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# South Carolina Childcare Initiatives

Supported by research evidence



UNIVERSITY OF  
SOUTH CAROLINA

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This document is a compilation of research and evidence in the field of early childhood education that supports the several child care programs, practices and services offered by the South Carolina's Department of Social Service's Division of Early Care and Education and funded through the Child Care Development Fund (CCDF).

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# South Carolina Childcare Initiatives

## Overview of Early Care and Education Services

The Division of Early Care and Education is the part of the South Carolina Department of Social Services (SCDSS) that manages all state and federal child care programs, and serves as the single point of contact for federal child care dollars in South Carolina. The mission of the division is to make child care more available and affordable to parents, and to increase the quality of care for all children in the state. Collaboration has been the cornerstone of its operations with examples of partnerships through the SC Department of Education (SDE), Head Start, and the SC First Steps to School Readiness so as to maximize resources and assist families in accessing affordable quality child care wrap-around services.

## Data Capacity and Research

The Division of Early Care and Education Services has identified the need for good quality accessible data for strong evidence based decision making in its day-to-day operations and the need to support research to study the impact of these programs on targeted populations. In order to better coordinate data in child care systems in September 2007, the SCDSS received a 3 year grant from the Administration for Children and Families, Office of Planning, Research, and Evaluation to integrate and link child care system data within the SC Integrated Human Services Data Warehouse and to build research capacity to better track the state's children and families who use child care subsidies and other services.

These initial efforts continue with the agency's partnership with the Yvonne and Schuyler Moore Child Development Research Center (CDRC) at the University of South Carolina and the SC Budget and Control Board's Office of Research and Statistics (ORS). Documentation of research and evidence supporting early care and education initiatives in the state is a collaborative effort to offer evidence based services in the state.

## About This Evidence Documentation

The purpose of this document is to present a body of evidence from the field of early childhood education that supports the operation of federally funded child care programs and their impact on intended outcomes. It is the best available evidence at the time of its compilation with special attention to elements in the study that are relevant to the implementation of programs and initiatives in SC.

*“The basic principles of neuroscience and the econometrics of human capital development both suggest that early and effective intervention for the most vulnerable children will generate the greatest financial payback.*

*Scientific evidence about how brains develop makes it very clear that neural circuits are shaped by time-specific experiences, and that the impact of a given experience is influenced by the nature of the circuits that are being formed at that time.”*

National Scientific Council on the Developing Child (2007). The Timing and Quality of Early Experiences Combine to Shape Brain Architecture: Working Paper #5. <http://www.developingchild.net>

## **Selection of Evidence**

Results from studies in early education, child care and early intervention programs are not always consistent in their presentation of findings. This is not surprising given the complexity of data collection efforts in this field, shortage of psychometrically sound instruments for the assessment of child outcomes, difficulties in conducting experimental design studies and the significant multi-disciplinary /multi-agency coordination efforts (e.g. early childhood and k-12) to understand the long-term benefits of the interventions. Additionally, diversity among child care types (center-based/family), dosage and execution of the intervention resulting in heterogeneity of intervention and implementation challenges sound research design principles.

Several entities and articles have addressed research quality based on research design (experimental/quasi-experimental/descriptive) and generalizability of the results (the representativeness of the sample, sample sizes, etc.). Sometimes, the quality of research is judged from the credibility of researchers and/or institutions involved in the study in either funding the study or conducting it. The dramatic effects of the results sometimes overshadow design flaws making them acceptable. Since the primary purpose of this document is to present evidence supporting child care programs and services that are similar to programs operating in South Carolina, the evidence was selected based on the relevance of the program elements in the study to the implementation of these federally funded programs in South Carolina. Every effort has been made to present exemplar research with sound design and strong results that were relevant to the SC early care and education programs.

The number of references for each program has been limited to three citations to focus on the most relevant research. Additionally, each reference is categorized based on a classification criteria used by Forrey et. al. (2013) giving the reader additional information to judge the research evidence.

## **Categories of Research Design and Data\***

A brief overview on study design and evidence:

Experimental studies are considered by many to be the “gold standard” for testing the effects of a change in policy or practice in that the experimental study designs meet the conditions necessary for causal inference (e.g., random assignment of participants to the intervention or control conditions, intervention occurs prior to measurement of outcomes) (Engel & Schutt, 2012).

Quasi-experimental studies include an intervention and a control (or comparison) group, but participants in the study are not randomly assigned to each group. One must be cautious in making causal inferences based on quasi-experimental studies because study participants in the intervention and control groups may differ in systematic and unmeasured ways.

Correlational studies examine whether and to what degree certain variables are associated with one another. In addition to examining simple correlations between variables, correlational studies can include multivariate techniques (e.g., regressions) that examine associations between specific variables while controlling for others. This type of study does not involve the creation of intervention and control groups. Associations detected from correlational studies usually should not be interpreted as causal.

Descriptive studies describe the characteristics, actions, or knowledge of research participants.

Inductive studies are used to develop theories or a better understanding of a phenomenon based on information about the perceptions, attitudes, and experiences of study participants. Inductive research designs tend to rely on qualitative data.

## Types of Data

Survey data can be collected from a nationally representative, state, or local sample. Nationally representative data provide information that is representative of families, children, or child care arrangements in the United States. Sample sizes in nationally representative studies are typically large enough to support sophisticated statistical models, and many nationally representative samples include an oversample of low-income families. However, nationally representative samples are usually not designed to also be representative of specific states or localities. The main drawback of survey data is the questionable accuracy of parent-report on certain measures (e.g., family income and child care subsidy receipt), the use of simple measures of subsidy receipt (e.g., allowing researchers to compare receipt vs. non-receipt only), and consequently the lack of information needed to study associations between individual policies/practices and outcomes (Giannarelli, Adelman, & Schmidt, 2003). The Early Childhood Longitudinal Study-Birth cohort and Early Childhood Longitudinal Study-Kindergarten cohort are two examples of nationally representative studies used in subsidy research. Each of these studies surveyed the parents of a cohort of children longitudinally. The National Survey of Early Care and Education is a forthcoming nationally representative study that will contain useful data for child care subsidy research.

