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The Importance of Early Childhood Education Programs

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Introduction

Increasingly, school districts and county offices of education that once considered early childhood education programs to be outside their core mission are expanding their focus and investment in the early years. Many are motivated by a realization that achievement gaps are best addressed before children enroll in kindergarten.

An established and respected body of research underscores the importance of early learning to children's later success in school and life. Additional evidence indicates that the implementation and expansion of early learning programs are feasible. In the words of Deborah Stipek, a Stanford University scholar who has studied the early learning landscape in California for decades: "There is strong evidence that early intervention can be done at scale with long-term benefits—both for the participating children and for society."¹

From the California State Preschool Program to Head Start to transitional kindergarten and beyond, a variety of opportunities and funding streams make it possible for California school districts to play an active role in helping children get a strong start in elementary school.

California's 2019-20 budget, passed in June 2019, includes significant new investments to improve and expand access to care and education for young children. This includes \$300 million to build more kindergarten classrooms in order for districts that provide part-day programs to shift to full-day kindergarten. The budget also invests an additional \$1.8 billion to expand access to preschool to an additional 10,000 more low-income 4-year-olds and subsidized childcare to an additional 21,000 children. The budget also invests \$195 million

In this brief you will find:

- » An overview of the various early childhood education programs in California;
- A primer on the evidence of quality early childhood education and later success in school;
- An overview of the return on investment offered by early childhood education;
- A review of the importance and key elements of quality in effective early childhood education;
- » Information about the unmet need for early childhood education in California; and
- » Questions designed to spur productive conversations among school board members and their governance teams.

in workforce professional development and education for early education programs. CSBA will continue to monitor how these investments impact school districts and county offices of education.

The Early Childhood Education Landscape in California

For the purposes of this brief, early childhood education includes transitional kindergarten (TK), expanded transitional kindergarten, the California State Preschool Program, Head Start, general child care and development programs adhering to state Title 5 regulations, Title I-funded preschool programs, and private preschool programs that serve 3- and 4-year-old children. The array of early childhood education programs available in California is sometimes referred to as a system, though it could more accurately be called a patchwork, given the variety of funding streams, eligibility requirements, and administering agencies.

What follows is a more detailed description of the publicly funded programs in California:

- Transitional Kindergarten. A school-based, publicly funded program year for children who turn 5 between September 2 and December 2, TK is considered the first year of a two-year kindergarten program that uses a modified kindergarten curriculum. There is no means testing or income threshold to gualify for TK. Prior to the advent of TK, these children were formerly admitted to kindergarten. All California districts that provide kindergarten are required to also offer TK to eligible children. The same credentialing requirements that apply to kindergarten teachers apply to TK teachers. In addition, TK teachers hired after July 1, 2015, are required to have completed 24 units of Early Childhood Education/Child Development; to have comparable professional experience with preschoolage children, as determined by the school district; or to hold a child development teacher permit issued by the California Commission on Teacher Credentialing.²
- Expanded Transitional Kindergarten. As part of the 2015–16 state budget, the Governor and Legislature authorized districts to expand their TK programs to enroll children that turn 5 after the December 2 cutoff. When children turn 5, they begin generating Average Daily Attendance dollars for their school district.³ Several school districts have expanded TK to younger children, including Alum Rock, Los Angeles, and Pasadena.⁴
- » California State Preschool Program. The partday or full-day program for 3- or 4-year-old children from families whose income is at or below 70 percent of the California State median income, which is recalculated annually.⁵ Other eligible children include those experiencing homelessness or receiving protective services.⁶ The program provides preschool curriculum as well as meals and snacks to children, education for parents, and referrals to health and social services for families.

- » Head Start. The federal program for children from families who earn less than \$24,250 annually (for a family of four).⁷ It provides preschool and nutrition for 3- and 4-year-olds and support services for their families and is administered by a variety of local agencies, including school districts.
- » General Child Care and Development. State and federally funded programs that provide education, nutrition, and care to income-eligible children from birth through age 12 in centers and family child care home networks administered by public or private agencies and local educational agencies.⁸
- » Title I-funded Preschool: Federal Title I supplemental funds, allocated to school districts based on counts of low-income children, may be used to fund kindergarten-readiness programs. A number of California school districts invest Title I funds in early childhood education.

