Supporting Quality Across Preschool Programs: Balancing Quality and Access

By Megan Carolan

Philadelphia is one of the largest U.S. cities to embrace a plan for universal pre-Kindergarten, highlighting the potential benefits for parents, children, and the city as a whole. The city has recently kicked off its PHLpreK initiative, which seeks to provide 6,500 high-quality slots over five years, with funding from a small beverage tax approved by the city council. The City developed its plan through a robust community feedback process, including the development of A Running Start Philadelphia report. Though the initiative’s current structure differs from this report, it provides ambitious goals for the full system:

1. “All infants, toddlers, and preschoolers have the opportunity to experience high-quality, full-day/full-year early learning in formal and informal settings,
2. Philadelphia has an ample supply of high-quality public, private, and nonprofit providers with supports for entering, sustaining, and growing the number of high-quality opportunities,
3. Philadelphia has a sufficient, stable, and diverse high-quality early learning workforce with access to professional development supports and adequate compensation,
4. Children and families are continuously supported by the early learning and K–3 systems,
5. Philadelphia has the required infrastructure and funding to support a high-quality, robust early learning system.”

The ambitious goals of the city’s vision require that hard choices be made in implementation. Early childhood education is interconnected with other systems in Philadelphia and across the state, including K-12 education, health, and child welfare. In this paper, we explore some of the challenges faced by the city in its roll-out of pre-K, including how Philadelphia can face these challenges informed by research and the experience of other jurisdictions.

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Balancing Access and Quality

Perhaps no challenge must summarize the struggle of pre-K implementation as well as the tug-of-war between expanding access and ensuring quality. In an ideal world, a government funds early childhood education to offer high-quality programming in a variety of settings to all children who can benefit. Of course, in the real world, financial constraints exert pressure on this decision. Philadelphia is facing the difficult choice faced by all jurisdictions offering pre-K: how do you balance the necessary investments in quality with the desire to serve as many children as possible? There is no secret formula to balancing these needs but rather it is a decision based on a number of local factors and priorities.

Costs for quality pre-K are complex, determined by a number of desired inputs and expected outcomes. Gault, Mitchell, and Williams (2008) describe two categories of pre-K program costs that can help shape our thinking:

- **"Direct service costs are expenditures directly associated with day-to-day operations such as salaries, employer-provided benefits, in-service teacher training, food, transportation, support services for students, building operations and maintenance, administration, and research and data processing."**

- **"Infrastructure costs are investments that contribute to the long-term success of the program, including facilities renovation, technical assistance and consultation, quality monitoring, outcome evaluation, and governance."**

How much, then, does quality care cost? No one estimate fits all scenarios, but several figures give us a sense of the differing costs by model:

- **For the 2013-2014 school year, the National Institute for Early Education Research estimated that providing high-quality pre-K and paying teachers a public school-level wage would cost about $8,400 per child nationally. This estimate considers serving children in a mix of full- and part-day slots based on where they are currently served, across a school year, rather than having a set schedule across all slots.**

- **Current spending patterns show that most programs are missing this mark, with state-funded programs spending an average of $5,031 in the 2014-2015 school year from all funding sources.**

- **Specific to Pennsylvania, the Nonprofit Finance Fund (NFF) estimates that a “high-quality” preschool slot in the state for 260 days per year, defined as meeting STAR 3 or 4 on the state’s Quality Rating and Improvement System (QRIS) would cost $12,789. The more basic quality of a STAR 1 site costing $10,320 per slot.**
The Philadelphia Commission on Universal Pre-Kindergarten estimates the cost of a quality pre-K slot in Philadelphia is between $14,000 and $15,000 per child for a full-day, full-year slot. These estimates, which highlight the need for additional resources to best serve children, include the expectation of a highly qualified, well-compensated workforce.\textsuperscript{7}

Despite what we know about the costs of high-quality pre-K, the current maximum amount for a slot in Philadelphia, through blending and braiding funding, is $10,439.\textsuperscript{8}