Administrative data, or data collected to administer programs, offers verified measures of program participation (e.g., subsidy receipt) and select demographics (e.g., family income). There are multiple examples of studies in this review that use administrative data. Some of these studies occur in one state, others use data from multiple states. Drawbacks of reliance on administrative data are that these datasets tend to include minimal information regarding child and family characteristics, do not include measures of parents'/providers' attitudes, perceptions, or experiences, and do not allow for comparisons of subsidy users to other low-income families that are not participating in the subsidy program. Some of these drawbacks can be mitigated by linking data with administrative data from other sources (e.g., Supplemental Nutrition Assistance Program) or survey data (e.g., individual-level state employment data).

Qualitative data are captured through open-ended questions and observations of study participants. Qualitative data can be gathered on an individual basis or within groups (e.g., focus groups). Qualitative data can be useful for developing a better understanding of study participants' experiences and perceptions or for identifying vocabulary used by the study population. A drawback of qualitative is that it tends to use small samples and thus the generalizability of findings is sometimes unclear.

*\*Used with the permission of the author*

## Reference

Forry, N. D., Daneri, P., Howarth, G. (2013). Child care subsidy literature review. OPRE Brief 2013-60. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

## Programs Addressed in this Document

- SC Voucher Program (SC's Subsidy Program)
- Child and Adult Care Food Program (CACFP)
- Child Care Licensing Activities
- ABC Child Care Quality Rating and Improvement System (QRIS)
- Professional Development and Education Supports (CCCCD)
- SC Child Care Resource and Referral Network (SC-CCRRN)
- SC Child Care Inclusion Collaborative (SCIC)





# SC Child Care

## EARLY CARE & EDUCATION

### South Carolina Voucher Program (SC's Subsidy Program)

#### **Description**

The SC Voucher Program makes payments to child care providers to care for children from low-income families so that their parents can work or attend school.

#### **Delivery Method**

Child Care vouchers are paid directly to qualified child care providers participating in the state's Quality Rating and Improvement System (QRIS) for child care or to a family, friend, or neighbor selected by parents eligible for vouchers.

#### **Target Population**

TANF and Child Welfare families applying for financial assistance with child care.

#### **Target Outcomes**

Connect parents who are willing to work with quality child care for their children.

#### **SC Presence**

This program is available throughout the state. All eligibility and program implementation takes place through the state office.

#### **Data Collection System and Measurement**

Administrative data for the voucher system is collected and maintained by SCDSS. This data is linked to ABC Quality data indicating the quality levels of the providers who serve the children through child care subsidies.

#### **Research**

Research on child care subsidies has primarily focused on mothers' employment and more recently on parental child care decisions. There is very little research on child outcomes, the impact on the rest of the family and, in a broader context, the community as a whole. The evidence presented addresses some of the research on outcomes.

# Evidence 1: South Carolina Voucher Program

## Source

Tarnai, J., *Impacts of HB3141 on the working connections child care program*. 2011, Social & Economic Sciences Research Center: Pullman, WA. p. 1-81.

## Evidence Type

Quasi-experimental Design

## Data Type

Survey Data

## Program Aspects addressed in the study

Quality child care outcomes

## Brief Findings

A comparison of parents enrolled in Washington's extended child care subsidy and eligible parents who were not enrolled in the program revealed several positive child care and parental outcomes from participation in the subsidy program. Survey results indicated that children on child care subsidy were twice as likely to be using a child care center or a family child care home. Similarly, the selected child care was more likely to be licensed and have a curriculum. Survey data of parents indicated a big impact on the stability of child care for their children.

## Alignment with SC

In South Carolina, 94% of the subsidy children are currently being served in a registered or licensed facility (2014) that is participating in the state's QRIS. Selection of the child care provider for subsidy children is decided by the parent who also has the choice to take the voucher payment to a family, friend or neighbor. In SC, participation in the state's QRIS is one of the requirements to serving subsidy children which promotes quality care.

## Related Research

Johnson, A., Ryan, R. M., & Brooks-Gunn, J. (2012). Child-care subsidies: Do they impact the quality of care children experience? *Child Development*, Advance online publication.



## Evidence 2: South Carolina Voucher Program

### Source

Forry, N. D., Daneri, P., Howarth, G. (2013). Child care subsidy literature review. *OPRE Brief 2013-60*. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

### Evidence Type

Synthesis of Research

### Data Type

Secondary Data

### Program Aspects addressed by the study

Family Outcomes- Employment

### Brief Findings

This literature review is a synthesis of research related to child care subsidies over that last two decades (1988-2013). The review categorizes the literature under outcome measures in the study such as family financial well-being, children's developmental outcomes, parental employment, stability of care, etc. A series of correlational studies associated positive employment outcomes with families that received child care subsidies. A higher probability of employment, shorter transition from welfare to work and length of employment was positively correlated with the receipt of child care subsidy.

### Alignment with SC

Currently, in South Carolina, for families to be eligible for child care subsidy requires their participation in welfare to work program; they must be working or attending school or training. Therefore, almost all the parents receiving subsidized child care are engaged in activities that help them enter or re-enter the workforce.