Link Between Quality Early Childhood Education and Later Success in School

The period before children enroll in kindergarten is one of dramatic brain growth and development. Appropriate and nurturing stimulation is essential for children to build the neural pathways, social skills, and self-confidence that will later help them succeed in school.

The foundation children bring with them to school is incredibly important, but not all of them start on the same footing. Researchers report that by age 3, for instance, children from high-income families have double the vocabulary of same-age children from low-income families.⁹

Stanford researchers note that California has one of the largest achievement gaps in the nation, and that its lowincome students appear to have fewer opportunities to prepare for kindergarten than similar children in other states. These scholars suggest that "California's poor performance relative to that of other states lies not in the gains students make from third grade on, but in the disproportionate achievement gap when children enter kindergarten. Efforts to close the achievement gap clearly need to begin long before school entry."^{10,11}

Research shows that quality early childhood education programs—using a curriculum that emphasizes play, along with purposeful teaching to build social-emotional and readiness skills—can help narrow those gaps, and that children who have access to these programs enjoy an advantage over those who do not.¹² Indeed, rigorous studies show that quality early childhood education helps build a stronger foundation in language, literacy, and numeracy (early math) skills. Researchers studying New Jersey's exemplary Abbott preschools, for example, found that disadvantaged children who participated in two full years of early childhood education had significantly higher vocabulary and math skills than children who did not participate.¹³ California researchers report particularly strong impacts for Latino children and children of immigrant parents—two groups strongly represented in many California school districts.^{14,15}

Equally important, children in early childhood education have the chance to develop the social and self-regulation skills that are essential for success in school, such as interacting with teachers and peers in positive ways, solving problems with increasing independence, and learning to focus their attention.¹⁶

"The skills gap found at kindergarten entry suggests that California's lag in academic achievement arises before children even enter the schoolhouse door."

--Sean Reardon, Professor of Poverty and Inequality in Education, Stanford University

Further, studies show that a child who does not have the opportunity to participate in quality early childhood education is 25 percent more likely to drop out of school,¹⁷ 40 percent more likely to become a teenage parent,¹⁸ and 70 percent more likely to commit a crime,¹⁹ compared to socioeconomically similar peers who had the opportunity to attend quality early childhood education.

Link to Success for Dual Language Learners

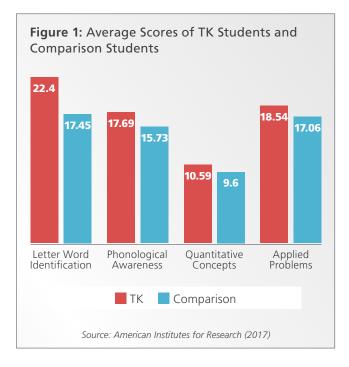
More than a third of California children enter kindergarten speaking a primary language other than English, and their proportion of the school population is growing.²⁰ Their status as dual-language learners brings advantages but also challenges, with many entering kindergarten behind their peers on measures of readiness and lagging in reading achievement at the end of first grade.²¹

Quality early childhood education is a sound strategy for addressing these challenges early. Children from non-English-speaking homes who attend early childhood education have significantly better prereading skills compared to their peers who do not. Research also indicates that programs that support children's home language in the early years are more successful than English-only programs.²² Early childhood education programs that are most successful with dual-language learner children have at least one adult in the classroom who can speak the home language and have general staff who can support the culture of the home. This underscores the importance of a diverse and culturally competent teacher workforce, as well as linguistically appropriate programs and practices, in early childhood education settings.²³

Findings on Transitional Kindergarten

In 2017, an American Institutes for Research (AIR) team reported significant benefits for children enrolled in TK programs in California.²⁴ This rigorously designed study found that TK has a positive effect for children enrolled across all language, literacy, and mathematics outcomes at kindergarten entry, compared to their control-group peers who were not enrolled.