Increasing program quality often increases direct service costs for providers—consider the costs of adding another adult in the classroom to improve the child-staff ratio or implementing a data system that provides ongoing feedback to providers and parents. However, operating a high-quality center often also increases infrastructure costs, with very little financial support to offset these costs. Operating a small child care center that complies with licensing requirements costs much less than operating a high-quality center participating in Keystone STARS, both because of these direct costs as well as administrative burdens and compliance. An analysis of providers found that those with higher STARS ratings were not necessarily in better financial health; providers who focused exclusively on early childhood education had slightly better liquidity than those who had a range of programs.\textsuperscript{9}

Achieving Quality for Families

There is broad agreement among policymakers, teachers, and parents that children need quality care, but the debate continues on what constitutes “quality” and how to best utilize limited resources system-wide.

Research has shown that children benefit from high-quality interactions with teachers. These interactions are helpfully illustrated by Yoshikawa, et al. (2013) as those which “provide input to children, elicit verbal responses and reactions from them, and foster engagement in and enjoyment of learning.”\textsuperscript{10} The key question is how to guarantee these types of quality interactions in all classrooms. Yoshikawa et al. note that while defining the characteristics of classrooms, such as class size and student-teacher ratio, can help create an enabling environment for quality interactions, they do not serve as a guarantee of those interactions.\textsuperscript{11}

There is broad agreement that well-qualified teachers, receiving quality professional development and professional wages, are among the most important contributors to children’s learning. Dosage — that is, the amount of time in a high-quality program — also has an impact on child outcomes, as well as whether a program is convenient enough for parents to enroll their children. Yoshikawa et al. identify these aspects of process quality: “children’s immediate experience of positive and stimulating interactions” as the most important factor in children’s learning.

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Credentials and Professional Development

Staff qualifications and ongoing training are key components of providing high-quality care and education. A recent Institute of Medicine report recommends a Bachelor’s degree for all lead teachers, specifically “phased, multiyear pathways to transition to a minimum bachelor’s degree requirement with specialized knowledge and competencies for all lead educators, meaning those who bear primary responsibility for the instructional and other activities for children in formal care and education environments.”

Quality, ongoing professional development is important to creating high-quality interactions, both for teaching staff who hold higher degrees and for those who do not. The National Association for the Education of Young Children identifies both initial preparation (preservice) and learning experience (in service) as important to a professional development system. Professional development must be an ongoing process; evidence-based; responsive to each learner’s unique background and current role; and structured to connect research and practice. Rather than just quantifying professional development by the number of hours per year, it should be “based on specific outcomes that define what the professional should know and be able to do for young children and families as a result.” NAEYC provides “professional preparation standards” that highlight core knowledge areas to help shape the content and goals of professional development. Coaching and mentoring can be particularly rich methods for supporting implementation of instructional approaches, as noted by Yoshikawa, et al.: “Coaching or mentoring that provides support to the teacher on how to implement content-rich and engaging curricula shows substantial promise in helping to assure that such instruction is being provided. Such coaching or mentoring involves modeling positive instructional approaches and providing feedback on the teacher’s implementation in a way that sets goals but is also supportive. This can occur either directly in the classroom or through web-based exchange of video clips.”

Wages

Low wages for teachers and child care providers prove a major barrier in the field. It would be difficult to draw a direct line between higher teacher wages and improved child outcomes, as there are a number of other factors that may have an impact. Child care centers often have high teacher turnover rates, due to a combination of low wages and unpredictable staffing based on child attendance; many centers will send teachers home early, without pay, if there is low child attendance. Wages differ significantly by setting. According to the Center for the Study of Child Care Employment’s review of Bureau of Labor Statistics data, in 2015, child care workers across all settings had a median hourly wage of $9.77, while preschool teachers in schools earned a median hourly rate of $20.62; this is in comparison to the $24.83 median hourly wage of Kindergarten teachers.
Low wages may impact the experience in the classroom. In California, 57 percent of teaching staff were “somewhat or strongly worried” on an economic insecurity index, with those teachers earning less than $12.50 hourly having significantly higher scores. A negative correlation has been found between aggregate worry scores and Environment Rating Scale (ERS) scores. Stress and adversity can negatively impact providers’ interactions with the children in their care, particularly towards children who may have difficulty adjusting to the classroom; children who do not receive appropriate support and sensitivity in the classroom have been observed to have higher stress hormones as well as anxiety. High turnover creates costs for employers, including recruiting, hiring, and training replacement staff members and disrupting the flow of operations as teachers in other classrooms are often shifted to provide coverage.