### Related Research

Ahn, H. (2012). Child care subsidy, child care costs, and employment of low-income single mothers. *Children and Youth Services Review*, 34, 379-387. Baum, C. L. (2002).

Cochi Ficano, C. K., Gennetian, L. A., & Morris, P. A. (2006). Child care subsidies and employment behavior among very low-income populations in three states. *Review of Policy Research*, 23, 681-698.

Danziger, S. K., Ananat, E. O., & Browning, K. G. (2003). *Childcare subsidies and the transition from welfare to work*. (Working paper series #03-11). Ann Arbor, MI: National Poverty Center.

## **Evidence 3: South Carolina Voucher Program**

### **Source**

Forry, N. D., Davis, E. E., & Welti, K. (2013). Ready or not: Associations between participation in subsidized child care arrangements, pre-kindergarten, and Head Start and children's school readiness. *Early Childhood Research Quarterly*, 28, 634-644.

### **Evidence Type**

Quasi-experimental study

### **Data Type**

Administrative Data from three sources

### **Program Aspects addressed by the study**

Subsidy Payment Delivery Method

### **Brief Findings**

This study used three administrative file sources: Maryland Model for School Readiness (MMSR), Maryland's child care subsidy administrative data, and pre-kindergarten enrollment data. The analyses estimated multivariate linear regression models of the probability of being fully ready for school on each domain - personal and social development, language and literacy, and mathematical thinking. The indicator variables used in the model were - type of subsidized child care (center/home-based), enrollment in pre-kindergarten, and Head Start, while controlling for child and family characteristics. The results indicate positive associations between subsidized center-based child care, public pre-kindergarten and children's academic school readiness among a low-income sample. Among children in subsidized care who did not participate in pre-kindergarten, those in subsidized center-based care had a higher likelihood of being categorized as fully ready on assessments of their language/literacy and mathematical skills than children in subsidized home-based care arrangements.

### **Alignment with SC**

In SC, majority of families receiving child care subsidies select center-based child care for their children and pre-kindergarten (CDEPP). The curriculum in both these settings is regulated and monitored. QRIS participation of providers serving subsidy children ensures a quality learning environment for children to promote academic success.

### **Related Research**

Ansari, A., & Winsler, A. (2012). School readiness among low-income, Latino children attending family childcare versus centre-based care. *Early Child Development and Care*, 182(11), 1465-1485.



# SC Child Care

## EARLY CARE & EDUCATION

### Child and Adult Care Food Program (CACFP)

#### **Description**

In South Carolina, the Child and Adult Care Food Program is a key source of support for improving the nutritional quality of meals and snacks served to children and adults in child care. The Child and Adult Care Food Program is a federally funded program that gives meal reimbursements to child care centers and adult day care centers for serving nutritious meals.

#### **Delivery Method**

Reimbursements to child care providers for providing meals to children that meet USDA guidelines

#### **Target Population**

Children who qualify for free meals and snacks

#### **Target Outcomes**

Improve, develop, and maintain healthy diets and eating habits by providing meals that help children grow and develop in a healthy way.

#### **SC Presence**

This program is available throughout the state. Eligibility and monitoring occur from the state office. Local site sponsors throughout the state implement the program.

#### **Data Collection System and Measurement**

Data is collected from the Food System and reported to federal partners annually.

#### **Research**

Several federal programs provide food and nutrition support to children and families to combat food insecurity, which was at an all-time high (15%) in 2008, including the Supplemental Nutrition Assistance Program (SNAP, formerly the Food Stamp Program), National School Lunch Program, Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and the Child and Adult Care Food Program (CACFP).<sup>1</sup> All of these programs are well researched except for CACFP.

Data collection on this topic is complicated because CACFP is administered at the child care provider level and parents cannot apply individually, many do not know whether their child participates.

# Evidence 1: Child and Adult Care Food Program

## Source

Gayman, A., Ettinger, S., March, E., Cook, J., Coleman, S., & Frank, D. (2010, January 1). Child Care Feeding Programs Support Young Children's Healthy Development. Retrieved August 20, 2014, from [http://www.childrenshealthwatch.org/upload/resource/cacfp\\_brief\\_jan10.pdf](http://www.childrenshealthwatch.org/upload/resource/cacfp_brief_jan10.pdf)

## Evidence Type

Descriptive

## Data Type

Primary Data – Interviews

## Program Aspects addressed by the study

Child Outcomes

## Brief Findings

This study identified a subset of children who are likely to participate in CACFP based on their age (between 13 months and three years of age), child care subsidy recipients and who are in centers or family child care homes where the meals are supplied by the provider to children meeting the same criteria except the meals were provided from home. The results indicated that children whose meals are supplied at a child care facility were

- 28% less likely to be in fair or poor health
- 26% less likely to be hospitalized
- More likely to have a healthy weight and height for their age

## Alignment with SC

Over 1,300 child and adult care programs in South Carolina participate in CACFP.

## Quote

“The average cost of a hospital stay for children between one and four years of age was \$6,010 in 2006. Increased participation in CACFP could lead to significant cost savings for families and the healthcare system through children's better health and decreased hospitalizations.”

## Related Research

Agency for Healthcare Research and Quality (AHRQ) Healthcare Cost and Utilization Project (HCUPnet) KIDS database

Child Trends Databank. (2014). *Food insecurity*. Available at: <http://www.childtrends.org/?indicators=food-insecurity>

## Evidence 2: Child and Adult Care Food Program

### Source

Gordon, Rachel, Robert Kaestner, Sanders Korenman and Kristin Abner. 2010. "The Child and Adult Care Food Program: Who is served and what are their nutritional outcomes?" NBER Working Paper 16148.

