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Governance Brief

What Boards of Education Can Do About Kindergarten Readiness

Introduction

An established and respected body of research underscores the importance of early learning to children's later success in school and life. Increasingly, school districts that once considered pre-kindergarten 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.

From state preschool 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.

This brief

In this brief you will find:

- » Details about early learning opportunities and funding streams in California.
- » A primer on the research base in early learning.
- » A review of the importance and key elements of quality in effective pre-K.
- » Information about unmet need for pre-K in California.
- » A set of questions designed to spur productive conversations among school board members and their governance teams.

For the purposes of this brief, the umbrella term pre-K includes Transitional Kindergarten, the California State Preschool Program, Head Start, child care programs adhering to state Title 5 regulations and private preschool programs that serve 3 and 4 year-old children.

The link between quality early learning 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.¹

Research shows that quality preschool—using curriculum that includes 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.² Rigorous studies show that quality pre-K 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 2 full years of pre-K had significantly higher vocabulary and math skills than children who did not participate.³ Closer to home, findings have been particularly strong for Latino children and children of immigrant parents—two groups strongly represented in many California school districts.⁴

Equally important, children in pre-K 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.⁵

Further, studies show that a child who does *not* have the opportunity to participate in quality pre-K is 25% more likely to drop out of school,⁶ 40% more likely to become a teenage parent⁷ and 70% more likely to commit a crime,⁸ compared to socio-economically similar peers who had the opportunity to attend quality pre-K.

“We have better evidence for the effectiveness of early childhood education than for almost any social or educational intervention.”

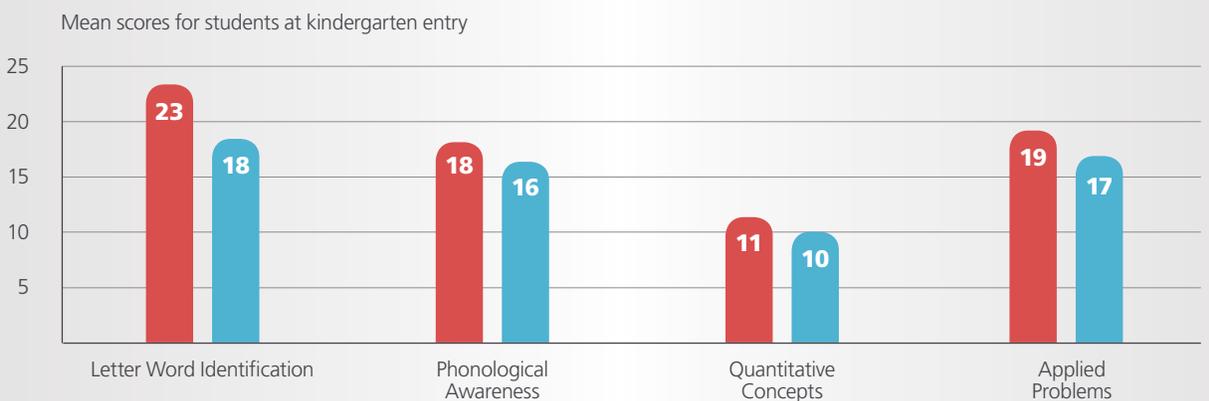
—*Timothy Bartik, Economist,
W. E. Upjohn Institute for Employment Research*

New findings on Transitional Kindergarten

In 2015, an American Institutes for Research team reported significant benefits for children enrolled in TK.⁹ This rigorously designed study found that:

- » Children enrolled in TK were substantially better able to identify letters and words in kindergarten, equating to a 5-month learning advantage over their control-group peers who were not enrolled.
- » TK students had stronger knowledge of basic mathematical concepts and symbols in kindergarten than their peers who did not attend TK, giving them a 3-month lead in kindergarten.
- » Children enrolled in TK had a relative advantage in executive function, meaning they had great ability to regulate their behavior, remember rules, and think flexibly.

Figure 1. Transitional Kindergarten Improves Literacy and Math Skills



Source: American Institutes for Research

Not all early learning programs have shown uniformly strong results. A recent 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.¹⁰ Critics of this study point out problems with its design and execution.

