

The Link between Early Learning and Care and School Readiness

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The positive relation between child care quality and virtually every facet of children's development is one of the most consistent findings in developmental science."

J. Shonkoff and D. Phillips¹

Quality child care and early education experiences are essential to help young children enter school ready to succeed. Children who participate in high quality early childhood education programs learn better and are more successful in school.

BRAIN DEVELOPMENT: The early years are learning years

Studies in neurobiology, neurodevelopment, and early intervention show that the years birth to 5 are critically important for brain development.²

During these early years, children develop the essential language and cognitive skills required to learn, develop their ability to manage emotions and stress, and learn to cooperate with others.

- The first five years of life are a time of enormous social, emotional, physical, and intellectual growth. The human brain develops more rapidly during this time than at any other subsequent period.³ The pace of this growth depends on whether the child's eagerness to learn is stimulated by their environment.⁴
- A child's ability to pay attention, stay focused, and follow directions emerges in the early years; structured early learning fosters these abilities for later success in school and life. ⁵ A safe, caring, and nurturing environment boosts a child's chance for future success.

READINESS TO LEARN: Too many children don't enter school ready to learn 40% of kindergartners are not ready for school

Each year, millions of children enter a new kindergarten classroom. Schools are expected to respond to a wide diversity in children's backgrounds and educational needs, furnish all children with appropriate activities and instruction, and get each child off to a good start in school. It is one of eight national education goals that all children in America start school ready to learn, but national studies estimate that more than forty percent of America's new kindergartners are not fully prepared or "ready" for school. Kindergarten teachers report that at least half of their children have specific problems with entry into kindergarten, including difficulty in following directions, lack of academic skills, and/or difficulty working independently.

Because children's readiness to learn is strongly predictive of future academic performance, children who enter kindergarten behind their peers are unlikely to ever catch up. Therefore, implementing a high quality early learning program is a key strategy for closing the achievement gap.

SUCCESS IN SCHOOL: Quality early education prepares children for success in school Success in school leads to success in life.

Research has found that upon starting kindergarten, children who completed preschool programs were significantly more advanced in key areas of development—language and literacy, creativity, music and movement, initiative, and social skills. They are more eager to learn and try new things, and they get along better with their classmates.⁹

Kindergarten teachers report that children who attended preschool or pre-kindergarten programs are significantly more ready for school than their classmates who did not. While this difference holds true for children across family income levels, ethnicity, and educational attainment, participation in preschool disproportionately benefits low-income children.¹⁰

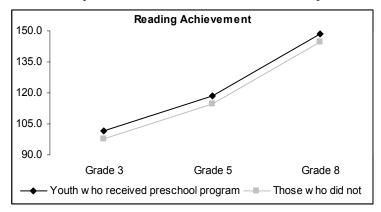
Ability to learn:

Children's academic success is directly linked to high quality preschool programs

- They are more likely to score higher in school-readiness tests, such as the National Assessment of Educational Progress.¹¹
- They are more likely to have better language skills. For example, children in Head Start who do not speak

English as their primary language show gains in school readiness in their knowledge of English by the end of the Head Start year. 12

- They are more likely to be better prepared academically, especially in the areas of verbal and arithmetic skills ¹³
- Reading achievement scores were consistently higher for children in early childhood education programs. These effects remained large from primary school through age 21.¹⁴ Mathematics achievement also showed a similar pattern.



Social and emotional skills

In addition to the necessary core cognitive capabilities, a child's ability to handle emotions and work with others provides a foundation for learning in the classroom. Children who attend preschool benefit in these ways:

- They are more interested in school and more motivated to learn.¹⁵
- They are eager to complete assignments.
- They are eager to attend school and have good attendance. ¹⁶
- They have social skills.