### Evidence Type

Descriptive

### Data Type

Nationally available – Early Childhood Longitudinal Program Birth Cohort (ECLS-B) Dataset

### Program Aspects addressed by the study

Family Outcomes

### Brief Findings

This study used nationally representative data from the ECLS-B to examine access to CACFP, participant characteristics and children's consumption of food, food insecurity and weight. The study concluded that although the program misses a sizable portion of poor children because of parental child care preferences, attending a CACFP-participating center, among lower-income children, is associated with a greater consumption of milk, vegetables, and (to some extent) fruits at four years of age. No difference in the likelihood of being over or under weight among poor children at CACFP participating centers than children at non-participating centers was found. Food insecurity did not differ between poor children attending CACFP-participating and nonparticipating centers.

### Alignment with SC

Over 1,300 child and adult care programs in South Carolina participate in CACFP. In South Carolina, the Child and Adult Care Food Program is a key source of support for improving the nutritional quality of meals and snacks served to children and adults in day care.

### Quote

"...among poor preschoolers in center-based care, participation in the program is correlated with positive outcomes such as increased consumption of milk and vegetables, and healthier weight (BMI)."

### Related Research

Korenman, S., Abner, K. S., Kaestner, R., & Gordon, R. A. (2013). The Child and Adult Care Food Program and the nutrition of preschoolers. *Early Childhood Research Quarterly*, 28(2), 325-336. doi: <http://dx.doi.org/10.1016/j.ecresq.2012.07.007>

Gordon, R. A., Kaestner, R., Korenman, S., & Abner, K. (2011). The Child and Adult Care Food Program: Who Is Served and Why? *Social Service Review*, 85(3), 359-400. doi: 10.1086/662607





# SC Child Care

## EARLY CARE & EDUCATION

### Child Care Licensing Activities

#### Description

In South Carolina, Licensing inspects child care facilities for compliance with laws and regulations, including inspections conducted by Fire and Health Safety Inspectors. Licensing requires state and federal background checks on all staff members who work in regulated child care facilities. This includes checks of the Central Registry for Child Abuse and Neglect and the SLED Sex Offender Database on staff members who work in regulated facilities and family, friend or neighbor providers enrolled in the state's Voucher Program.

#### Delivery Method

With the passing of House Bill H.4665 in 2014, Licensing's annual visits were decreased from two announced visits, annually, to one visit, annually to assist licensed child care providers in meeting all laws and regulations. However, the language in House Bill 4665 added the inspections of 1,300 Registered Family Child Care Homes to the workload of Child Care Licensing. Those unannounced inspections will be phased in throughout the state beginning October 2014. Additionally, Licensing investigates complaints against regulated facilities and those operating without a license or registration.

#### Target Population

Child Care Licensing regulates

- Licensed Centers
- Approved (publicly funded) Centers
- Registered Faith-Based Centers
- Group Child Care Homes
- Licensed Family Child Care Homes
- Registered Family Child Care Homes

#### Target Outcomes

Regulates child care facilities to help providers build healthy, safe environments for children.

## **SC Presence**

This program is available throughout the state. With the passing of House Bill 4665 in 2014, Licensing's annual visits were decreased from two announced visits, annually, to one visit, annually to assist licensed child care providers in meeting all laws and regulations. However, the language in House Bill 4665 added the inspections of 1,300 Registered Family Child Care Homes to the workload of Child Care Licensing. Those unannounced inspections will be phased in throughout the state beginning October 2014. Additionally, Licensing investigates complaints against regulated facilities and those operating without a license or registration.

## **Data Collection System and Measurement**

Data from child care provider visits is collected and deficiencies are reported on the SCDSS websites to help families make an informed choice during child care selection.

## **Research**

Most of the research presented in this section is from a literature review synthesis\* of child care licensing and regulation by Child Care and Early Education Research Connections in 2010. Research in licensing and regulation is closely paired with research on quality because health and safety practices by a child care provider is the foundation of its quality.

*\*Child Care Licensing and Regulation A Key Topic Resource List. (2010, March 1). Retrieved 8/15/2014 from <http://www.researchconnections.org/files/childcare/keytopics/licensing.pdf>*



# Evidence 1: Child Care Licensing Activities

## Source

Fiene (2002). 13 indicators of quality childcare: Research update 2002, US Department of Health and Human Services: Washington, DC.

## Evidence Type

Descriptive

## Data Type

Secondary Research

## Program Aspects addressed by the study

Provider Outcomes

## Brief Findings

The National Resource Center for Health and Safety in Child Care utilized two licensing measurement methodologies to develop a user-friendly, shortened assistance tool (13 indicators) based on an original list of 900 standards. This shortened list of standards has gone through a weighted consensus based on risk factors as well as an indicator methodology that predicts overall compliance with the original list of standards and positive outcomes for children. The 13 quality indicators of child care are a core set of standards that are very good predictors of overall compliance. This research brief indicates that these 13 indicators have statistically predicted overall compliance with regulations in particular states and has a significant relationship between compliance with these indicators and positive outcomes for young children (Fiene, 1994).

## Alignment with SC

Licensing develops child care regulations in partnership with providers and parents. Licensing also helps providers' access technical assistance, services, and grants to keep their license and to improve the quality of care.

## Quote

"The 13 indicators were the following: child abuse reporting and clearances, proper immunizations, staff child ratio and group size, director and teacher qualifications, staff training, supervision/discipline, fire drills, administration of medication, emergency plan/contact, outdoor playground safety, inaccessibility of toxic substances, and hand washing/diapering."

## Related Research

Fiene (1994). *The case for national early care and education standards: Key indicator/predictor state childcare regulations*, National Association of Regulatory Administration, summer 1994, 6-8.