But the most salient take-away 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 designed to sustain gains. The Tennessee program did not have all of the high-quality standards

supported by research, nor alignment with expectations of the state’s public school primary grades.

While alignment between pre-K and K-12 in California is very much a work in progress, 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 developed and aligned to the state’s academic standards for K-12. These foundations and frameworks are used by all state preschool programs and increasing numbers of transitional kindergartens.

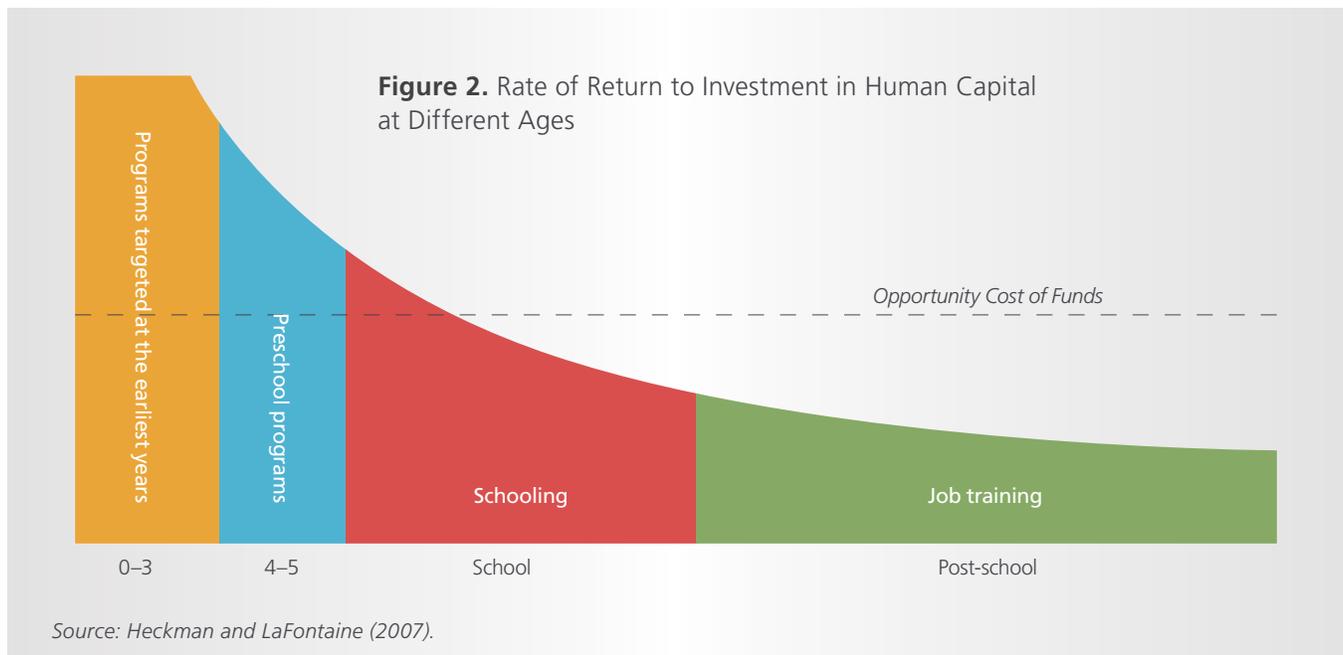
Pre-K's return on investment

The majority of research makes clear that the academic and social benefits of quality pre-K are far reaching. For school board members, the fiscal benefits may be just as important. Quality pre-K can reduce the need for downstream remediation or special services that are costly to both schools and children themselves. For example, researchers at Duke University followed a group of children enrolled in a high-quality pre-K program in North Carolina as they progressed through elementary school. The researchers found that by third grade, the pre-K group had 39% fewer special education placements compared to similar children who did not attend the pre-K program.¹¹

These benefits, along with broader benefits to society, such as reduced criminal activity and incarceration and increased earnings in adulthood, add up to savings of \$8 for every \$1 invested up front.¹² Nobel Laureate economist James Heckman has documented these returns, illustrated in the graphic below, to show that quality pre-K programs are among the most cost-effective education investments that schools and society can make.