Increasing wages could foster stability within centers and retain qualified providers. Several states currently provide stipends to teachers based on their center’s rating on the QRIS; across four such states, annual stipends ranged from $200 to over $3,000. The WAGE$ program provides twice-annual stipends to center staff. The program is currently funded in five states, with North Carolina’s SmartStart funded centers as a compelling case study. In 2011, 43 percent of teachers and assistant teachers received these stipends; in 2014, the average six-month supplement was $931. Evidence suggests the program has achieved its goal of reducing turnover, with a rate of 12 percent to 18 percent turnover statewide (compared to a national rate of 30%-40%). Another national effort is T.E.A.C.H. (Teacher Education And Compensation Helps) Early Childhood, which provides scholarships for early childhood providers to obtain a college degree in the field and incentivizes them to continue at their current centers. The program requires financial buy-in from centers, individual practitioners, and public entities; in 2014-2015, over 8,000 child care and education settings sponsored T.E.A.C.H. recipients, with family child care homes representing about a fifth of sponsoring organizations. Pennsylvania currently provides Education and Retention Awards for teachers in STARS facilities, an important step toward continued ongoing professional development in the Philadelphia expansion.

While scholarship and bonus programs provide important incentives in the field, the experts at the Center for the Study of Child Care Employment warn that they “are not permanent features of the early childhood infrastructure and thus are vulnerable to changes in state budgets and priorities…[S]cholarships and bonuses are often limited to those working in certain types of programs, serving particular groups of children, earning below a certain wage, or participating in particular initiatives, and therefore, they do not provide opportunities for all early educators and do not adequately address inequities in ECE services.” Rather, systemic change in compensation and credentialing is necessary to change the situation across the field. A NAECYC-funded voter survey in 2015 demonstrated that voters are already aware of these pay issues, but are split between wanting to increase
wages before increasing provider educational standards (43 percent) compared to increasing education standards before increasing wages (40 percent). Taxpayers already provide significant support for providers earning low wages in the form of public support. A 2014 study estimated that, nationally, $2.4 billion per year is spent on supporting families of low-wage workers in this field, with $1.3 billion of that cost coming from funding for Medicaid and CHIP, as many centers do not provide private health insurance benefits. Families of childcare workers also received an estimated $328 million in food stamps and $729 million in payments through the federal Earned Income Tax Credit. The current system of wage inequity based on setting is unsustainable for providers, centers, families, and taxpayers.

**Dosage**

While K-12 education tends to operate along similar schedules in most states, there is great diversity in how long pre-K programs operate; in the 2014-2015 year, 22 state-funded programs operated on a school-day schedule while 23 operated on a part-day schedule. Part-day schedules flourish for a number of reasons, ranging from trying to serve more children through multiple part-day sessions to a belief that young children cannot handle a full school day. Research does not specify one particular schedule as the “best” opportunity for education, but tends to point towards more quality classroom time as leading to better outcomes. A study of the Chicago Child-Parent Center found that full-day participation, compared to part-day participation, was linked to increased school readiness in 4 out of 6 school readiness domains (on the TS GOLD) as well as reduced chronic absenteeism in the pre-K year. Evidence also points to the value of more than one year of pre-K education. Results from the New Jersey Abbott preschool program and Chicago CPC’s both found greater impacts from two years of enrollment, though researchers note that the size of the impacts generally decrease with time. Additionally, children benefit most from differentiated programming in each year--a 3-year-old who simply sits through the same curriculum twice will not gain as much as one who enjoys two different classroom experiences. The Philadelphia Commission on Universal Pre-Kindergarten recommends a program operate eight hours or more per day, for 260 days per year. The goal is to provide an operating schedule that not only enables more opportunities for learning, but also allows parents to work.