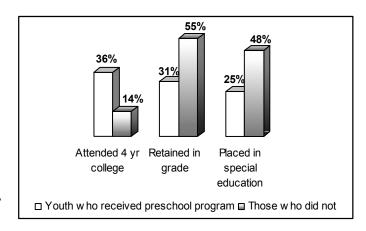
Their ability to work well with others, both their peers and their teachers, is grounded in their preschool experience and is evident throughout the elementary, middle, and high school years. 17, 18, 19

Long-term academic success

In addition to the short-term benefits, children from quality preschool and early learning settings have been shown to realize sizable and enduring achievements in the long term.

- They have higher high school graduation rates,
- They are more than twice as likely to attend a four-year college,
- They are less likely to require remedial education or be held back a grade.²⁰

The results shown here are from the Carolina Abecedarian Project and have recently been validated by a longitudinal study in Chicago which showed similar conclusions.²¹



AN EXCELLENT RETURN ON INVESTMENT: Quality early childhood education is an investment that pays off

For every \$1 dollar spent on early learning, society saves \$7 in later costs.

Research has shown that when children are better educated, they are more productive as adults, likely to be healthier, pay more taxes, and are less likely to require welfare and other public assistance.²² Findings from the High/Scope Perry Preschool Project, as well as other research studies have concluded that for every dollar invested in a high-quality early childhood program for children, the direct and indirect economic benefits to the public total approximately \$7.16.²³ For school systems, the report specifically noted that a \$1 investment in preschool leads to \$0.73 in reduced costs for remedial and special education.

In 1994, Congress enacted the Educate America Act, with the first goal being: "All children shall enter school ready to learn." The 107th Congress introduced the Foundations for Learning Act, aimed at reducing the risk of early school failure. And in April of 2002, President Bush announced a new early childhood initiative to strengthen early learning in young children. These powerful and ambitious goals provide the impetus to move forward and make further investments in high quality early childhood education programs to help children succeed in school and life.

Endnotes

¹ Shonkoff, J. & Phillips, D. (2001). From neurons to neighborhoods: The science of early childhood development. Washington, D. C.: National Academy Press. www.nap.edu/books/0309069882/html/

² Shonkoff, (2000)

³ Shonkoff, (2000)

⁴ Bowman, B, Donovan, MS, Burns, MS (2000) *Eager to Learn*. National Research Council. Washington, D.C.: National Academy Press. www.nap.edu/books/0309068363/html/

⁵ Bowman, (2000)

⁶ Kauffman Early Education Exchange (2002) Set for Success: Building a strong foundation for school readiness based on the social-emotional development of young children. Vol. 1, Num. 1. The Ewing Marion Kauffman Foundation. www.emkf.org/pdf/eex_brochure.pdf ⁷ E. Rimm-Kaufman, R.C. Pianta, and M.J. Cox, Early Childhood Research Quarterly, Vol.15, No.2, 2000 cited in Early Education Clearinghouse. Kindergarten Teachers Perceive Difficulty in Transitions to School. Facts in Action, Nov.2000 Associated Day Care Services. Available online at http://www.factsinaction.org/brief/brnov001.htm.

Lee, VE, Burkam, DT. (2002) *Inequality at the Starting Gate: Social background differences in achievement as children begin school.* University of Michigan. Economic Policy Institute. www.epinet.org

¹⁰ ES Peisner-Feinberg, et al. (June 1999). *The Children of the Cost, Quality, and Outcomes Study Go to School.* Chapel Hill, NC: University of North Carolina. www.fpg.unc.edu/~NCEDL/PAGES/cq.htm.

Robin Peth-Pierce. (1998). NICHD Study of Early Child Care. Washington, DC: National Institute of Child Health and Human Development. www.nichd.nih.gov/publications/pubs/early_child_care.htm

¹¹ Peisner-Feinberg, (June 1999)

Karoly, L, et al. (1998) Investing in our children: what we know and don't know about the costs and benefits of early childhood interventions. RAND. www.rand.org/publications/MR/MR898/

¹² Administration for Children and Families. (2001) *Head Start FACES: Longitudinal Findings on Program Performance: Third Progress Report*, U.S. Department of Health and Human Services. www.acf.hhs.gov/programs/core/pubs_reports/faces/PMC3rdReport.pdf.