“Early childhood development is perhaps the strongest investment we could make on a raw return-on-investment basis.”

—James Heckman, Nobel Laureate in Economics



Additional considerations for school districts

Pre-K programs can help better engage families in school life and education. Those districts that offer the strongest and most accessible pre-K options have early learning advantages over districts or charter 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 pre-K build relationships with schools and fellow parents, and ideally with the school district.¹³

In addition, school districts that establish strong Transitional Kindergarten preschool programs have an opportunity to focus squarely on alignment across programs from pre-K through third grade, so that 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.¹⁴

Public programs serving young children in California

The array of early childhood 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 and eligibility requirements. Publicly funded programs include:

Transitional Kindergarten: School-based, publicly funded pre-kindergarten year for children who turn 5 between September 2 and December 2, regardless of family income. These children were formerly admitted to kindergarten. All California districts that provide kindergarten are required to offer TK to eligible children. The same credentialing requirements that apply to kindergarten teachers apply to TK teachers. In addition, TK teachers hired after 2015 are required to have completed 24 units in early childhood education/development; or to have comparable professional experience with preschool-age children, as determined by the school district; or to hold a child development teacher permit issued by the California Commission on Teacher Credentialing .

Expanded Transitional Kindergarten: In 2015, the Governor and Legislature changed the Education Code to clarify that districts may expand their TK programs to children with 5th birthdays after the December 2 cutoff. In the 2015-16 school year, a number of districts, including Alum Rock, Los Angeles, Pasadena and Placentia-Yorba Linda, moved to extend TK opportunity to younger children.

Source: California Department of Education, Legislative Analyst's Office

California State Preschool Program: Part-day or full-day program for 3 or 4 year-old children from families who earn less than \$46,896 annually (family of four). Provides preschool curriculum as well as meals and snacks to children, education for parents and referrals to health and social services for families. More than half of children enrolled are in programs administered by school districts.

Head Start: Federal program for children from families who earn less than \$24,250 annually (family of four). Provides preschool and nutrition for 3 and 4 year-olds and support services for their families. 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. Eligibility limited to families earning less than \$46,896 (family of four).

Title I-funded Preschool: Federal Title I supplemental funds, allocated to school districts based on counts of poor children, may be used to fund kindergarten readiness programs. A number of California school districts invest Title I funds for this purpose.

The importance of quality in early learning

Research on the benefits of pre-K strongly underscores the importance of quality in achieving positive results for children. Positive and engaging interactions between children and teachers and caregivers are the single most important contributors to gains in language, literacy, math and social skills.¹⁵ 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.¹⁶ While many model preschool programs feature teachers with a bachelor's degree, early childhood experts

note that some effective preschool programs do not. They explain that most importantly, preschool teachers need a special 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."¹⁷

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 has recommended 10 important elements of high-quality programs that are supported by a substantial body of research.¹⁸ These elements offer school board members and district administrators important insights about effective programs. They include:

1. Well-prepared pre-K teachers who provide engaging interactions and classroom environments that support learning.
2. Ongoing support for pre-K teachers, including coaching and mentoring.
3. Comprehensive early learning standards and curricula that address the whole child, are developmentally appropriate and are effectively implemented.
4. Assessments that consider children's academic, social-emotional 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.
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 exact 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.¹⁹

Professional development in support of quality

Like their peers in the K-12 system, pre-K teachers, staff, and program leaders benefit from job-embedded professional learning opportunities. In the pre-K setting, coaching and mentoring have been identified as effective strategies to build educator capacity and reduce teacher turnover.²⁰

In addition, collaborative professional development that brings together educators from pre-K and early elementary grades can develop and deepen a shared understanding of child development and school readiness expectations.²¹

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.