**Structural Indicators of Quality**

Structural quality factors can help create an environment that leads to child success, but are not guarantees of the quality interactions that most benefit children. These include class size, student-teacher ratios, and other standards that govern the day-to-day activity of classrooms. Increasingly, experts and policymakers focus not only on these easier-to-measure inputs but also on process quality and child outcomes. Indeed, as Yoshikawa et al. notes, qualifications alone do not ensure greater gains for children during the course of the preschool years... preschool programs should be characterized by both structural features of quality and ongoing supports to teachers to assure that the immediate experiences of children, those provided through activities and interactions, are rich in content and stimulation, while also being emotionally supportive. “Qualifications alone do not ensure greater gains for children during the course of the preschool years...”
Maximizing Funding Opportunities: Blending and Braiding

The City of Philadelphia reports that current pre-K providers are able to secure funding levels above $15,000 per child if they combine funding from several existing revenue sources, including from Pre-K Counts (state-funded pre-K, Head Start, or Head Start Supplemental with Child Care Subsidy). However, these funding sources all have different eligibility and administrative requirements, which create administrative costs for centers seeking to combine funding sources. Maximizing revenues for each child in care is one component of a successful financing strategy for early childhood providers. The totals presented do not account for intermediary fees to cover service and administrative expenses. However, the Philadelphia Commission recognizes that combining funding sources can be time and resource intensive and recommends that “the City leverage, streamline, and organize resources to enable providers to layer funding from more than one public source...This can be accomplished through policy coordination, strengthening providers’ fiscal management systems, training by early learning specialist and business professionals or contracting with a service that provides specialized expertise in this area.”

Currently, in order to achieve the maximum available funding, “blending” and “braiding” are common practices in funding early childhood services. The goal is to maximize available funding, but both strategies have barriers to their efficiency. The Ounce of Prevention defines these concepts as:

- **Blending**: “funds from two or more separate funding sources are wrapped together within one full-workday, full-year program budget to pay for a unified set of program services to a group of children. In blending, costs are not necessarily allocated and tracked by individual funding source.”

- **Braiding**: “two or more funding sources are coordinated to support the total cost of services to individual children, but revenues are allocated and expenditures tracked by categorical funding source. In braiding, cost allocation methods are required to assure that there is no duplicate funding of service costs and that each funding source is charged its fair share of program and administrative costs.”

Blending or braiding funding is generally a logical decision by a program to utilize multiple funding sources, but requires significant staff time and administrative oversight to juggle program eligibility requirements. A change in eligibility of one funding source used for a child’s slot is disruptive not only to the individual family, but also to the providers.

Providers in Southeast Pennsylvania already report utilizing braiding of multiple funding sources, but report “high financial management barriers.” Philadelphia has an opportunity to provide adequate per-child funding and reduce this administrative burden for providers and guarantee quality for children.

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**Pennsylvania** allows for classrooms serving children through braiding child care subsidies, state pre-K, and Head Start; in this cost allocation model, each source of funding must be traceable based on a cost driver such as number of children or square footage.

**Oregon** has built a partnership between Head Start and the Department of Human Services to provide contracted 12-month slots. Head Start-eligible children have protected eligibility except in a few small circumstances.

Nonprofit Finance Fund recommends finding "opportunities for cost efficiencies," which may include sharing back-office administrative costs with other organizations or finding collaborative options for professional development and training opportunities.