The largest positive effect was related to a better ability to identify letters and words in kindergarten (equating to a six-month learning advantage) and problem-solving skills in math (a three-month learning advantage). This advantage was more pronounced for English learners, who had a 7.5-month advantage in word and letter identification and a six-month advantage in problem solving upon entering kindergarten. And while overall, non-TK students



appeared to catch up with their TK peers on most measures (except for letter and word identification) at the end of kindergarten, the impact of TK on the literacy and mathematics skills of low-income and Latino students persisted through kindergarten. To add context as to why non-TK students appeared to catch up, the authors note: "It is not unexpected that non-TK students will 'catch up' in kindergarten, as teachers may focus their attention on students who need the most support to be ready for first grade."

The AIR researchers also found little difference in the impact of TK by classroom characteristics (standalone versus combination classrooms or half-day versus full-day programs) or instructional characteristics (the assessed quality of teacher–child interactions). According to the researchers: "These findings suggest TK's positive impact for students may be driven by the characteristics that TK programs have in common (and that make TK a unique approach to early childhood education): credentialed teachers with bachelor's degrees, close alignment with kindergarten, and inclusion of students from all income-levels."

Return on Investment of Early Childhood Education

The majority of research makes clear that the academic and social benefits of quality early childhood education are far reaching. For school board members, the fiscal benefits may be just as important. Quality early childhood education can reduce the need for later remediation or special services that are costly to both schools and children. For example, researchers at Duke University followed a group "Early childhood development is perhaps the strongest investment we could make on a raw return-on-investment basis."

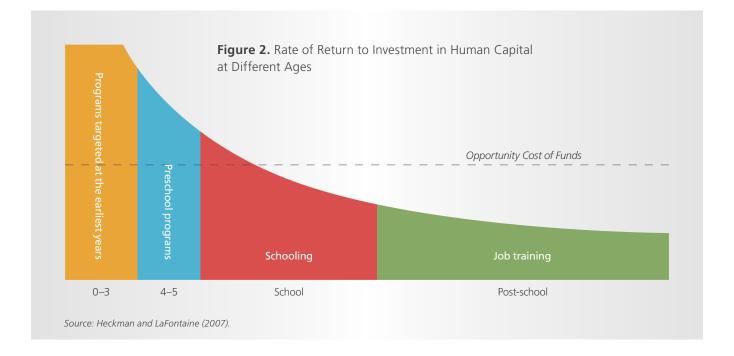
> *—James Heckman,* Nobel Laureate in Economics

of children enrolled in a high-quality early childhood education program in North Carolina as they progressed through elementary school. By third grade, the early childhood education group had 39 percent fewer special education placements compared to similar children who did not attend the early childhood education program.²⁵

These benefits, along with the broader benefits to society described earlier, add up to savings of \$8 for every \$1 invested up front.²⁶ Nobel Laureate economist James Heckman has documented these returns, illustrated in the graphic below, to show that quality early childhood education programs are among the most cost-effective education investments that schools and society can make.

Additional Benefits to School Districts

Early childhood education programs can help better engage families in school life and education. Those districts that offer the strongest and most accessible early



childhood education options have early learning advantages over district, charter, or private schools without such programs. Those advantages, in turn, can add up to significant accrual of Average Daily Attendance over time, as families enrolling their children in early childhood education build relationships with schools and fellow parents, and ideally with the school district.²⁷

In addition, school districts that establish strong TK and State Preschool programs have an opportunity to focus squarely on alignment across programs from early childhood education through third grade, so each year of learning is connected to and builds upon the prior year, and early gains can be sustained or strengthened as children progress through the primary grades.²⁸

The Importance of Quality in Early Childhood Education

Research on the benefits of early childhood education strongly underscores the importance of quality in achieving positive results for children. Positive and engaging interactions between children and teachers and caregivers are the most important contributors to gains in language, literacy, math, and social skills.²⁹ Children benefit most when teachers build on children's interests, provide related learning opportunities, and engage in back and forth conversations—known as verbal serve and return-to discuss and elaborate on a given subject.³⁰ While many model preschool programs feature teachers with a bachelor's degree, early childhood experts note that other effective early childhood education programs do not. They explain that, most importantly, teachers need a particular set of skills, including the ability "to relate well with very young children who are rapidly changing across multiple domains of child development and know how to embed play with learning. In order to do that, teachers need to understand child development and know what children are like as they grow from infants to preschoolers."³¹