## **Evidence 2: Child Care Licensing Activities**

### **Source**

Clarke-Stewart, K. A., Vandell, D. L., Burchinal, M., O'Brien, M., & McCartney, K. (2002). Do regulable features of child-care homes affect children's development? *Early Childhood Research Quarterly*, 17(1), 52-86.

### **Evidence Type**

Descriptive

### **Data Type**

Primary Data collection

### **Program Aspects addressed by the study**

Provider and Child outcomes – Family Child Care Homes

### **Brief Findings**

Participants for this study were recruited from hospitals located in about 10 cities in the United States. Child care home and child outcome data was collected from 164 children at 15 months, 172 children from 24 months and 146 children at 36 months. Using hierarchical linear modeling (HLM) the researchers assessed the child care quality both in terms of the caregiver's behavior and more global measures of the physical and social environment. Scores from the Observational Record of the Caregiving Environment (ORCE) and CC-HOME were provider outcome measures and Bayley Mental Development Index (MDI) and Child Behavior Checklist-2/3 (CBCL-2/3), Wechsler Preschool and Primary Scale of Intelligence and other age appropriate measures were used for child outcome measures. The study found that compliance with teacher-child ratio was associated with positive caregiving. Also, children who received higher quality care, in emotionally supportive environments did better on tests of language and cognitive development and also were rated as being more cooperative.

### **Alignment with SC**

With the passing of House Bill H.4665 in 2014, Licensing's annual visits were decreased from two announced visits, annually, to one visit, annually to assist licensed child care providers in meeting all laws and regulations. However, the language in House Bill 4665 added the inspections of 1,300 Registered Family Child Care Homes to the workload of Child Care Licensing. Those unannounced inspections will be phased in throughout the state beginning October 2014. Additionally, Licensing investigates complaints against regulated facilities and those operating without a license or registration.

### **Quote**

"Children who received higher quality care, in homes that were more stimulating, with caregivers who were more attentive, responsive, and emotionally supportive, did better on tests of language and cognitive development and also were rated as being more cooperative. These findings make a case for regulating caregivers' education and training and for requiring that child-care homes not exceed the recommended age-weighted group size."

### **Related Research**

Clarke-Stewart, K. A., Gruber, C. P., & Fitzgerald, L. M. (1994). *Children at home and in day care*. Hillsdale, NJ: Erlbaum.

## Evidence 3: Child Care Licensing Activities

### Source

Hestenes, L. L., Kintner-Duffy, V., Wang, Y. C., La Paro, K., Mims, S. U., Crosby, D., Cassidy, D. J. Comparisons among quality measures in child care settings: Understanding the use of multiple measures in North Carolina's QRIS and their links to social-emotional development in preschool children. *Early Childhood Research Quarterly*(0). doi: <http://dx.doi.org/10.1016/j.ecresq.2014.06.003>

### Evidence Type

Descriptive

### Data Type

North Carolina Child Care Data

### Program Aspects addressed by the study

Provider and Child outcomes

### Brief Findings

Ten years after the implementation of North Carolina's QRIS, data was collected on 97 child care centers to examine the best predictors of quality (4 quality measures), impact on children's social-emotional development and distinct characteristics of providers at the various quality levels. Correlation between the quality rating measures (ECERS-E, ECERS-R, CLASS Emotional Support, CLASS Classroom Organization, CLASS Instructional Support, C5 Positive, and C5 Negative) and structural variables (teacher-child ratio and group size) were examined. The study found structural features of the environments such as teacher education (addressed later in this document) and teacher-child ratio were associated with classroom quality and found to be important predictors of quality. Low teacher-child ratios allowed teachers to spend more time supporting children's cognitive and social-emotional needs. There was a positive correlation between social skills scores (Social Skills Improvement system) and CLASS Instructional Support suggesting that more instructional support in the classroom was linked to better social skills in children. This study concluded that the QRIS system in the state demonstrated positive associations with some of children's socio-emotional outcomes and other child outcomes.

### Alignment with SC

ABC Quality (the program that operates the state's QRIS), Licensing and the South Carolina Child Care Resource and Referral Network (SC-CCRRN) work very closely together to help child care centers achieve and maintain adequate teacher-child ratios. Several of the staff in ABC Quality and SC-CCRRN quality coaches are trained in using classroom quality measures to assess, evaluate and train teachers in attending to quality elements within a classroom.

### Quote

"In terms of ratio, better adult-to-child ratios were associated with better scores on ECERS-R ( $r = .41, p < .01$ ), CLASS Emotional Support ( $r = .33, p < .01$ ), CLASS Classroom Organization ( $r = .31, p < .01$ ), CLASS Instructional Support ( $r = .23, p = .02$ ) and C5 Negative ( $r = -.20, p = .04$ ). Finally, group size was correlated positively with ECERS-E ( $r = .24, p = .02$ )."





# SC Child Care

## EARLY CARE & EDUCATION

### ABC Child Care Quality Rating and Improvement System (QRIS)

#### **Description**

ABC Quality defines statewide quality standards for early care and education programs in South Carolina. Programs include centers, family child care homes, and group child care homes.

The system helps programs progress through a multi-level quality system to achieve and maintain higher quality standards through financial incentives, technical assistance and on-site unannounced quality assessments.

#### **Delivery Method**

Monitoring and technical assistance visits assess quality performance. Grants and bonuses are awarded to providers that participate in the QRIS as funding allows.

#### **Target Population**

All legally operating child care providers and children who attend child care

#### **Target Outcomes**

Increase the number of programs achieving higher levels of quality in caring for the children they serve.

#### **SC Presence**

Statewide Presence with statewide consistency for assessments.

