

Investing in Early Childhood: The Path to a More Prosperous South Carolina



INSTITUTE *for* CHILD SUCCESS

(the challenge)

Children in the United States are struggling. In 2011, roughly two-thirds of fourth and eighth grade public school children lacked proficiency in math and reading, and only one-third of students had at least proficient science knowledge.¹ When comparing the United States' scholastic achievement with the other 33 countries in the Organisation for Economic Co-operation and Development (OECD), American 15-year-olds had average scores in the science and reading rankings and ranked below average in math.²

Regrettably, the welfare of children in South Carolina is even more precarious. On a recent national survey of child well-being, The Annie E. Casey Foundation's Kids Count, South Carolina ranked 43rd among the states in child well-being, and more specifically, it failed to achieve consistent improvements in economic, family and community well-being.³ Furthermore, children in South Carolina have even lower levels of reading and math proficiency than the average fourth and eighth graders in the United States.⁴ When looking at standardized test achievement for at-risk fourth and eighth graders, South Carolina ranked 50th in the nation.⁵ The implications of this low level of academic achievement are reflected in the state's graduation rate. In 2009, 75.5% of public high school students in the United States received regular diplomas, compared to a graduation rate of 66% in South Carolina.⁶

However, the challenges South Carolina's children face extend well beyond the academic realm, and it may be best to discuss the well-being of children within a comprehensive framework encompassing health, safety, and educational components. For instance, since 2006, there has been a steady decrease in the number of young children receiving all recommended immunizations, a proven way to prevent the spread of disease. Simultaneously, budget restrictions cut the

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1 National Center for Education Statistics [NCES], 2011a; NCES, 2011b; NCES, 2011c

2 Organisation for Economic Co-operation and Development [OECD], 2011

3 The Annie E. Casey Foundation, 2012. This ranking encompasses economic, educational, health, and family and community well-being.

4 NCES, 2011a; NCES, 2011b

5 South Carolina Education Oversight Committee [EOC], 2012. This included all states and the District of Columbia; it measured reading and math performance.

6 NCES, 2012. Graduation rate is four-year graduation rate

Regrettably, the welfare of children in South Carolina is even more precarious. On a recent national survey of child well-being, The Annie E. Casey Foundation's Kids Count, South Carolina ranked 43rd among the states in child well-being, and more specifically, it failed to achieve consistent improvements in economic, family and community well-being.¹ Furthermore, children in South Carolina have even lower levels of reading and math proficiency than the average fourth and eighth graders in the United States.²

1 The Annie E. Casey Foundation, 2012. This ranking encompasses economic, educational, health, and family and community well-being.

2 NCES, 2011a; NCES, 2011b

number of South Carolina children receiving mental health treatment.⁷ Regarding children with developmental delays or disabilities, the Legislative Audit Council found in its 2011 audit of BabyNet⁸ that funding decentralization and other challenges are such that “. . . South Carolina may not be adequately ensuring that eligible children receive early intervention services or that they receive services early enough.”⁹

(why it matters)

South Carolina’s future is inextricably tied to how well we work to foster the health, well-being, and education of the next generation of South Carolinians. In addition to its ethical and social arguments, investing in children is also important for South Carolina’s future prosperity.

When we fully attend to the domains of healthy childhood development, we can expect to see children grow up to be productive workers, responsible citizens and parents, and fully participating members of our society. However, when we fail to attend to the developmental domains of our children, all South Carolinians pay an excessive price: a diminished, insecure, and less prosperous society.¹⁰

“South Carolina’s future is inextricably tied to how we work to foster the health, well-being, and education of the next generation of South Carolinians.”

(birth to age five: the key investment window)

Investing in the social, emotional, cognitive, and healthy development of children from birth to age five is where the greatest impact can be made toward improving the well-being of our children and creating a more prosperous South Carolina.

