

Getting Ready for School:  
Promoting Cognitive, Social and Behavioral Wellness  
Through Early Childhood Education

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In the first decade of the 21<sup>st</sup> century, too many young children face risks that limit their opportunities to develop a foundation for cognitive, social and behavioral functioning. Such risk factors include living in poverty, having a single parent, having a mother with less than a high school education, and living in a family that does not speak English. Nearly half of all kindergarteners in the United States face at least one of these risk factors. Nearly one in six is subject to more than one such factor. Poverty affects 20 percent of children under six, but the rate is over 50 percent among children living in a female-headed household, 39 percent for African-American children and 32 percent for Hispanic children. And while it is important to recognize that exposure to poverty and other risks does not necessarily lead to developmental problems, for some children the consequences can be considerable.

Because individual differences in development and exposure to risk factors do vary, all five years olds are not ready for school. Research shows that gaps in readiness often persist throughout the educational career of children and youth. This means that children from more disadvantaged backgrounds enter school with less developed cognitive and social skills and learning competencies. Often disadvantaged children do not progress at the same rate as their more advantaged peers, thus widening the achievement gap as children age. Many children from disadvantaged backgrounds fail to meet grade-level expectations in core subjects. National educational assessments at grades 8 and 12 show that more children from at-risk backgrounds score below a “basic” level of reading and math achievement. Underachievement in school is associated with adult problems like low rates of employment, low earnings when employed, welfare dependency, and crime.

Thus, it seems clear that the first five years of life are a time of opportunity and vulnerability.

#### Early Childhood Education Interventions

In recent years, there has been a growing interest in early childhood education (ECE) programs designed to promote a child’s cognitive, social and behavioral development in the years leading to school entry. Often these programs are billed as making children from disadvantaged backgrounds “ready to learn” when they enter kindergarten. Perhaps the most visible ECE program supported by public funds is Head Start. It is national in scope, 40 years old and was designed to compensate for the

detrimental influences of poverty on the cognitive and social development of young children (Zigler & Muenchow, 1992).

Head Start is part of a broad array of public programs that provide ECE services to disadvantaged children. Nationwide, Head Start serves about 900,000 children ages 3 and 4 annually, while Early Head Start reaches an additional 62,000 children under three (Head Start Bureau, 2005). As of the 2002-03 school year, 38 states provided additional funding for public pre-kindergarten (preK) programs, primarily programs targeted at disadvantaged children and in most cases programs serving 4-year-olds. In California, Head Start serves about 90,000 children annually, while the California State Preschool Program, which is open to disadvantaged 3- and 4-year-olds, reaches an additional 75,000 children per year (Karoly & Bigelow, 2005). Preschool-aged children with special needs also receive publicly supported services. One or more of these three programs serve approximately 27 percent of all 4-year-olds and 13 percent of all 3-year-olds.

In the US, most publicly-funded ECE programs target at-risk children. However, several states have elected to make their programs available for all children whose families choose to enroll them. Georgia and Oklahoma were the earliest states to implement universal preK programs for all 4-year-olds. Florida, New York, Massachusetts and West Virginia have just recently begun to implement universal programs or are in the process of phasing them in. Overall, the momentum across the states is building toward increased investments in preK programs, with 26 states and the District of Columbia having increased preK funding in fiscal year 2006 (PreK Now, 2005). In California, several counties including Los Angeles, San Mateo and San Francisco counties, are phasing-in universal preschool programs using funding from Proposition 10, the California Children and Families Act passed in 1998. This initiative, better known as First 5, is funded through tobacco taxes. Two weeks ago, California overwhelmingly rejected an initiative, Proposition 82 - the Preschool for All Act, which would have mandated and funded universal preschool programs for all 4-year-olds in the state.

What evidence is there about the short term and long term benefits of ECE programs in terms of their effectiveness on school readiness and later outcomes?

#### Evidence of the Short Term and Longer Term Effects of High-Quality ECE Programs

RAND recently published a comprehensive review of 11 ECE programs such as the High Scope/Perry Preschool Project, the Carolina Abecedarian Project and the Chicago Child-Parent Center Project (Karoly, Kilburn, & Cannon, 2005). The review found that the effects of enrollment in high-quality preschool include the following:

- Improvement in student achievement and IQ test scores
- Lower incidence of grade retention
- Fewer special education referrals
- Increased graduation rates
- Lower incidence of criminal activity

- Increased likelihood of delaying first pregnancy
- Improved worker productivity with higher levels of employment
- Higher average wages

These short and long term benefits are estimated to save significant amounts of money to society as a whole as well as having a significant impact on the individuals who participated in the programs themselves. It is also important to note that the high quality preschool programs evaluated by RAND included substantial services inside and outside of the school setting. Such services include parent and community outreach and participation as well as screening, assessment and referral services for health and social services to the children and their families. Most of the reviewed programs provided preschool and ECE services to young children for more than one year. Researchers caution that there is little to no evidence to support long term benefits like increased graduation rates with only one year of preschool or for preschool programs that do not have the same high quality components.