#### **Data Collection System and Measurement**

Data are collected electronically at regular on-site reviews by trained assessors and are housed in the ABC Quality review data base. QRIS categories assessed include teacher qualifications and experience; classroom environment; staff-child interaction; activities; health, safety and well-being; administration; staff-parent interaction; group size and adult-child ratios. ABC Quality review results deter-

mine eligibility and payment rates for the South Carolina Voucher System. Federal reporting.

## **Research**

While reviewing the literature on QRIS, one should bear in mind that QRIS is a framework not an intervention. Although the ultimate goal of QRIS is children's academic and social-emotional success, this complex statewide system is still in its infancy, with multiple goals targeted to improve the quality of child care programs. Given the lack of longitudinal data, the lack of a widely accepted preschool instrument that measures learning that can predict a child's future academic success; the research in this topic currently focuses on intermediate goals. These goals include strengthening early and school-age care, education system alignment, finance reform, expanding supply, and helping to increase demand for high-quality programs\*. Research in this area, therefore, often addresses common QRIS categories such as teacher qualifications and experience, classroom environment, family activities, group size and adult-child ratios.

\*QRIS Resource Guide. (2013). Retrieved August 20, 2014, from [http://qrisnetwork.org/sites/all/files/resources/gscobb/2011-12-15 06:10/QRISResourceGuide.pdf](http://qrisnetwork.org/sites/all/files/resources/gscobb/2011-12-15%2006:10/QRISResourceGuide.pdf)

# Evidence 1: ABC Child Care Quality Rating and Improvement System (QRIS)

## Source

Thornburg, K.R., Mayfield, W.A., Hawks, J.S., & Fuger, K.L. (2009). The Missouri Quality Rating System school readiness study. The Mid-America Regional Council's Metropolitan Council on Early Learning.

## Evidence Type

Descriptive

## Data Type

Pre and Post school readiness measures in Missouri

## Program Aspects addressed by the study

Child outcomes

## Brief Findings

This study was conducted in 38 licensed early childhood programs – 32 centers and six family child care homes. These programs were then rated by the researchers as high, medium or low quality based on their star rating (1-5) in the state's QRIS (MOQRIS). Sixteen school readiness assessments that cover vocabulary, early literacy skills, basic knowledge (shapes, colors), math skills, fine and gross motor skills, and social-emotional development were administered as a pre and post measure of school readiness. A comparison of scores among the centers found that children in higher quality programs made greater gains (effect sizes of .80 to .45) in social and emotional development than their peers in lower quality programs which showed a decline in social emotional skills. Results from a sub-sample of children in poverty (based on their eligibility to receive free and reduced lunch) showed similar results in social emotional development in high quality programs but not medium quality programs. Vocabulary scores indicated substantial gains in both high and medium quality programs. In areas of knowledge of letters/sound and gross motor skills, the higher the quality of the program, the greater gains were made by the children.

## Alignment with SC

South Carolina is at the threshold of adopting a statewide definition for school readiness and implementing an assessment aligned to this definition. This venture is underway with support from several statewide groups including the local Trident United Way, United Ways statewide, the Institute for Child Success, The Children's Trust, South Carolina Children's Hospital Collaborative and many more. This will allow SC to better assess the impact of its QRIS efforts and other child care policies and practices. SC participates in the multi-state consortium led by the North Carolina Department of Public Instruction and research partners such as SRI International, Child Trends, and the Build Initiative to develop a Kindergarten Entry Assessment (KEA). Additionally, SC has conducted a horizontal and vertical analysis of the Early Learning Standards to inform the revision of the SC's Infant and Toddler Guidelines and the Good Start Grow Smart South Carolina Early Learning Standards for 3, 4, and 5 year old children.

## Quote

“Given that the results of this study show that some aspects of children's school readiness are *hurt* by low quality programs, it is imperative that all children have the opportunity to attend medium or high quality programs. Children in poverty are particularly at-risk for falling behind in school readiness and thus need access to higher quality early childhood programs.”

## Related Research

Tout K, Starr R, Soli M, et al. Compendium of quality rating systems and evaluations. Washington, DC: Office of Planning, Research and Evaluation (OPRE), Administration for Children and Families (ACF), US Department of Health and Human Services (US DHHS); 2010. Accessed on August 21, 2014

## **Evidence 2: ABC Child Care Quality Rating and Improvement System (QRIS)**

### **Source**

Schilder, D, Canada, D., Paulk, S., & Smith Leavell, A. (2012) Review of Research on QRIS Standards. Boston, MA: Massachusetts Department of Early Education and Care

### **Evidence Type**

Synthesis

### **Data Type**

Secondary Research

### **Program Aspects addressed by the study**

Program Standards

### **Brief Findings**

This report is a compilation of research evidence on the QRIS standards adopted by the state of Massachusetts under five categories - Curriculum and learning, Environment, Workforce qualifications, Family involvement and Administration. The authors rated the research evidence as strong or weak based on the methodology used in the analyses (e.g experimental and correlational studies were considered strong evidence). Based on the results of the research, the evidence was also classified as positive, negative or mixed. Positive and strong evidence (experimental research evidence or correlational studies) was found for 60 of the 78 center and school-based standards, 44 of the 61 family child care standards, and 52 of the 72 after school and out of school time standards. Example: The research evidence on the positive effects of outdoor environment suggests its role in children's ability to learn about the world, others, and themselves, with more creative play, and lesser absenteeism (Elkind (2006); Fjørtoft (2001)). Similarly, a synthesis of research on the topic by Aziz and Said (2011) found that children's place preferences and play behaviors in the outdoor environment are influenced by their developmental needs, as well as individual, physical, and social factors suggesting a need for a more structured and developmentally appropriate outdoor area.