Children’s brains are shaped by their early experiences. The environments and activities in which young children engage help fashion the neural connections—synapses—that enable them to obtain new knowledge and skills. These early connections form the foundation for future learning and success and are rapidly being assembled from a very young age.¹¹ For example, children’s ability to distinguish between different sounds is formed by their first birthday.¹² Moreover, a longitudinal study comparing language development between children raised in low-, middle-, and high-income environments found that their early home environments not only influenced the number of vocabulary words they knew by the age of three, but also their language achievement at nine and ten years old.¹³

Upon examining the science behind early childhood development, it is not surprising that high-quality pre-kindergarten programs have been shown to positively impact not only the development of all children, but especially those who are considered at risk due to their socioeconomic status.¹⁴ Children participating in such programs have significantly higher math, reading, and literacy skills. Depending on the program, they were between 26% and

7 South Carolina Joint Citizens and Legislative Committee on Children, 2012

8 BabyNet is South Carolina’s system of early intervention services for children with developmental delays.

9 Legislative Audit Council, 2011. Since that report was published, South Carolina First Steps for School Readiness has become the lead agent for BabyNet, and this may not reflect the current institutional reality (D. Wuori, personal communication, October 22, 2012). Dan Wuori is the Chief Program Officer for South Carolina First Steps to School Readiness.

10 Partnership for America’s Economic Success, 2011; ReadyNation, 2011

11 Center on the Developing Child, 2007

12 Kuhl, Conboy, Padden, Nelson, & Pruitt, 2005

13 Hart & Risley, 1995

14 Institute for a Competitive Workforce, 2010



“In order to ensure that South Carolina’s children, parents, taxpayers, businesses, and other stakeholders acquire the greatest benefit from high-quality early childhood programs, it is imperative that the state focus on continually improving the *access, accountability, and quality* of such programs.”

almost 50% less likely to be placed in special education classes and were 33% less likely to undergo grade repetition before high school.¹⁵ Beyond high school, children who participated in high-quality pre-kindergarten were almost three times as likely to have attended a four-year college as those who did not.¹⁶ Such pre-kindergarten programs also have positive effects outside the academic arena. Their participants had fewer emotional problems and felony arrests and were significantly less likely to be teenage parents.¹⁷

South Carolina’s early childhood education system, which offers some assistance to children under the age of four with developmental difficulties and provides some home visits for at-risk preschool children,¹⁸ primarily provides pre-kindergarten services for at-risk four-year-olds.¹⁹ Two of South Carolina’s cardinal programs, the Half-Day Child Development Program (4K) and the Child Development Education Pilot Program (CDEPP), are both built upon comprehensive research-based standards, have teachers who have undergone specialized training, and have restricted class sizes with reasonable staff-child ratios.²⁰

(achieving greater returns)

In order to ensure that South Carolina’s children, parents, taxpayers, businesses, and other stakeholders acquire the greatest benefit from high-quality early

15 Wat, 2007; Wat, 2010

16 Campbell, Ramey, Pungello, Sparling, & Miller-Johnson, 2002

17 Campbell et al., 2002; Schweinhart & Weikart, 1997

18 National Institute for Early Education Research [NIEER], 2011. When looking at eligibility for early childhood programs in South Carolina, risk factors include child history of low family income, low parent education level, teen parent, homelessness, or foster care.

19 South Carolina Department of Education, 2003. Under the 4K Program, districts have the option of serving three-year-old children who are identified as having significant readiness deficiencies.

20 NIEER, 2011; South Carolina First Steps to School Readiness [First Steps], 2011

childhood programs, it is imperative that the state focus on continually improving the *access*, *accountability*, and *quality* of such programs.

