







Students' early education experiences set the tone for future success as they transition through the learning continuum.



Standards- and assessment-based reforms have helped to identify which children exhibit more success in third grade and beyond; but to date these efforts have failed to meaningfully close achievement gaps. The lesser known “P-3” reform approaches, however, are gaining traction because they focus on the crucial early childhood years from preschool through third grade.

Developmental science has long identified the years from birth through age 8 (the age at which most children are in third grade) as a critical period during which children's educational pathways are set. Brain science tells us that it becomes more difficult—not to mention more expensive—to close achievement gaps in populations of older children. Based on this science, as well as economic cost-benefit arguments, P-3 approaches provide a compelling argument: If children are given a stronger start earlier in life, they will be more successful in grades 4-12 and beyond. In short, development during the preschool through third-grade years sets the tone for children's later educational and lifelong success.

At the same time that P-3 approaches are gaining force, the education world has increasingly focused on the central role of school principals. As discussed in The Wallace Foundation's January 2012 report, *The School Principal as Leader*, effective

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principals establish a vision of academic success for all students; create a climate hospitable to education; cultivate leadership in others; improve instruction; and manage people, data, and processes to foster school improvement. In other words, principals set the tone for everything that occurs both within schools and among schools and their community partners.

What follows brings together these two “tone-setting” reform trends: comprehensive P-3 approaches and the critical role of elementary school principals.

## Making the Case for P-3

The scientific basis for focusing on the continuum of years from birth through third grade is persuasive. It is during these years that children acquire the skills, behaviors, and dispositions that

are foundational as they transition to later learning. Developmentalists and economists alike acknowledge that skill begets skill. Cognitive, social, emotional, and physical development at a young age allows deeper and more complex skill development throughout life.

Neuroscience, molecular biology, and genomics all point to the early childhood years as the most promising window of opportunity during which to influence children’s lifelong trajectories. Brain development is most rapid and “plastic,” ensuring greater possibility for neural connections to reorganize and adapt to external influences. Positive, nurturing, and engaging interactions and experiences lay the foundation of skills and behaviors that contribute to children’s later success in school and beyond.

The experiences children have early in life shape whether their foundation for later learning is sturdy or fragile. Because young children’s learning—for example, the acquisition of new vocabulary and the meanings behind those words—occurs in the context of reciprocal relationships with adults and caregivers, it is difficult to tease apart children’s cognitive, social, and emotional development during these years. They are inextricably intertwined.

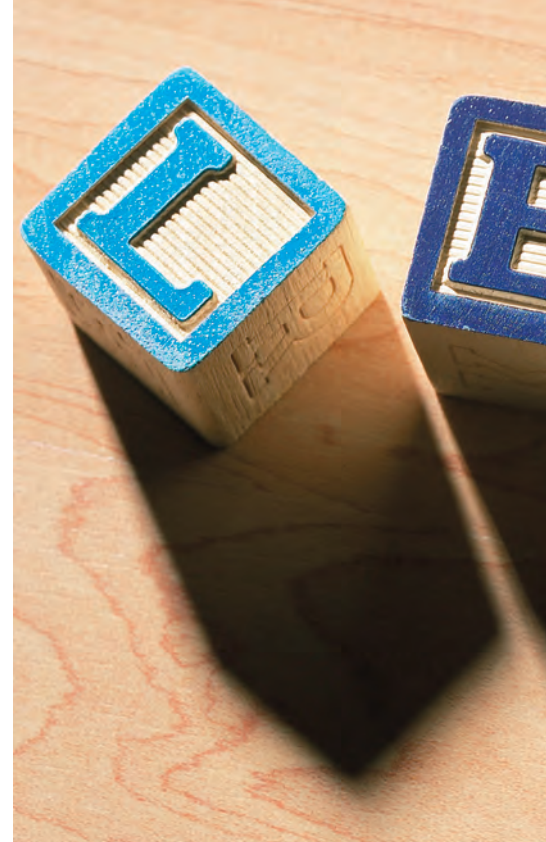
## Effect on Achievement Gaps

Data from a nationally representative sample of children, the Early Childhood Longitudinal Study—Birth Cohort 2001, reveal that gaps in what children know and are able to do appear as early as 9 months of age. Not surprisingly, these gaps only grow over time. Based on 2011 National Assess-

ment of Educational Progress (NAEP) reading assessment data, by fourth grade there is a 25 point difference between black and white students and a 29 point difference between lower- and higher-income students.

By focusing on achievement gaps early, they can be closed. According to data from the nationally representative *Early Childhood Longitudinal Study—Kindergarten Class of 1998-99* (ECLS-K), children who attended pre-school performed significantly better in both math and reading in the fall of their kindergarten year compared with children cared for only by their parents before kindergarten. Similarly, children who attend state-funded pre-kindergarten programs as 3- and 4-year-olds have statistically significant and meaningful gains in early language, literacy, and math development by the time they enter kindergarten—an 8 percent increase in children’s average vocabulary scores and a 13 percent increase in math scores.

In terms of quality and dosage, similar to outcome evaluations of preschool programs, there is increasing evidence of the efficacy of full-day kindergarten in boosting children’s academic achievement. Analyses of ECLS-K data show that children who participated in full-day programs made



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the continuum of learning settings so that, for example, teachers collaborate and share data across grade levels; standards and assessments are aligned across age levels; assessments are aligned with instruction; families partner with schools; schools partner with early learning/preschool programs; and children have smooth transitions as they move throughout the system. (For more specificity, see Kauerz and Coffman's *Framework for Planning, Implementing, and Evaluating PreK-third Grade Approaches*.)