### **Alignment with SC**

ABC Quality in South Carolina sets standards at different quality rating levels (A+, A, B+, B and C) addressing standards such as outdoor play. One such standard includes the requirement of a high-quality infant and toddler program to support children's development by intentionally planning, equipping, and maintaining safe, age appropriate outdoor spaces for young children to grow and develop. Emerging motor abilities and skills are supported when outdoor spaces and equipment allow children to move freely and have appropriate levels of challenge. This standard and others relating to nutrition and physical activity were implemented through a state partnership between the SC Department of Health and Environmental Control and ABC Quality with funding from the U.S. Centers for Disease Control and Prevention. Those standards, known as ABC Grow Healthy, have been externally reviewed and designated as an emerging intervention by the Center TRT (Training and Research Translation) at UNC-Chapel Hill (<http://www.centertrt.org>).

### **Quote**

"The Massachusetts QRIS is one of the most important tools, among many, that Massachusetts is developing to help families, communities, and policymakers understand what constitutes quality in child care settings."

### **Related Research**

Elkind, D. (2006). The values of outdoor play. *Exchange*, Sep/Oct (171), 6-8.

Fjørtoft, I. (2001). The natural environment as a playground for children: The impact of outdoor play activities in pre-primary school children. *Early Childhood Education Journal*, 29(2), 111-117.

Aziz, N. F. and Said, I. (2011). The Trends and Influential Factors of Children's Use of Outdoor Environments: A Review. <http://fspu.uitm.edu.my/cebs/images/stories/a2may11c7.pdf>.



## **Evidence 3: ABC Child Care Quality Rating and Improvement System (QRIS)**

### **Source**

Ma, X., Shen, J., Kavanaugh, A., Lu, X., Brandi, K., Goodman, J., . . . Watson, G. (2011). Effects of Quality Improvement System for Child Care Centers. *Journal of Research in Childhood Education*, 25(4), 399-414. doi: 10.1080/02568543.2011.605208

### **Evidence Type**

Synthesis

### **Data Type**

Secondary Research

### **Program Aspects addressed by the study**

Child Outcomes - example

### **Brief Findings**

Over a period of five years, the authors collected pre and post data using ECERS and ITERS from about 100 child care centers in Palm Beach County, Florida. The baseline data was collected when a child care center started to participate in the Early Learning Coalition's QIS followed by post data after 13 months of its participation. Results indicated that Palm Beach County's QIS appeared to be effective in improving the quality of child care centers. The overall measure indicated that centers evaluated with ECERS-R experienced large improvement in quality, with effect size of 0.67 during the period of 13 months. Certain areas such as activities (effect size = .82) and language reasoning (effect size = .59) showed greater improvement than other areas. The smallest improvement occurred in program structure. Programs assessed using ITERS found larger improvements in the program (effect sizes range from .74 to .84).

### **Alignment with SC**

Currently, the ABC Quality program has three major tiers – A, B and C. Each of the tiers has its own assessment instruments. The Environment Rating Scales (ERS), including ITERS, ECERS and SACERS, are used to evaluate the programs at levels A or A+. At levels B and B+, South Carolina uses an instrument developed by the state based on national standards. Level C sets the floor of the quality levels with an assessment building on the state's child care licensing standards.

### **Quote**

“... theory of action in QIS emphasizes pathways to quality. Our finding that QIS became more and more efficient and effective in improving quality over time suggests that it takes time for the QIS approach of pathways to quality to produce educational change (improvement).”





# SC Child Care

## EARLY CARE & EDUCATION

### Professional Development and Education Supports (CCCCD)

#### Description

Helps programs achieve and maintain higher quality standards by providing a professional development system and education supports for South Carolina's child care workforce as well as certification and professional development of Trainers and Technical Assistance Providers throughout the state.

#### Delivery Method

TEACH scholarships, conference scholarships, seminars, credentials and a professional development database to track training and education, Train the Trainers in adult learning principles and research based relevant content to support the implantation of best practices as a result of the training.

#### Target Population

Child care workforce (including technical assistance providers)

#### Target Outcomes

Providing child care teachers the opportunity to participate in professional development including workshop style training, technical assistance, and college coursework that is part of a credentialing system which may result in a formal college degree with the ultimate outcome to improve the quality of all early education programs

#### SC Presence

Statewide Presence through Certified Trainers with the SC Child Care Training System, technical assistance providers, local colleges and technical schools

#### Data Collection System and Measurement

Repository for child care staff professional development training and coursework, T.E.A.C.H. database, data provided to and for child care providers, licensing and QRIS staff and across the Division of Early Care and Education programs

## Research

Education, training, mentoring, coaching, specific training (training in early childhood concepts), professional development and counseling are all means of supporting and preparing early child care educators to provide quality child care. However, in sifting through the research on early childhood teacher quality, there has been a greater emphasis on teacher's educational qualifications than regular (annual) training in the area.

*Note: There is an ongoing effort to find research and evidence that support annual training hours required by licensing and child care regulations.*

# Evidence 1: Professional Development and Education Supports (CCCCD)

## Source

Clarke-Stewart, K. A., Vandell, D. L., Burchinal, M., O'Brien, M., & McCartney, K. (2002). Do regulable features of child-care homes affect children's development? *Early Childhood Research Quarterly*, 17(1), 52-86.