Access:

Disparities in children's cognitive and social abilities, which can vary significantly by socioeconomic status and other environmental influences, can develop by the time children enter kindergarten and will continue to expand with age. However, early interventions such as high-quality pre-kindergarten programs can lessen this ability gap, laying the foundation for children's future success.²¹

*Examples of existing early interventions for South Carolina's children include:*²²

- Head Start is a federally funded program that promotes the school readiness of children ages birth to five from low-income families. The program aims to enhance the cognitive, social, and emotional development of participating children. Head Start programs exist in every county in South Carolina. Although the federal government funds local agencies providing Head Start services, a Head Start Collaboration Office is located at the South Carolina Department of Social Services.²³ In fiscal year 2010, 12,195 children were enrolled in Head Start programs in South Carolina.²⁴
- The Children's Hospital of the Greenville Hospital System University Medical Center, the South Carolina Department of Health and Environmental Control's (DHEC) Early Childhood Comprehensive System, and the United Way Association of South Carolina launched the Help Me Grow system in the summer of 2012. This system aims to build collaboration across sectors, including child health care, early care and education, and family support. Help Me Grow promotes early detection and connection to services for children with developmental or behavioral challenges. Through physician and community outreach and centralized information and referral centers, families are linked with community programs and services. The Help Me Grow centralized telephone access point for connecting families to services and care coordination became operational in September 2012 and will initially support families in Greenville and Pickens Counties.²⁵
- South Carolina has several home visiting programs. The Children's Trust of South Carolina is the state's lead agency for the Maternal, Infant, and Early Childhood Home Visiting (MIEC HV) program. MIEC HV is administered by the U.S. Department of Health and Human Services, Health Resources and Services Administration's (HRSA) Maternal and Child Health Bureau in collaboration with the Administration for Children and Families (ACF).²⁶ The Children's Trust allocated \$673,000 to the Nurse-Family Partnership in fiscal year 2010. The Nurse-Family Partnership (NFP) is a community

21 Heckman, 2008

22 Examples are provided for informational purposes only and are not meant to be an exhaustive listing of all early childhood interventions taking place throughout South Carolina. In listing these examples, the Institute for Child Success makes no judgment regarding intervention outcomes, model fidelity, or administration.

23 South Carolina Department of Social Services, Division of Child Care Services [DSS], 2008

24 Head Start, 2011

25 Help Me Grow National Center, 2011; South Carolina Department of Health and Environmental Control [DHEC], accessed on November 4, 2012; United Way Association of South Carolina, accessed on October 28, 2012

26 The Children's Trust of South Carolina, accessed on November 4, 2012



health program providing nurse home visits to low-income, first-time mothers through pregnancy and their child's first two years. NFP has served over 1,160 families in South Carolina since 2008 and currently operates in 19 counties.^{27,28} Other home visiting models in South Carolina include Healthy Families America (HFA), Parent Child Home Program (PCHP), and Parents as Teachers (PAT).²⁹ Additionally, South Carolina spent an estimated \$6,232,000 in fiscal year 2010 from state general funds on home visiting programs through South Carolina First Steps to School Readiness.³⁰

Since the establishment of the 4K Program in 1984, South Carolina has provided state-funded pre-kindergarten education for some at-risk four-year-olds. In 2006, in response to *Abbeville County School District, et al v. South Carolina*, the state expanded its early education program with the initiation of CDEPP. CDEPP offers full-day 4K to at-risk children who live in the 37 plaintiff counties.³¹ South Carolina also funds an extended day five-year-old kindergarten that was fully implemented in the 1998-1999 school year.³²

27 Nurse-Family Partnership [NFP], 2012a; NFP, 2012b; Pew Center on the States, 2011. NFP currently serves Abbeville, Anderson, Berkeley, Charleston, Colleton, Dorchester, Edgefield, Georgetown, Greenville, Greenwood, Horry, Lexington, McCormick, Pickens, Richland, Saluda, Spartanburg, Union, and Williamsburg Counties.

28 C. Bishop, personal communication, October 17, 2012. Chris Bishop is the Regional Program Director at the National Service Office for Nurse-Family Partnership.

