savings annually, continuing for 13 years; the initial grade cohort would have some 100,000 fewer students, and that cohort would require 13 years to work its way through the K–12 system. (Subsequent grade cohorts would be the same size as current cohorts, but their composition, by age, would simply differ, as children whose birthdays occur in autumn would shift between cohorts.) The savings in the first year would be somewhat reduced because of declining enrollment protections. While the state could adjust for this as part of the proposal, school districts could face some short-term costs associated with this change in policy, so allowing the declining enrollment provision to continue would provide districts with some fiscal relief as they make this transition (see “Impact on schools of having fewer students,” below).

### **Changing the age of eligibility for kindergarten creates complex challenges**

While changing the date of birth by which children become eligible to enter kindergarten would seem to be a simple matter, it is fraught with complex considerations that policymakers will need to address. These include the following:

- **Impact on families that must delay their children's entrance into school.** Families with children born during the three-month period encompassed by the change would need to adjust their child care plans to accommodate these students whose planned school attendance would be delayed. The state would want to provide sufficient notice of this change to families and, to the extent possible, should link this proposal to the expansion of preschool to ensure that low-income families have educational options for their children during this year.
- **Impact on schools of having fewer students.** The impact on elementary schools would vary depending on local circumstances, but generally, they would lose funds due to reduced enrollment — without necessarily experiencing a commensurate reduction in costs. This impact would be particularly acute in smaller schools. For example, a small elementary school with 240 students would have roughly 40 children in each grade (two classes of 20); shifting the entry age would reduce the number of kindergarteners to 30 in the first year, and that smaller number of students would pass through each grade over the years. However, the school would still need to have two classes to accommodate that cohort each year; therefore, it would face generally the same costs (for teachers, facilities, and other overhead, etc.) but would receive substantially less funding. The state could mitigate the negative impact by allowing some local flexibility in how the district would phase in the new policy, ranging from a one-year to three-year implementation, to at least spread out the financial impact on the district.
- **Impact on Proposition 98 funding — depends on various factors.** While delaying kindergarten entry until age 5 would decrease state costs, the changes may or may not reduce the level of Proposition 98 funding that is available. Contemplation of such a policy change should consider the following complex issues potentially impacting the state's Proposition 98 obligation:
  - *Change occurs in a Test 1 Year.* The Department of Finance and Legislative Analyst's Office project that the state will transition to Test 1 in the near future (probably fiscal year 2010–11), at which point schools would receive roughly 40 percent of state General Fund revenues plus their current share of local property taxes. Under Test 1, all of the savings identified above (\$700 million) must be reallocated to other K–14 (K–12, child care, community colleges) purposes. In its deliberations, the Committee consistently contemplated the "reinvestment" of these savings for other K–12 priorities, in particular to support preschool Recommendation 5.1, which would mitigate the burdens on families — initially, low-income families in particular — who are precluded from entering their children into kindergarten as previously expected.
  - *Change occurs in a Test 2 year.* Under Test 2, the Proposition 98 minimum guarantee equals the prior-year funding level adjusted by the growth in K–12 student attendance and growth in per capita personal income. Thus, having 100,000 fewer kindergarteners would reduce the attendance growth rate and would likely reduce the Proposition 98 minimum guarantee from what it would be absent this policy change. As a result, the state could provide less funding to K–14 education while meeting the minimum guarantee and redirect the savings to other General Fund budget priorities.
  - *Enrollment change could result in statewide declining enrollment.* This policy change has the potential to result in aggregate enrollment decline statewide; Proposition 98 includes a declining enrollment provision that would apply in such a scenario. In the first and second consecutive years that total K–12 attendance declines, the state would provide a Proposition 98 funding level as if there were no attendance change. In the third consecutive year, the minimum guarantee would be adjusted for the actual decline in attendance. So, the fiscal impact on Proposition 98 would depend on the year in which the policy is implemented and whether the prior year's attendance change was positive or negative. The most recent forecast suggests that statewide K–12 enrollment has declined for the last two years and is likely to continue to decline for the next several years (through 2010–11). If that forecast holds, then the Proposition 98 minimum guarantee actually would decrease by approximately \$1 billion. The difference between the \$700 million in potentially reduced state costs and the \$1 billion reduction in the Proposition 98 minimum guarantee means that the

state could actually implement this policy and reduce funding for schools by more than the policy saves. The state could, of course, spend above the minimum guarantee, which would allow the state to redirect the change-generated savings to other K–14 purposes. The state also could explore re-benching the Proposition 98 minimum guarantee as part of this proposal — but no precedent exists for such a re-benching.

## **Recommendation 5.2: Change the Qualifying Date of Birth for Kindergarten Entry**

Because this policy change would support students’ academic development, potentially help close the achievement gap, and result in significant programmatic savings that could be redirected to other investments in early childhood education, the Committee recommends changing the date by which children must reach 5 years of age to be eligible for kindergarten from the current date of December 2 to September 1. The Committee further recommends that this change take place when it is expected that the Proposition 98 calculation will be driven by Test 1, to ensure that the savings generated from this policy change remain available for other education expenditures. To provide some flexibility in the implementation of the date change, the state should give school districts the option of making the transition over as long as three years (e.g., Year 1 — shift date to November 1, Year 2 — October 1, Year 3 — September 1). Savings from this proposal should be redirected at the state level to other ECE investments, including expanding preschool, improving the quality of preschool, and lengthening half-day kindergarten to full-day kindergarten (see below for discussion of the latter).