More easily measured structural features of quality, such as class size, child-teacher ratios, and teacher qualifications create the conditions for stimulating and supportive teacher-child interactions—but do not guarantee them. The Learning Policy Institute recommends 10 important elements of high-quality programs that are supported by a substantial body of research.³² These elements offer school board members and district administrators important insights about effective programs. They include:

- 1. Well-prepared early childhood education teachers who provide engaging interactions and classroom environments that support learning;
- 2. Ongoing support for early childhood education teachers, including coaching and mentoring;
- Comprehensive early learning standards and curricula that address the whole child, are developmentally appropriate, and are effectively implemented;
- Assessments that consider children's academic, socialemotional, and physical progress, and contribute to instructional and program planning;
- 5. Support for English learners and students with special needs;
- 6. Meaningful family engagement;
- 7. Sufficient learning time, including full-day, year-round programs over multiple years;
- 8. Small class sizes with low student–teacher ratios that facilitate meaningful teacher–child interactions. A class size of 20 with a student–staff ratio of 10:1 is the largest acceptable by general professional standards;
- 9. Program assessments that measure structural quality and classroom interactions; and
- 10. A well-implemented state quality rating and improvement system that establishes quality standards and supports continuous improvement efforts.

It is important to note that not all of the laws and regulations governing California's public early education programs require adherence to the best practice quality standards recommended above. Some school districts and local First 5 Commissions have chosen to invest local or federal dollars to enhance quality beyond the level now required by the state.

Outcomes Depend on Quality and Alignment

The importance of quality and alignment with other systems to sustain benefits is reflected in outcomes for students, as not all early learning programs have shown uniformly strong results. An examination of Tennessee's state-funded preschool program, for example, showed that gains made before starting kindergarten faded by the time participating children reached third grade.³³ A key

takeaway from the Tennessee program may be that good results for children are difficult to produce in programs that lack key aspects of quality, or that lack alignment with quality primary education. The Tennessee program did not have all of the high-quality standards supported by research, nor alignment with expectations of the primary grades.

New California research underscores that alignment between early childhood education and K-12 in California is very much a work in progress.³⁴ The state has several strong foundational elements in place that increase its likelihood. For instance: Well-regarded, state-developed and approved standards—known as the California Preschool Learning Foundations—and accompanying curriculum frameworks have been created and aligned to the state's academic standards for K-12. These foundations and frameworks are used by all State Preschool programs and in some TK programs.

Professional Development in Support of Quality

Like their peers in the K-12 system, early childhood education teachers, staff, and program leaders benefit from job-embedded professional learning opportunities. In the early childhood education setting, coaching and mentoring have been identified as effective strategies to build educator capacity and reduce teacher turnover.^{35,36} In addition, collaborative professional development that brings together educators from early childhood education and early elementary grades can develop and deepen a shared understanding of child development and school readiness expectations.^{37,38,39}

School districts can use local and federal funds to support professional learning opportunities. State educator effectiveness funds, federal Title I and Title II funds, and the Local Control Funding Formula may all be used to support professional development.

Link Between Quality and Full and Fair Funding

The connection between preschool quality and student outcomes is further highlighted in a recent report by the Learning Policy Institute. Given that it is well-established that high-quality preschool improves a range of outcomes for students, the essential question is "how to design and implement programs that ensure public preschool investments consistently deliver on their promise."⁴⁰ The report further points out that implementing high-quality preschool programs is both complex and expensive and that sustained benefits likely require investments in children and their families that also persist from preschool through grade school and beyond."⁴¹ This report indicates that the conversation about quality in preschool goes hand in hand with a conversation about full and fair funding for public schools, from early childhood education through 12th grade.