¹³ Vecchiotti, S. (2001). *Kindergarten: The Overlooked School Year*. The Foundation for Child Development. www.ffcd.org
Xiang, (2002)

¹⁴ Reynolds, AJ, Wolfe, B. (1997) *School achievement, early intervention, and special education: New evidence from the Chicago Longitudinal Study*. Institute for Research on Poverty, University of Wisconsin–Madison. http://worldbank.org/children/why/18.htm Campbell FA, Ramey CT. (1999) *Early Learning, Later Success - The Abecedarian Study*. Frank Porter Graham Child Development Center www.fpg.unc.edu/~abc/index.htm

¹⁵Beruta-Clement, J., Barnett, W., Schweinhart, L., Epstein, A., & Wiekart, D. (1984). *Changed lives: The effects of the Perry Preschool Project on youths through age 19.* Ypsilanti, MI: Monographs of the High/Scope Educational Research Foundation, No. 8. www.highscope.org/Research/PerryProject/perrymain.htm.

Lally, J.R., Mangione, P.L., & Honig, A.S. (1988). "The Syracuse University Family Development Research Program: Long-range impact of an early intervention with low-income children and their families." In D.R. Powell (Ed.), *Parent education in early intervention: Emerging directions in theory, research, and practice.* Norwood, NJ: Ablex.

McKey, R.H., Condelli, L., Ganson, H., Barrett, B.J., McConkey, C., & Plantz, M.C. (1985). *The impact of Head Start on children, families, and communities. Final report of the Head Start Evaluation, Synthesis, and Utilization Project.* Washington, DC: CSR Inc. for the Head Start Bureau, Administration for Children, Youth and Families, U.S. Dept. of Health and Human Services.

16 Barrueta-Clement (1984)

¹⁷Phillips, (1987

Whitebrook, M., Howes, C., & Phillips, D.A. (1989). Who cares? Child care teachers and the quality of care in America. Executive summary of the National Child Care Staffing Study. Oakland, CA: Child Care Employee Project.

¹⁸Howes, C. (1990). "Can the age of entry into child care and the quality of child care predict adjustment in kindergarten?" *Developmental Psychology*, 26(2), 292-303.

McKey, (1985)

Vandell, D.L., Henderson, V.K., & Wilson, K.S. (1988). "A longitudinal study of children with day care experiences of varying quality." *Child Development*, 59, 1286-1292.

¹⁹Berrueta-Clement, (1984)

²⁰Barnett, S.W. (1995) Long-Term Effects of Early Childhood Programs on Cognitive and School Outcomes. The Future of Children, Vol. 5:3, www.futureofchildren.org/information2826/information_show.htm?doc_id=77669
Xiant. (2002)

²¹Reynolds, A.J. et al (2001) Long-Term Effects of an Early Childhood Intervention on Educational Achievement and Juvenile Arrest: A 15-Year Follow-Up of Low-income Children in Public Schools. *JAMA*. http://jama.ama-assn.org/issues/v285n18/abs/joc01444.html ²²Committee for Economic Development. (2002) *Preschool for All: Investing in a Productive and Just Society*. Statement by the Research and Policy Committee of the Committee for Economic Development.

²³Barnett, W.S. (1996). *Lives in the balance: Age-27 benefit-cost analysis of the High/Scope Perry Preschool Program* (Monographs of the High/Scope Educational Research Foundation, 11). Ypsilanti, MNI: High/Scope Press. www.highscope.org/Research/Perry Project/perrymain.htm

⁸ Shonkoff, (2000)

⁹ Xiang, Z, Schweinhart, LJ. (2002) *Effects Five Years Later: The Michigan School Readiness Program Evaluation Through Age 10*. Prepared For the Michigan State Board of Education. High/Scope Educational Research Foundation. www.highscope.org/Research/MsrpEvaluation/msrp-Age10-2.pdf