## **Full-Day Kindergarten Particularly Benefits Disadvantaged Students**

Research from various sources shows the benefits of full-day kindergarten. For example, data from the Early Childhood Longitudinal Study show that students in full-day programs showed greater gains in math and reading than students in half-day programs.<sup>18</sup> In 2004, the Center for Evaluation and Education Policy conducted a review of the literature on behalf of the state of Indiana.<sup>19</sup> It highlights five specific findings of full-day kindergarten relative to half-day programs nationwide:

1. National data provide evidence that full-day kindergarten has a positive effect on both short-term and long-term student achievement.
2. Data generally support that full-day programs reduce the number of children who are held back one grade.
3. Positive development of student social and behavioral skills occurs.
4. Positive outcomes appear to be larger for disadvantaged students.
5. There appear to be no negative outcomes commonly associated with full-day kindergarten.

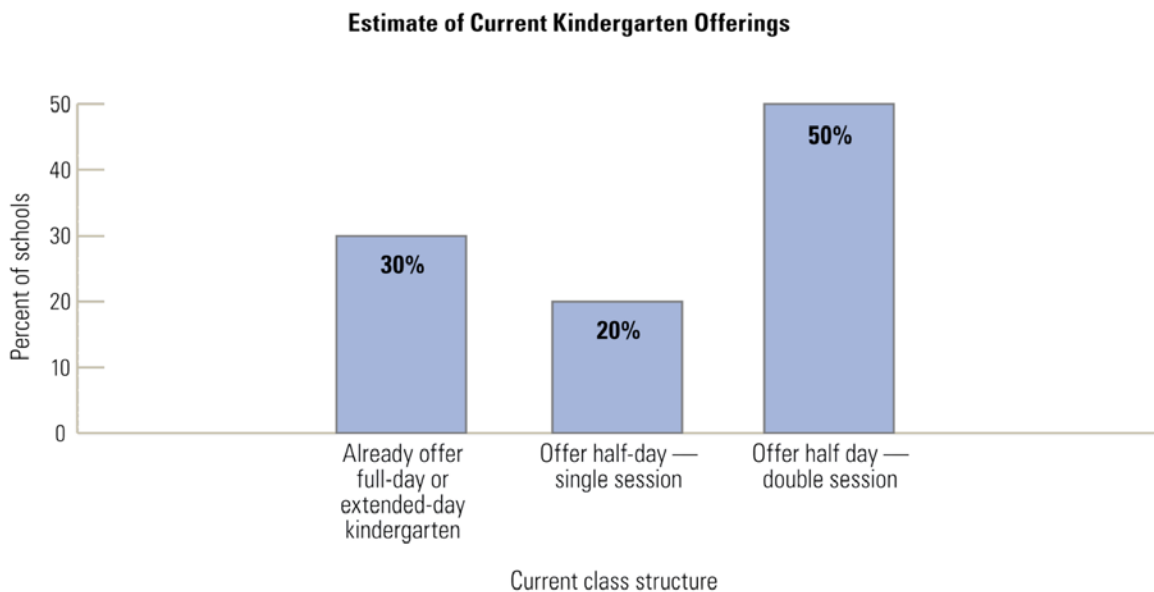
Documentation of these gains appears consistent across an array of studies, when considered in the short term. Research also shows that students in full-day kindergarten experience a curriculum that is more well-rounded than that received by children in a half-day program.<sup>20</sup> Specifically, students in full-day kindergarten are more likely to spend time each day on math, social science, and science than students in a half-day program. (Since almost all children received some reading and language arts instruction each day, there is little difference in the frequency of instruction in that subject.) While the overall findings of the research are positive, the Committee acknowledges that individual studies have raised specific concerns. Some suggest that the initial academic gains that students experience dissipate over time. Other studies suggest that full-day programs can result in additional behavioral problems for boys.<sup>21</sup> Still others question whether disadvantaged students experience greater gains than other students.<sup>22</sup> On balance, however, the research appears to support the expansion of full-day kindergarten to improve academic achievement.

In addition to the benefits cited in the research literature, full-day kindergarten also provides a social benefit to working parents. These parents often have a difficulty finding and securing child care options for children in half-day programs. Providing full-day programs would especially support the child care needs of families in which both parents work or a single working parent is raising the children.