Unmet Need for Early Childhood Education in California

Despite mounting evidence of developmental and fiscal benefits, and despite encouraging state and local reinvestment following the Great Recession, many children from low and middle-income families still lack access to quality early childhood education in California. The American Institutes for Research reported in 2016 that some 33,000 eligible 4-year-olds (16 percent) did not have a space in the subsidized programs for which they were eligible. Roughly four times as many 3-year-olds (about 137,000 or 40 percent) who were eligible did not have a space in subsidized programs.⁴² Moreover, many middle-class families are ineligible for subsidies and struggle to afford quality private early childhood education, which can cost more than \$10,000 annually for a part-day program.

Linking Resources to Expand Access

While a subsequent brief will focus on strategies for expanding access to preschool, there are several actions that districts can consider. For example, many districts have moved to deliver and improve early learning by making smart use of federal, state, and local resources. The most creative among them are stitching together these funding streams to create full-day opportunities that make the most sense for working families. School districts can, for example, serve the same low-income child in a morning TK program and an afternoon California State Preschool Program classroom, so long as the programs are delivered subsequently and not simultaneously.⁴³

For districts that operate both expanded TK programs and State Preschool, the enrollment of larger numbers of 4-year-olds in TK opens the opportunity to serve more low-income 3-year-olds in State Preschool. Provided the programs are geared to the developmental needs of younger children and are of high quality, this creates an optimal early childhood education continuum for lowincome children.

Questions for Board Members

As board members and district and county office of education (COE) staff focus on early learning, understanding the school district's baseline for such learning is important. To establish this context and encourage an informed discussion among the governance team, several key questions are important to ask.

- How many children are enrolled in our district in TK (4-year-olds), CSPP (3- and 4-year-olds), and Head Start (3- and 4-year-olds), and how many are on waiting lists for these programs?
- 2. Have we done any fiscal modeling of what it would cost to invest more significantly in early learning? What could we save over time by doing that?
- 3. What is needed in the district to increase access and quality in early childhood education?
- 4. How does the district/COE ensure high quality in all the early learning programs we provide?
 - » What are the adult-child ratios and class sizes in TK? Have we considered investing local or federal dollars to improve them?
 - » Do we use developmentally appropriate curriculum for 4-year-olds in TK?
 - » Do we go beyond minimum state permit requirements when we hire teachers for our California State Preschool Program? Do we pay them a livable wage?
- 5. Do our early childhood education teachers, staff, directors, and principals engage in early learning-focused professional development on a regular basis, comparable to the quality and frequency of PD that is available in K-3?
- 6. What are we doing to promote alignment of our early childhood education to third grade programs?
- 7. Do we have good relationships and communication with our COE and private and nonprofit early childhood education and childcare providers in our community?

- 8. How do we coordinate with non-district providers, including Head Start and First 5, on school readiness activities, especially in providing opportunities for collaborative professional development?
 - Could we convene them in a joint conversation about our mutual roles in promoting kindergarten readiness?
- 9. Do we address pre-kindergarten in our Local Control and Accountability Plan?

Conclusion

Given unmet needs and the movement toward expanding access to early childhood education by Governor Newsom, school districts and COEs have an important opportunity to support the kindergarten readiness of early learners. Board members also play an important role by asking questions, setting goals, and approving resources that expand access to quality early childhood education programs in their communities. To support these efforts, subsequent briefs will focus on the specific topics of expanding access to preschool and kindergarten, including an overview of the landscape in California, recommendations for districts and county offices of education to consider, and opportunities to look forward to in the near future.

Resources

- » **GAMUT Online.** CSBA's policy tool includes sample policies and administrative regulations for subscribers, available at www.gamutonline.net
 - » BP/AR 5148—Child Care and Development
 - » BP/AR 5148.3—Preschool/Early Childhood Education
 - » BP 6170.1—Transitional Kindergarten
- » Meeting California's Challenge: Key Ingredients for Student Success (2017). CSBA report highlights eight research-supported investments that can support students in achieving their potential, including investing in early support and services. Available at https://bit.ly/2DKN5Ny
- » Untangling the Evidence on Preschool Effectiveness: Insights for Policymakers (2019). Learning Policy Institute report that includes reviews of evaluations of 21 public preschool programs, finding that quality preschool programs improve student success. Available at https://bit.ly/2lu6A1n

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