

**NCCP** National Center for  
Children *in Poverty*

Columbia University

MAILMAN SCHOOL OF PUBLIC HEALTH



# PROMOTING EFFECTIVE EARLY LEARNING

WHAT EVERY POLICYMAKER

AND EDUCATOR SHOULD KNOW

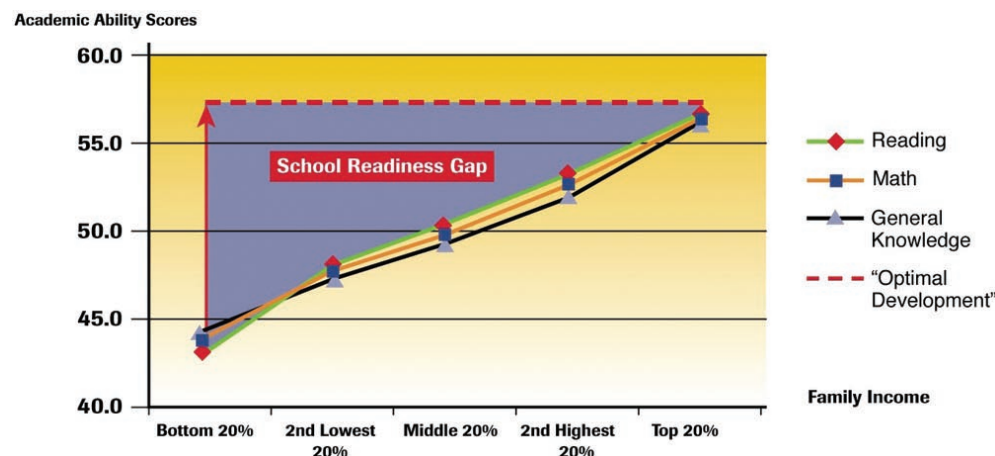
Language and literacy skills are critical to success in school. For low-income preschoolers, increasing early literacy and math skills is vital to closing the achievement gap between them and their more advantaged peers. New research shows that an intentional curriculum and professional development and supports for teachers are important components of effective preschool classrooms and programs.

A special focus on these strategies is important because many low-income children in early learning settings fall behind early and remain very much behind their peers in reading and math.

## How Far Behind Are Low-Income Children?

- Before entering kindergarten, the average cognitive scores of preschool-age children in the highest socioeconomic group are 60 percent above the average scores of children in the lowest socioeconomic group.<sup>1</sup>
- At age 4 years, children who live below the poverty line are 18 months below what is normal for their age group; by age 10 that gap is still present. For children living in the poorest families, the gap is even larger.<sup>2</sup>
- By the time children from middle-income families with well-educated parents are in third grade, they know about 12,000 words. Third grade children from low-income families

## Achievement Gap as Children Begin Kindergarten



Source: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99, Fall 1998. In Barnett, W. S.; Hustedt, J. T.; Robin, K. B.; & Schulman, K. L. (2004). *The state of preschool: 2004 state preschool yearbook*. Washington, DC: National Education Association <[nieer.org/yearbook2004/pdf/yearbook.pdf](http://nieer.org/yearbook2004/pdf/yearbook.pdf)>.

with undereducated parents who don't talk to them very much have vocabularies of around 4,000 words, one-third as many words as their middle-income peers.<sup>3</sup>

## What Helps Young Low-Income Children Catch Up?

These data frame the challenge, but the situation is not irreversible. There is already a large literature demonstrating that with comprehensive, ongoing early interventions it is possible to change the educational odds for low-income children. Now, there is emerging evidence that closing the achievement

gap depends greatly on using an intentional curriculum and providing teachers with the kinds of professional development and supports that can help them more effectively promote early literacy and math skills in the context of nurturing and emotionally supportive classrooms.

The key aspects of an effective intentional curriculum (see box) are consistent with a joint position statement on curricula issued by the National Association for the Education of Young Children and the National Association of State Early Childhood Specialists in State Departments of Education.