29 Hale, Shull, Maletic, Wilson, & Kraeff, 2010

30 Pew Center on the States, 2011

31 *Abbeville County Sch. Dist. v. State*, 1999; NIEER, 2011. The plaintiff districts are Abbeville County School District, Allendale County School District, Bamberg County School Districts 1 and 2, Barnwell County School Districts 19, 29, and 45, Berkeley County School District, Chesterfield County School District, Clarendon County School Districts 1, 2, and 3, Dillon County School Districts 1, 2, and 3, Florence County School Districts 1, 2, 3, 4, and 5, Hampton County School Districts 1 and 2, Jasper County School District, Laurens County School Districts 55 and 56, Lee County School District, Lexington County School District 4, Marion County School Districts 1, 2, and 7, Marlboro County School District, McCormick County School District, Orangeburg County School Districts 3, 4, and 5, Saluda County School District, and Williamsburg County School District (First Steps, accessed on October 28, 2012).

32 South Carolina Legislature, accessed on November 4, 2012

South Carolina's state-funded preschool education has continued to expand since 2002, when one percent of three-year-olds and 29% of four-year-olds were enrolled in these programs. Last year, four percent of three-year-olds and 41% of four-year-olds were enrolled in state-funded pre-kindergarten programs. However, while enrollment has increased over the years, the state has continually cut funding to pre-kindergarten programs. In 2002, South Carolina spent \$2,092 per child enrolled, but spent \$1,342 in 2011. Consequently, even though the state is 15th and 11th in the nation in three-year-old and four-year-old access to pre-kindergarten rankings, respectively, it is 39th in the nation in state-provided resource rankings.³³

Quality:

The trend of declining state funding threatens one of the most predictive factors of an early childhood development program's success—quality. For instance, research has shown that pre-kindergarten programs with established early learning standards, well-trained and well-educated teachers, and small class sizes are the most effective programs and provide the most benefit to children and society.³⁴

*Examples of efforts to enhance and assess quality in early childhood programs in South Carolina include:*³⁵

- The ABC Child Care Quality Improvement System (ABC QIS), administered by the Child Care Services Division of South Carolina's Department of Social Services (DSS), is South Carolina's system to encourage and reward quality performance by child care programs through established quality standards, regular on-site assessments, feedback for quality improvement, technical assistance, and professional development opportunities. A total of 2,008 child care programs (centers, family, and group homes) statewide participate in the ABC QIS. Child care programs are recognized for five levels of quality performance (A+, A, B+, B, and C):
 - Levels A+ and A: providers meeting the highest state standards measured by performance on a national research-based assessment tool
 - Levels B+ and B: providers meeting voluntary state standards above licensing requirements measured by performance on a state-developed assessment tool
 - Level C: providers meeting basic health and safety requirements (licensed or legally exempt from licensing requirements).³⁶
- The National Institute for Early Education Research (2011) ranks each state's preschool programs on ten quality benchmarks every year. South Carolina's 4K Program achieved six of these benchmarks in 2011, and CDEPP accomplished seven of the ten. Unfortunately, both of these programs failed to meet one particular benchmark: regular site visits by the state to monitor program quality. Accurate assessment of a program's policy implementation and effectiveness is

33 NIEER, 2011

34 NIEER, 2011

35 Examples are provided for informational purposes only and are not meant to be inclusive of all early childhood quality initiatives taking place in South Carolina. In listing these examples, the Institute for Child Success makes no judgment regarding program outcomes, model fidelity, or administration.

36 L. Bolick, personal communication, October 18, 2012. Leigh Bolick is the Director of Child Care Services for the South Carolina DSS.

difficult without this on-site monitoring.³⁷

- In partnership with the Mary Black Foundation, Spartanburg County First Steps is implementing a pilot Quality Rating Improvement System (QRIS) in Spartanburg County. Quality Counts is designed to assess, improve, and communicate the level of quality in early childhood programs. Forty percent of the licensed and registered child development centers in Spartanburg County applied for participation in the 18-month pilot. Currently, 22 centers are enrolled in the voluntary pilot program scheduled to end in June 2013. Participating centers are assessed according to program standards and receive an initial star rating. The centers then receive ongoing technical assistance, quality improvement grants, and training designed to support the program's quality improvement goals. It is expected that quality improvements will promote professional development and create developmentally appropriate learning environments to enhance children's

Accountability:

Improved communication and data collection are tools which can be used to increase the effectiveness and efficiency of early childhood programs.