## California trails other states in students participating in full-day kindergarten

The expansion of full-day kindergarten has been significant over the past two decades. According to U.S. Census Bureau data, in the early 1970s, fewer than 20 percent of students participated in a full-day program.<sup>23</sup> That rate had more than tripled by the late 1990s. This expansion is, in part, justified by the research described above. Districts saw the full-day program as an opportunity to help students better prepare for elementary school, and parents' child care needs were seen to be supported by these programs. ECS reports that nationally, approximately 60 percent of kindergarteners are now enrolled in extended-day or full-day kindergarten classes.<sup>24</sup> The CDE has conducted a voluntary survey to determine full-day kindergarten participation in California, summarized in the chart "Estimate of Current Kindergarten Offerings." Although that survey had a relatively low response rate (about half of elementary schools responded), if the results of that survey were representative of the state, one-third of kindergarten classes are already operating on a full-day basis. That figure is substantially less than the percentage of kindergarten classes that are full-day classes in other states. Since the ECS estimate includes California students, full-day offerings in other states would necessarily exceed the 60 percent estimate. According to a National Center for Education Statistics report, states in the South are most likely to offer full-day kindergarten (84 percent of public schools).<sup>25</sup> Nationally, schools that serve a high concentration of at-risk students are more likely to offer full-day kindergarten.

Linking CDE's kindergarten survey data with other demographic information suggests that California schools follow a similar pattern. For example, the proportion of students eligible for a free or reduced-price meal is approximately two-thirds at schools offering full-day kindergarten, compared to roughly half of students at schools offering half-day kindergarten. Both nationally and in California, a high proportion of Black students are in full-day programs, whereas Latino students are less likely to have access to full-day kindergarten. Nationally in public schools, 79 percent of Black students are in full-day programs, compared to 46 percent of Latino students and 49 percent of White students.



Source: California Department of Education

## Considering cost factors that schools face

Currently, the state provides the same funding level to a school whether the school offers a full-day or half-day kindergarten program. The cost of implementing a full-day program, however, would vary dramatically across school districts. Most districts would experience some additional staffing costs in making the transition to full-day kindergarten. Currently, most kindergarten teachers teaching a half-day class only teach that one session each day. However, it is common for districts to assign those half-day kindergarten teachers during their non-teaching hours to carry out other activities, such as working with individual students or small classes. If a school converted to a full-day program, the district would face additional staffing costs to backfill for these other activities that the (current half-day) kindergarten teachers would no longer be able to conduct.

A second key cost factor depends on whether the school currently offers a half-day program in a single or double session. If the school offers a single session, the cost of extending the school day would be minimal (extra materials and staff time, as discussed above). However, if the school offers a double session (two kindergarten classes each day in the same classroom), the district would need to find space and materials to offer full-day kindergarten for both cohorts. Moreover, the common practice, even in double-session schools, is to have a kindergarten teacher teach only one session. Usually, these teachers fulfill other roles at the school when they are not teaching (such as pull-out sessions for readers in early elementary grades), as described above. Because of these common assignment patterns, most school districts offering double kindergarten sessions would have to backfill for the staffing to complete the other work assignments that kindergarten teachers currently perform. The CDE survey suggests that approximately half of all schools currently offer a double session of half-day kindergarten. Therefore, many districts would experience significant personnel, facility, and materials needs.

Finally, the facility costs that school districts experience would vary, depending on the existing local demand for school facilities. Many areas of the state have declining enrollment, especially in the elementary grades; the cost of implementing this policy could be far less expensive in places where declining enrollment frees classroom space.

According to Department of Finance estimates, over the past five years elementary school enrollment statewide has fallen by some 100,000 students, from 2.9 million to 2.8 million students; those enrollments are projected to begin to increase again, but much of that growth will be focused in the Inland Empire and Central Valley, while coastal areas will experience flat or declining enrollments. For example, over the next decade, elementary enrollment in Riverside County is projected to increase by 40 percent, or 73,000 students; meanwhile, Los Angeles County enrollment is projected to fall by 9.4 percent, or 72,000 students. As the combination of these particular examples demonstrates, statewide numbers greatly mask these significant regional impacts; therefore, policies to implement the expansion of full-day kindergarten should consider regional differences.

## Recommendation 5.3: Target the Expansion of Full-Day Kindergarten

Because the Committee sees the potential benefits of moving from half-day kindergarten to full-day kindergarten, particularly as a mechanism to assist in closing the achievement gap, the Committee recommends that the state make available to schools serving high concentrations of disadvantaged students incentive grants to support the transition to full-day kindergarten. These grants would consist of a combination of one-time funding to accommodate facility and program start-up costs, as well as ongoing funding to address additional staffing costs. The Committee further recommends that the state take a multi-step approach to implementing this program: First, it should establish a grant funding rate that effectively requires a local contribution to participate and thereby engages districts more directly and constructively in the reform. Second, as schools begin to transition to full-day kindergarten, the state should study the cost of implementing the new program and adjust the incentive funding level as necessary. Finally, at full implementation, this incentive funding should be folded into the student-centered funding system, described in the Finance chapter of this report, thereby increasing the adjustments for economically disadvantaged students and English language learners to support districts' offering full-day programs.

## Endnotes

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<sup>23</sup> Walston, Jill, and Jerry West (2004).

<sup>24</sup> Education Commission of the States (2004).

<sup>25</sup> Walston, Jill, and Jerry West (2004).