## Defining an Intentional Curriculum

- An intentional curriculum is: content driven, research-based, emphasizes active engagement with children, includes attention to social and regulatory skills, and is responsive to cultural diversity and children just learning English.
- An intentional curriculum is directive without using drill and kill strategies; it is fun for young children and promotes positive peer and teacher interactions.
- An intentional curriculum is developmentally appropriate.

But the research also shows that no curriculum is teacher proof, and that both the qualifications teachers have and how they teach content matter. New studies are raising questions about what types of credentials and qualifications best predict children's achievement—a college degree, an increased understanding of child growth and development, a combination of the two, or something else entirely.

Research findings on teacher education are mixed:

- Teacher behavior and classroom quality are best when teachers have a Bachelor's degree and specialized early childhood training at the college level.<sup>4</sup>

- Teachers' education, training, and credentialing are not consistently related to classroom quality or academic gains for children; they are necessary but not sufficient for improving outcomes for young children.<sup>5</sup>

In addition, researchers are learning about how to improve achievement by finding better ways to measure what actually goes on in early learning classrooms. Specifically, they are assessing how teachers and children interact in learning situations, including the social, emotional, physical, and instructional elements of those interactions—what is known as “process quality.”<sup>6</sup>

Unfortunately, poor and low-income children are most likely to be enrolled in early learning programs that are lower quality overall. In fact, a recent study found that early learning classrooms comprised of about 60 percent of children from low-income homes were rated significantly lower in quality indicators of teaching, teacher-child interaction, and provisions for learning than classrooms with fewer low-income children.<sup>7</sup>

Still, there is new evidence across early learning settings that all children who are behind can make gains when they have teachers who know how to actively involve children in learning and have the appropriate supports.



Research findings on children's achievement show that:

- Children make academic gains when they have teachers that encourage communication and reasoning, are sensitive to their interactions with children, and construct an atmosphere of respect, encouragement, and enthusiasm for learning.<sup>8</sup>
- Children make the most achievement gains when a research-based curriculum is used in conjunction with web-based professional development to mentor teachers and when children's progress is monitored to inform practice.<sup>9</sup>



All children who are behind can make gains when they have teachers who know how to actively involve children in learning and have the appropriate supports.

## Take-Home Messages

Evidence that low-income children make gains in early literacy and math skills when high-quality preschool programs include an intentional curriculum and provide teachers with professional development and supports has important implications for the ongoing debates about expanding prekindergarten and closing the achievement gap. Following are eight key messages for policymakers and educators about promoting effective early learning.

- The gap in achievement between low-income children and their middle-class peers is real and significant.
- Teachers and administrators need to set high expectations for what all young children can and should learn.
- An intentional curriculum is an important component of quality early learning and most effective when it is consistent with district-wide kindergarten through third grade (K–3) professional development activities and early learning standards.
- Teachers need to have hands-on professional development and ongoing supports to implement intentional curricula effectively and to better interact with low-income children to promote early learning.
- Researchers are developing new ways to measure how teachers interact with children and how they implement an intentional curriculum to increase achievement.
- More research is needed to determine the type, amount, and combination of education and training that lead to increased achievement for low-income children.
- Education reform efforts need to start as early as birth, and be continued through preschool and into early elementary school.
- Investments in deliberate, sustained strategies (statewide, districtwide, and communitywide) are essential.

## Implications and Recommendations

Research on how to improve children's achievement in preschool has implications especially for state and local policymakers, early learning administrators, teachers, families, community leaders, and researchers.

### *For State and Local Policymakers*

- Link requirements for obtaining a Bachelor's degree with requirements for training in early childhood development or a related field.
- Allocate resources for state and local mechanisms to ensure that the translation of new knowledge about intentional curricula and teacher supports actually reaches teachers and is used to improve classroom practice.
- Invest in training strategies that provide direct feedback about classroom practice to teachers through ongoing consultation, mentoring, or coaching.
- Keep effective teachers in preschool classrooms by making their compensation and benefit packages consistent with those of kindergarten teachers.
- Ensure that state incentives for quality early childhood programs are tied to effective teacher-child interactions, child-focused teaching, and content-driven classroom instruction.
- Invest in research to determine the specific content, modules, and sequencing of curricula

that best predict increased achievement for all young children, especially low-income and the most at-risk children in all settings.