Shared Services Model

Acknowledging the challenges of improving program quality while funding operations based on "per-child" funding streams, Nonprofit Finance Fund (NFF) recommends that funders in the ECE sector provide the "right" capital to program providers: "flexible general operating support and change capital for growing and changing programs that will incur deficits until the new financial model stabilizes." Many providers may struggle with operating responsibilities beyond the care of children. NFF recommends finding "opportunities for cost efficiencies," which may include sharing back-office administrative costs with other organizations or finding collaborative options for professional development and training opportunities. This is an opportunity to use a Shared Services model, which:

"enables center- and home-based child care providers to share costs and deliver services in a more streamlined and efficient way. A network of child care centers or homes are linked by a “hub” office that centralizes leadership and management, enabling both economies of scale and economies of specialization so that maximum resources can be focused on the learning environment—where they matter most." The Shared Services model builds capacity in two areas: business leadership (administration, billing, human resources) and pedagogical leadership (professional development, assessment training, curriculum development).

The organization Opportunities Exchange highlights the growing number of Shared Services networks on the ground, as well as their ECE Knowledge Hub, meant to embrace opportunities beyond the brick and mortar. One example is a Shared Services arrangement in Philadelphia, the Philadelphia Early Learning Alliance (PELA), which began with five centers and looks to add one or two centers per year. Shared Services initiatives have been explored or implemented in a number of communities nationwide. The interest in this model across a variety of communities--including Chattanooga, Tennessee; Greenville County, South Carolina; and Seattle, Washington, among others--demonstrate the flexibility of Shared Services to fit local needs and reduce common provider barriers. The Shared Services model will not address all operational issues providers face, but it can be a powerful, locally developed strategy to address needs.

Aside from a formal Shared Services model, a large expansion in Philadelphia is a ripe opportunity for maximizing economies of scale. Larger centers and those that provide longer hours of operation may benefit from economies of scale compared to smaller, shorter programs, with lower costs per child enrolled. One study that examined costs across 401 centers in four states found that per-child costs were significantly higher for centers serving fewer than 40 children than those serving more than 40 children. As is often the case with taking advantage of economies of scale, these savings may seem difficult to access by center operators as they require larger upfront costs (renovating space to serve more children, hiring additional staff, etc.). The expansion may create an opportunity for bulk purchasing and other opportunities for savings across centers.
Targeted or Universal Program?

The Philadelphia Commission on Universal Pre-Kindergarten recommended a “universal plan for pre-K that begins with a targeted approach,” including prioritizing communities with high levels of poverty, low numbers of quality slots, and a concentration of factors putting children at risk for not being ready for school. The Commission also identified two separate funding structures depending on family income, recommending that the City’s program should allow for subsidy-eligible (200% FPL) children to enroll full-day (8 hours or more) for 260 days per year, and that families not eligible for subsidies be able to enroll their children for a reduced 6-hour per day, 180-day per year schedule. In its current implementation, the program does not have an income cap but rather selected providers based on their experience serving children in high-needs areas. This strategy reflects a commitment to a vision of universal service, while prioritizing the specific needs of low-income children.

This strategy of working towards universal access while prioritizing more targeted enrollment is not uncommon among cities and states with ambitious goals, but limited budgets. American Institutes for Research examined 10 local pre-K expansions (Boston, Denver, Los Angeles, New York City, Salt Lake City, San Antonio, San Francisco, Seattle, Washington, D.C., and West Sacramento) and noted that while nine of these programs aim to serve all 4-year-olds, they do not necessarily provide equal financial support regardless of income. For example, Denver’s program, which is fully implemented, reached 54 percent of 4-year-olds, but funnels most funding to low-income families; on the other hand, San Antonio aims for universal access but has begun by introducing the program first in high-need areas in the city. Philadelphia is utilizing a similar strategy by prioritizing center participation in high-need neighborhoods in the city, especially those that do not currently have enough slots.