Examples of existing and past mechanisms used in South Carolina to promote early childhood program communication and data collection include:³⁸

- Through a grant from the U.S. Department of Health and Human Services, South Carolina's Early Childhood Comprehensive Systems (ECCS), housed at DHEC, seeks to build and integrate early childhood service systems that better meet the needs of children and families.³⁹ The ECCS leadership team, comprised of individuals representing health, education, and social sector public and private organizations, meets regularly and produced a comprehensive implementation plan in 2009, which is updated annually.⁴⁰ The system's five key components include:

Medical homes and health care,

Mental health and social-emotional development,

Early care and education,

Family support, and

Parenting education.⁴¹

- The South Carolina Education Oversight Committee (EOC), an independent, nonpartisan group entrusted with establishing the state's education accountability system, received funds between 2007 and 2010 to have an external agency evaluate CDEPP's short- and long-term effects.⁴²

- First Steps, South Carolina's school readiness agency dedicated to providing and expanding programs that prepare children for school (e.g., Nurse-Family Partnership, Parents as Teachers, Countdown to Kindergarten, BabyNet, and private 4K expansion), undergoes an external

37 NIEER, 2011

38 Examples are provided for informational purposes only and are not meant to be inclusive of all early childhood accountability, communication, and data collection initiatives taking place in South Carolina. In listing these examples, the Institute for Child Success makes no judgment regarding initiative outcomes, model fidelity, or administration.

39 DHEC, accessed on October 28, 2012a

40 DHEC, accessed on October 28, 2012b; R. Wilson, personal communication, September 10, 2012. Rosemary Wilson is the South Carolina ECCS Grant Coordinator.

41 DHEC, accessed on October 28, 2012 c

42 EOC, 2010

evaluation of its programs every three years.⁴³

- Since 2010, the First Steps Board of Trustees has acted as our state's Early Childhood Advisory Council (ECAC) in order to strengthen linkages between Head Start and other early childhood programs serving children from birth to school entry.⁴⁴ Thus far, the ECAC has commissioned research related to school readiness indicators and the influence of professional development on early childhood program quality.⁴⁵

Note: Unlike CDEPP, South Carolina's overall 4K Program does not undergo a specific assessment, and all assessment measures are determined locally. The state has not determined the frequency at which this program should be assessed.⁴⁶

(greater investments → greater returns)

High-quality early childhood programs, such as pre-kindergarten, home visits, and preventive health care have been shown to consistently provide both short- and long-term benefits, not only for participating children, but also for the local and state economies.⁴⁷

Economist Ryan Lynch determined that a targeted preschool program serving all three- and four-year-olds from families in the lowest one-fourth of the income distribution would have cost South Carolina \$141 million in 2008. However, due to this type of program's positive impact on government budgets, its participating families, and crime rates, it would pay for itself within seven years of complete implementation. When looking solely at budget benefits, this program would pay for itself within a decade of being fully-established. Lynch then calculated that by 2050 this targeted program would:

Generate total benefits of \$4 billion, yield a benefit-cost ratio of 9.8 to one, and allow South Carolina workers to realize a total increase in wages and benefits of 2 billion and generate \$943 million in savings to individuals from crime reduction.⁴⁸



43 First Steps, 2011

44 First Steps, 2011

45 South Carolina Early Childhood Advisory Council (ECAC), 2011a; ECAC, 2011b

46 Ackerman & Coley, 2012

47 Wat, 2010

48 Lynch, 2007

Other examples of returns on early childhood investments include:

Healthy Infants:

Even though they were at a higher risk, babies born to mothers participating in the Nurse-Family Partnership program were more likely to be born at a healthy body weight than the average child in South Carolina.⁴⁹ Considering that it costs over \$14,000 more to care for low-birth-weight infants in the hospital, reducing this number could save South Carolina's hospitals thousands of dollars.⁵⁰

Healthy Young Children:

“When looking solely at budget benefits, this program would pay for itself within a decade of being fully-established.”