- For the most challenged families, build in supports to address barriers like health, safety, hunger, and housing that get in the way of young children's learning.

### *For Early Learning Administrators*

- Implement and sustain a whole school/center model of professional development that involves principals, directors, supervisors, teachers, child care providers, and families.
- Provide supports, including release time, substitute teachers, and subsidies so teachers can take advantage of professional development opportunities that are linked to classroom curricula.
- Align early learning curricula and teaching strategies with K–3 standards.

### *For Teachers*

- Participate in education and training that increases knowledge of early literacy and math skills.
- Participate in education and training that focuses on how young children grow and learn.
- Participate in training that focuses on the cultural traditions and practices and language diversity of the growing number of immigrant and limited English proficient children.



For the most challenged families, build in supports to address barriers like health, safety, hunger, and housing that get in the way of young children's learning.



An intentional curriculum and effective teaching supports are promising pathways to increase the early literacy and math achievement of low-income preschool-age children.

### *For Families and Community Leaders*

- Join together to determine how effective community preschools are when it comes to teaching early literacy and math skills to low-income children.
- Develop local advocacy efforts to help parents understand and insist that intentional curricula and effective teaching strategies be used in all community-based preschool settings.

### *For Researchers*

- Conduct experimental studies to determine the specific content, modules, and sequencing of curricula that best predict increased achievement for low-income preschoolers at risk for school failure.
- Conduct experimental studies across all early learning settings to test what specific type and amount of education is necessary for preschool teachers to be effective.
- Conduct experimental studies across all early learning settings to test what content and delivery methods of training best help teachers improve their classroom practice.
- Develop and use new tools to measure classroom quality and predict increased achievement.
- Translate research findings so that lay consumers can understand whether the differences identified are meaningful and change children's achievement.

### **Conclusion**

Closing the achievement gap is a large task requiring strategic planning and action at the classroom, local, state, and federal levels. For children in the highest-risk families and poorest communities, even the best early care and early learning opportunities will not be enough to help them perform on a level consistent with their more advantaged peers. However, a strong evidence base is showing that an intentional curriculum and effective teaching supports are promising pathways to increase the early literacy and math achievement of low-income preschool-age children. The challenge is to use this knowledge so that it gets into the hands of those working directly with the millions of low-income preschool-aged children across the nation.

## Endnotes

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The National Center for Children in Poverty (NCCP) is the nation's leading public policy center dedicated to promoting the economic security, health, and well-being of America's low-income families and children. Founded in 1989 as a division of the Mailman School of Public Health at Columbia University, NCCP is a nonpartisan, public interest research organization.

## PROMOTING EFFECTIVE EARLY LEARNING: WHAT EVERY POLICYMAKER AND EDUCATOR SHOULD KNOW

by Lisa Klein and Jane Knitzer

This brief provides a blueprint for state and local policymakers, early learning administrators, teachers, families, community leaders, and researchers to use effective preschool curricula and teaching strategies to help low-income young children close the achievement gap in early literacy and math to be ready for kindergarten like their more affluent peers. It is part of a series of publications from the Pathways to Early School Success project of NCCP that addresses the question: "What will it take to ensure that young low-income children succeed in the early school years?"

The brief and the more in-depth report—*Effective Preschool Curricula and Teaching Strategies*—are both based on a meeting that NCCP convened bringing together distinguished researchers, as well as a careful review of recently funded research. Other issue briefs in the Pathways project have focused on the importance of strategies to promote social and emotional competence in infants, toddlers and preschoolers: *Helping the Most Vulnerable Infants, Toddlers, and Their Families*, and *Resources to Promote Social and Emotional Health and School Readiness in Young Children and Families—A Community Guide*.

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