Philadelphia envisions universal prekindergarten not only as a strategy to improve academic outcomes, but also as one component of a broader anti-poverty agenda for the city. This approach makes it logical to prioritize enrollment for low-income families or families who meet other risk factors for children not starting school ready to succeed. However, children from across income levels can benefit from participating in mixed-income classrooms, so it is essential that enrollment not be limited only to low-income children. Economist Tim Bartik notes that pre-K benefits a broad range of children, including those from middle-income families, contending that full-day pre-K could potentially increase average earnings for the middle class by 5 percent. Prioritizing enrollment based on low-income status, or specific to low-income neighborhoods, is a logical way to implement the Philadelphia expansion in early days, though the city must begin planning for how to ensure access for middle-income families as it grows.
Considerations:

**Systems-based thinking**: How does funding additional quality pre-K slots impact the other systems that serve young children and their families? Philadelphia must consider a wide-ranging view of how children and families are currently served, and their unmet needs, to ensure families see maximum benefits. In a best case scenario, expanded pre-K access for low-income children improves Kindergarten readiness; how do we then ensure that Kindergarten classrooms are meeting the needs of their incoming students, keeping in mind that “fadeout” of pre-K’s benefits is often other children “catching up”? Do expanded pre-K offerings reshape the mass transportation needs of certain neighborhoods? Participation in center-based education and care has the potential to increase referrals to medical and special education services; engaging providers from these systems in pre-K planning can help avoid waitlists and gaps in services.

**Commit to a Vision of Quality**: Many agencies play a role in early childhood at local, state, and federal agencies, often with their own goals and priorities. One agency may be interested in maximizing the number of available slots for low-income families, to align with a goal of increased parental employment, while another may be committed to providing the highest educational quality possible, even if the high cost reduces available slots. Having agencies develop a collaborative vision for early care and education is essential to everyone speaking the same language, and reducing both administrative burdens and a knowledge burden for families. Once this vision of quality is determined, it needs to be clearly articulated to parents in order to fully empower their choices in early care and education. This is a difficult and ambitious process, but can provide an important roadmap not just for the next funding cycle but for the future.

**Understand Needs in Scale-Up**: No city-wide preschool program can roll out on auto-pilot. Stakeholders, including city officials and advocates, must constantly monitor progress in meeting enrollment targets and ensuring that high quality standards are maintained as programs expand. For example, the Fund for Quality, an initiative of the William Penn Foundation, works to improve the quality of existing preschool sites as well as help open new sites in high-needs areas. Strategic funding initiatives such as this are essential to ensuring children have access to high-quality slots and not just seats in any classroom. This includes ongoing communications with parents to understand that operating schedules meet their needs; working with institutes of higher education to ensure that enough highly qualified teachers are trained to suit the early childhood workforce; and checking that enrollment is accessible across income levels. Philadelphia should engage in ongoing conversations with other cities that have launched pre-K programs to understand challenges and share what works.

**THE EARLY CHILDHOOD ACTION COLLECTIVE**

The Early Childhood Action Collective (ECAC) is an initiative of Public Health Management Corporation, sponsored by the William Penn Foundation. ECAC is a multidisciplinary consortium comprising researchers, policy experts, and practitioners who share a commitment to creating a better future for Philadelphia’s children by informing policy and practice decisions to help move Philadelphia’s early childhood education sector forward.

The opinions expressed in this report are those of the author and do not necessarily reflect the view of the William Penn Foundation.
Citations


7. Commission on Universal Pre-Kindergarten, 2016, p. 29.

8. According to the Commission for Universal Pre-Kindergarten, “Estimate for the cost of providing quality care is based in unpublished research conducted for this effort that utilized surveys with local early childhood employers and employees and benchmarked compensation to local wage and benefits standards for similar occupations. The cost model is based on one that was recently introduced by the federal Agency for Children and Families Child care Bureau to help states establish reimbursement rates. $10,439 is based on full-time enrollment 260 days a year in a STAR 4 center in 2016. Reimbursement at this level is not the norm.”


36. Yoshikawa et al., 2013.


40-42. Alvarez, Epps, & Montoya, 2015.


49. https://www.princeton.edu/futureofchildren/publications/docs/06_02_03.pdf