By reducing the number of hospital visits, preventive efforts to address asthma in early childhood have been found to return \$1.46 for each dollar invested. This also led to a 41% reduction in missed school days and a 50% reduction in parents missing work due to an ill child. Similarly, children without adequate dental care are likely to miss two or more days of school per year. Preventive dental care programs decrease absenteeism contributing to the achievement gap.⁵¹

Kindergarten Readiness:

Attendance at one of South Carolina's 4K programs predicted significant improvement in the development of children's language and literacy skills above those who did not participate in the state-funded program. In particular, children from lower income families experienced the most gains in their understanding of print concepts, exemplifying how at-risk children can benefit the most from early education.⁵²

The most recent study comparing the academic data of former CDEPP students with children who did not attend this program showed that attendance in the First Steps' funded program predicted significantly better math achievement upon entry into kindergarten.⁵³

High School Graduation Rates:

High-quality preschool programs have been associated with increased graduation rates, which can boost South Carolina's economy.⁵⁴ One study demonstrated that if the state can prevent 1,000 students from dropping out each year, these new graduates could:

Earn a total of \$11 million in additional income each year.

Spend an extra \$1.1 million each year on vehicles and buy homes worth \$23 million more by the time they are middle-aged adults.

49 NFP, 2012; South Carolina Budget and Control Board, 2009

50 Russell et al., 2007

51 ReadyNation, 2011

52 Lamy, Barnett, & Jung, 2005

53 Browning & Xiang, 2010

54 Barnett, 2008

Support 60 new jobs in South Carolina and increase the state's gross state product by \$12 million.⁵⁵

Impact of High Quality Preschool Programs on Graduation Rates⁵⁶

More Postsecondary Degrees:

HS Graduation



Four Year College



■ Program Group ■ No-program Group

According to one private foundation, 60% of America's workforce will need a postsecondary degree by 2025 in order to stay competitive in a global economy. In 2008, only 34% of South Carolina's working-age adults (between the ages of 25 and 64 years old) held such a degree, and it was projected that 45.6% of the state's population would hold these degrees by 2025.⁵⁷ Generating the 7.3% annual increase (4,553 additional degrees annually) in South Carolina's production of associate and bachelor's degrees needed to reach the 2025 goal is a challenge that can be aided by investments in early childhood education.⁵⁸

Returns over a Lifetime:

ReadyNation, a national business partnership for early childhood and economic success, reports that a per-child investment of \$6,692 in quality pre-kindergarten for disadvantaged children can yield a lifetime societal return of \$67,937, more than a 10:1 return on investment.



55 Alliance for Excellent Education, 2011
56 Adapted from Barnett & Masse, 2007; Campbell et al., 2002
57 Lumina Foundation, 2010
58 Campbell et al., 2002; Lumina Foundation, 2010

ReadyNation also reports that over time, the highest quality nurse home visitation programs return \$5.70 for every dollar spent through increased employment, less welfare dependency, and decreased criminal justice and mental health care costs.

(moving forward)

We now know that the earliest years of life are vitally important, because early experiences affect the developing brain's architecture. As the brain grows, the quality of its architecture establishes either a sturdy or fragile foundation for all the development, learning, and behavior that follows. Therefore, getting this right at the beginning of life is much easier, and less expensive, than having to fix it later.

Overcoming current challenges and increasing the well-being of South Carolina's youngest citizens is an effort that transcends the disciplines of health, education, and safety. Thus, solutions will come from a concerted effort involving both the public and private sectors and include individuals and institutions involved in business, academia, health care, government, philanthropy, law enforcement, and education.

The Institute for Child Success (ICS) recognizes that the most effective way to improve the success of children is not one child at a time, but by improving the systems that advance the health and education of our children. Our goal is to foster a culture that facilitates and promotes the success of all children in South Carolina.

We invite you to join us and to learn more by visiting

www.instituteforchildsuccess.org

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Additional references can be found online at our website.

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