### High-Quality Preschool Program Standards

Through the research base on the effectiveness of preschool programs, researchers and experts in ECE and school readiness at the National Institute for Early Education Research (NIEER) have developed 10 benchmarks in evaluating the quality of preK programs. The Quality Standards Checklist includes:

- Comprehensive Early Learning Standards
- Teacher has a BA degree
- Teacher has specialized training in preK
- Teacher Aide has Child Development Associate (CDA) certificate
- Instructional staff gets at least 15 hours of in-service training per year
- Maximum class size is less than or equal to 20 children
- Staff to child ratio of 1:10 or better
- Required screening and referral/support services in health, vision, hearing and at least one support service such as parent education
- At least one meal served per day
- State monitoring through site visits and data collection

Few ECE programs meet all 10 benchmarks whether the program is targeted to at-risk children or universally available to all. In California, a recent review of the California State Preschool Program found only 4 of the 10 standards were met. Even Proposition 82 proposed to meet 6 of the 10 benchmarks. The most difficult standards to achieve are requiring teachers to have a BA degree and requiring aides to have the CDA certificate. These two standards present significant policy implementation challenges for public funding both in the short term and long term.

Across all states, many children are in ECE programs, both publicly- and privately-funded, that would be rated by NIEER as low quality. Notably, only about half the states with publicly-funded preK programs require the lead classroom teacher to have a bachelor's degree. California is not one of these states. All states do require

kindergarten teachers to have BAs. Likewise, only one in three Head Start teachers would meet this requirement of a bachelor's degree (NIEER, 2003).

### Targeted versus Universal Programs

Given the research evidence of the favorable effects of well-designed ECE programs and the strong returns both for society and individuals, there is growing support for making high-quality programs more widely available. Some would argue that the programs should continue to be targeted, like Head Start or Early Head Start, to serve disadvantaged children who are likely to benefit the most from investments in the early learning (Heckman, 2006) and that the pressure should be to enroll all eligible children in these programs. Others favor universal access to programs so that all parents have the option of enrolling their child in a high-quality program (Barnett, 2005).

Ultimately, policymakers and the public need to consider the tradeoffs involved in targeted versus universal ECE programs. In terms of total cost, a targeted program is generally less expensive because there are fewer children enrolled. However, a targeted program requires establishing eligibility rules and an administrative structure to determine if children meet the eligibility criteria. These administrative costs can be avoided when a program is open to all children regardless of circumstances. When a program is targeted, it is often a challenge to ensure that the targeted population is served. A child whose family is just above the poverty line is likely to benefit just as much as one whose family's income is just below the poverty line. And, as Head Start has so consistently experienced, a targeted program may be less likely fully funded or funded at the level required to deliver high-quality services when it serves the poor. In contrast, there may be greater political and public support for funding a high-quality program that serves all children.

### Linking Children's Oral and Mental Health to School Readiness

High quality ECE programs benefit all young children, regardless of risk factors. Disadvantaged 3- and 4-year-olds have the most to gain in terms of their readiness to learn important cognitive skills like literacy in grades K through 3. But all 3- and 4-year-olds can benefit from preK programs that have their curriculum designed on principles of child development and that employ staff who have the knowledge, skills and understanding of how young children develop in cognitive, affective and motor domains.

High quality ECE programs can provide pathways for more students to leave 3<sup>rd</sup> grade reading, writing and computing at grade level. "Reading to learn" is the basic learning strategy for student achievement after 3<sup>rd</sup> grade and is especially important for demonstrating proficiency on standardized tests, the primary indicator of student achievement in public K-12 education. Thus implementing policies at the state and local levels that put caring, competent and qualified preschool teachers who have training in emergent literacy instruction and teaching English language learners is critical to closing the achievement gap.

Research is clear about the positive effects of creating ECE programs that integrate health and social services with parent education. Health professionals, social workers, educators and parents together can address the needs of the whole child. To do this, pre-service preparation of these professionals should include opportunities for interprofessional collaboration in coursework and in field experiences at high quality ECE program sites. Such programmatic linkages in the preparation of dentists, nurses, social workers and preK and elementary educators can reduce fragmentation in the delivery of effective early childhood education, a small but powerful step toward a better quality of life for young children.

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