Opportunity to support dual language learners

More than a third of California children enter kindergarten speaking a primary language other than English, and their proportion in the school population is growing.²² 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.²³

Quality pre-K is a sound strategy for addressing these challenges early. Children from non-English-speaking homes who attend pre-K have significantly better pre-reading 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.²⁴ Pre-K 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 staff overall who can support the culture of the home. This underscores the importance of a diverse and culturally sensitive teacher workforce, as well as linguistically appropriate programs and practices, in pre-K settings.²⁵

Unmet need for pre-K in California

Despite mounting evidence of developmental and fiscal benefits, and despite encouraging state and local re-investment following the Great Recession, many children from low and middle-income families still lack access to quality pre-K in California. New data from the American Institutes for Research show that some

33,000 eligible 4 year-olds (16%) don't have a space in the subsidized programs for which they qualify. Roughly four times as many 3 year-olds (about 137,000 to 40%) who qualify do not have a space in the subsidized programs.²⁶ Moreover, many middle class families are ineligible for subsidized programs and struggle to afford quality private pre-K, which can cost more than \$10,000 annually for a part-day program.

Promising practice: Educare and Franklin-McKinley Unified School District

In 2015, Educare California at Silicon Valley established an early learning center at Santee Elementary School where almost all of the students are low income and three-quarters are English learners. The early learning center has quickly become a showcase for best practices, and for what is possible elsewhere in the state. Now serving 170 children from birth to age 5 from low-income families, the program also functions as a training and professional development institute for current and aspiring pre-K teachers and caregivers in the region.

Educare is a non-profit, research-based early learning model that features:

- » Teacher professional development provided to those who work on site and elsewhere in the community.

- » Small classes led by lead teachers with bachelor's degrees and 2 assistants.
- » Full-day, year-round learning focused on language and cognitive development, numeracy, the arts and problem solving.
- » Stability in adult-child relationships—children staying with the same teacher and peer group for 3 years.
- » Specially trained parent educators to support family involvement in the program.

The public-private partnership is supported by a combination of federal, state, local and philanthropic dollars, including Head Start, California State Preschool Program, child care and school district resources.

Sources: *EducareSV.org, First 5 Santa Clara County, New America*²⁷

Putting the pieces together: Making the most of existing resources for early learning

School districts have an important opportunity to impact the kindergarten readiness of students they have traditionally waited to enroll at age 5. 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 are most desired by 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. In 2015, the California Department of Education confirmed that such combinations are authorized, so long as the programs are delivered subsequently and not simultaneously.²⁸

For districts that operate both expanded TK programs and state preschool, the enrollment of larger numbers of 4 year-olds in TK opens up the opportunity to serve more low-income 3 year-olds in preschool. Provided that the programs are of high quality, this creates an optimal pre-K continuum for low-income children in which they receive 2 years of formal early learning before they start kindergarten.

Questions for school boards

As school board members and school district staff focus on early learning, the school district's baseline early learning context will be important to understand. To establish the facts on the ground and encourage an informed discussion among the governance team, a number of key questions may be important to ask.

1. How many children are enrolled in our district in TK (4 year-olds), CSPP (3 and 4 year-olds), Head Start (3 and 4 year-olds), and are children 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. How does the district ensure high quality in all of 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 those metrics?
 - » 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?
4. Do our pre-K 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?
5. What are we doing to promote alignment of our pre-K-kindergarten-third grade programs?
6. Do we have good relationships and communication with our COE and private and non-profit pre-school-childcare providers in our community?
 - » 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?
 - » Do we participate in local and regional efforts with our COE and our First 5 Commission?
7. Do we address pre-K in our Local Control and Accountability Plan?

Additional resources for school board members:

- » American Institutes for Research study on the impact of TK:
www.air.org/resource/impact-californias-transitional-kindergarten-program-2013-14
- » Learning Policy Institute brief on elements of quality programs:
learningpolicyinstitute.org/wp-content/uploads/2016/02/LPI_ECE-quality-brief_WEB-022916.pdf
- » Early Edge California (policy advocacy organization's web site, multiple resources):
www.earlyedgecalifornia.org
- » California Preschool Learning Foundations (state "standards" for preschool):
www.cde.ca.gov/sp/cd/re/psfoundations.asp
- » Preschool English Learners: Principles and Practices to Promote Language, Literacy and Learning (CDE):
www.cde.ca.gov/sp/cd/re/documents/psenglishlearners2.pdf

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