### Case in Point

Two publicly funded P-3 efforts provide compelling evidence of the approach's effectiveness. Detailed in the book *Leading for Equity*, the story of how Maryland's Montgomery County Public Schools tackled achievement gaps is remarkable. The district created an Early Success Performance Plan for the pre-K-3 grades that included aligned reading, writing, and math curriculum; ongoing district-designed diagnostic and formative assessments at each age/grade level; extensive professional development for teachers; a prioritized focus on full-day kindergarten and smaller class size for the district's most at-risk students; and both summer advancement and after-school programs for struggling elementary students. With a sustained focus on these efforts over the course of more than a decade, the district's black-white achievement gap narrowed by 29 percentage points between 2003 and 2009.

Similarly, in the Chicago Child-Parent Centers—a Chicago Public Schools effort that provided comprehensive aligned services to children beginning in preschool (age 3) and extending through third grade—children who enrolled at age 3 and remained in the intentionally aligned elementary schools through second or third grade outperformed their peers who had less extensive participation (e.g., were enrolled for only one to two years). Not only did the children who experienced an intentionally aligned pre-K-3 grade experience outperform their peers on

statistically significant gains in reading and math skills by the end of the kindergarten year when compared with their peers who attended only a half-day program. Children in full-day kindergarten made greater gains in both reading and math achievement—gains that close the achievement gap between the highest and lowest performing students by nearly one-third in reading and by one-fourth in math.

Finally, there is emerging consensus that the quality of literacy and math instruction, coupled with the quality of interactions between teachers and students, in elementary school classrooms has long-term impact on children's achievement. Unfortunately, this does not happen for many of the country's low-income students because, given the prevalent approach to public schooling, they are more likely to end up in low resource and lower quality schools. However, when the P-3 grades are implemented well and intentionally aligned, low-income and other children at risk for school failure (black and Hispanic children, children whose mothers have less than a high school education) benefit. Increasingly, scholars recognize that early childhood interventions have a stronger effect on particular populations of children, thereby contributing not just to overall increases in achieve-

ment for all participating students, but providing particular boosts to children who need it most.

### A Comprehensive Approach

The core elements of P-3 include high-quality preschool programs for 3- and 4-year olds, full-day kindergarten, and primary grades (grades 1-3) that provide meaningful instructional and emotional support. Obviously, one key to P-3 is starting children's learning opportunities earlier, prior to traditional entry into formal schooling. But what happens across the age/grade levels is equally important.

Comprehensive and effective P-3 approaches ensure that children's early education experiences are of high quality and adequate dosage, and have been meaningfully aligned. This requires that children's early childhood and early elementary settings provide intentional and developmentally appropriate instruction that balances cognitive, social, and emotional development (quality). It also requires that children's learning opportunities provide an adequate amount of time, year after year, for children to have child-friendly yet instructionally rich experiences (dosage).

Further, P-3 requires ensuring that there is increased alignment across



achievement tests in third grade and seventh grade, but they also had fewer grade retentions by age 15 and fewer special education placements by age 18.

### The Role of Principals

While comprehensive P-3 approaches such as those described above require buy-in and leadership from a broad range of stakeholders (e.g., teachers, classroom aides, families, community organizations), elementary school principals are central to their success. As noted earlier, principals are key to setting the tone of priorities both inside and outside of their buildings.

Effective elementary school principals build and support relationships with multiple stakeholders. For example, principals can increase the number and strength of partnerships between schools, local early learning/preschool programs, and families.

Principals can strengthen the consistency and depth of those partnerships to ensure that they are focused on creating high-quality instruction and learning environments for young children, as well as meaningful and mutually beneficial to all participants.

Principals are also key players in fostering and providing support for teamwork among teachers. They support regular, inclusive, and shared professional development among teachers in both age/grade-level (horizontal) and cross-grade (vertical) teams that, again, extend beyond school walls to

include teachers in community-based preschool programs. They engage and support teacher teamwork by instituting regular common planning time; review and analyze student-, classroom-, and school-level data; and involve teacher teams in setting professional development agendas.

Principals can also be effective instructional leaders, working in partnership with teachers to understand and ensure developmentally appropriate and differentiated instruction to support young learners. Principals are central to balancing developmentally appropriate teaching and learning with specific academic expectations. To be effective instructional leaders on behalf of young learners, principals should participate in annual professional development related to the learning and development of children from birth through age 8 and spend consistent time in P-3 classrooms, providing constructive and supportive feedback to teachers.

Comprehensive P-3 approaches hold tremendous potential to dramatically change the trajectory of achievement gaps and to set young children on sturdy pathways to educational and lifelong success. Elementary principals are a lynchpin in this work. **P**

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## New School, New Pre-K Challenges

I have always considered myself to be a transformational leader. So, I readily accepted the challenge when I was offered the opportunity to serve as the new principal of a well-established Montessori school with a pre-K program. The public school had performed well as a Montessori environment, but had not aligned its instructional practices with district curricular standards and benchmarks.

We needed to merge the Montessori curriculum with more traditional practices to meet district and state testing requirements. Additionally, I was tasked with providing pre-K students with a standards-based curriculum that would help them develop the necessary skills to master content by the time they reached kindergarten.

Before I could lead the school through any transformation, there would need to be a major paradigm shift. Little did I know that the first hurdle to overcome would be my own inexperience with Montessori and pre-K programs.

### Learn the Ropes

My first step was to visit local, private Montessori schools and form a strong relationship with the local university that provided Montessori teacher training. I needed to learn as much as possible about Montessori schools and their core beliefs. I initially struggled with having to rethink my own training as a teacher and principal to embrace a new way of learning and teaching.

I also met with state education officials responsible for pre-K instruction and day care regulation. Many of the operational guidelines and rules governing