## Evidence Type

Descriptive

## Data Type

Primary Data collection

## Program Aspects addressed by the study

Provider and Child outcomes – Family Child Care Homes

## Brief Findings

Participants for this study were recruited from hospitals located in about 10 cities in the United States. Child care home and child outcome data was collected from 164 children at 15 months, 172 children from 24 months and 146 children at 36 months. Using hierarchical linear modeling (HLM) the researchers examined the independent links between caregivers' education, training, and observed quality of care for children at three ages, while controlling for other caregiver characteristics and features of the child care home. Caregivers' educational background (6-level variable), specialized training in early childhood education (4 levels) and recent training in child care related area within the past year (2 levels) were captured. In education and training, 19% of the caregivers had bachelor's degrees or higher, 32% had graduated from high school; 48% had no specialized training and 39% had received training in the last year. Results of the study indicated that in the Child Care Home inventory (CC-HOME) scores were higher when caregivers were more educated, had higher levels of specialized training, and had received child-related training during the previous year. Caregivers provided more positive caregiving when they had higher levels of specialized training. These relationships did not vary with children's age, suggesting that these factors are equally important for toddlers and young preschoolers. The findings suggest that regulating caregivers' training in child development could lead to improved quality of care.

## Alignment with SC

In South Carolina, family child care providers are required to take 2 hours of training annually—Kendra's Law, 2010. However, the SC Resource and Referral Network offers free trainings to child care providers and family child care providers to attend these trainings. SC-CCRRN has also created several support networks for family child care providers and offers them training at their convenience in several state-wide locations to increase accessibility. The SC Center for Child Care Career Development sponsored 5 hour "Train the Trainers" on Health and Safety topics which is currently being delivered across the state through the SC-CCRRN.

## Quote

"Regulating caregiver education by requiring that caregivers have at least a high school diploma could also be valuable. The difference on the CC-HOME between caregivers with and without a high school diploma was slightly larger than one standard deviation (6 points at 15 and 24 months, SD=5; 10 points at 36 months, SD=8)."

## **Evidence 2: Professional Development and Education Supports (CCCCD)**

### **Source**

Hestenes, L. L., Kintner-Duffy, V., Wang, Y. C., La Paro, K., Mims, S. U., Crosby, D., & Cassidy, D. J. Comparisons among quality measures in child care settings: Understanding the use of multiple measures in North Carolina's QRIS and their links to social-emotional development in preschool children. *Early Childhood Research Quarterly*(0). doi: <http://dx.doi.org/10.1016/j.ecresq.2014.06.003>

### **Evidence Type**

Descriptive

### **Data Type**

North Carolina Child Care Data

### **Program Aspects addressed by the study**

Provider and Child outcomes – Child Care Centers

### **Brief Findings**

Ten years after the implementation of North Carolina's QRIS, data was collected on 97 child care centers to examine the best predictors of quality (4 quality measures), impact on children's social-emotional development and distinct characteristics of providers at the various quality levels. Correlation between the quality rating measures (ECERS-E, ECERS-R, CLASS Emotional Support, CLASS Classroom Organization, CLASS Instructional Support, C5 Positive, and C5 Negative) and structural variables (teacher-child ratio and group size) were examined. Teacher education and experience were used as variables to capture teacher quality in a structural manner. Teachers reported their highest level of education, ranging from 1 (high school), 2 (some college), 3 (2-year degree) to 4 (4-year degree and beyond). Since the QRIS quality star levels do not represent distinct quality levels as indicated by the instruments, the outcome data on the 7 measures (ECERS-R 0, ECERS-E 7, CLASS Emotional Support 12, CLASS Organization 12, CLASS Instructional Support 12, C5 Positive 1, and C5 Negative) were compared. Teacher education was positively associated with classroom quality in 5 out of 7 comparisons. Higher levels of teacher education positively and moderately correlate (.20 to .32).

### **Alignment with SC**

One of the divisions within the South Carolina Center for Child Care Career Development (SC-CCCCD) is the T.E.A.C.H. Early Childhood® SOUTH CAROLINA program that provides scholarships for teachers, directors, owners, and family/group providers working in childcare to complete coursework in early childhood education. The SC Center for Child Care Career Development offers incentives through a comprehensive credentialing system for providers to pursue a formal education through the statewide technical college system.

### **Quote**

“Results from this study and other research suggest that some structural features, such as teacher education, are more closely related to program quality and child outcomes than others, and that process quality indicators may be better indications of children's experiences.”



## SC Child Care Resource and Referral Network (SC-CCRRN)

### Description

SC-CCRRN serves the needs of families, early care professionals, and the community-at-large by providing consultation, referrals, training, and technical assistance. The SC-CCRRN also helps parents seeking child care to find child care providers in their area.

### Delivery Method

Field-based technical assistance providers (quality coaches) respond to referrals from state licensing and quality monitors, other state agencies such as Baby Net, First Steps, SC Inclusion Collaborative or the child care providers themselves requesting technical assistance by visiting the centers, providing individualized training, collaborative coaching and guided reflection to improve child care quality. The collaborative technical assistance model uses a data-driven decision making model by first collecting and analyzing all relevant program quality data (e.g. licensing compliance report, QRIS monitoring report, direct observation, communication with program administration and teaching personnel) and then engaging the program director and any other relevant program stakeholders in action planning session(s). The resulting Technical Assistance plan is an individualized plan of action that builds on program strengths to support quality enhancement. A hallmark of this model is the direct involvement of the program director in all phases of the technical assistance to build leadership capacity and support maintenance of improved teacher and program practices as well as a culture of continuous quality improvement within child care programs.

The SC Department of Social Services Division of Early Care and Education funds this program using federal child care development funds. Services are provided to child care providers in at no additional cost.

## **Target Population**

Child care providers

## **Target Outcomes**

Child care centers and benefits children who attend quality child care

## **SC Presence**

Statewide Presence

## **Data Collection System and Measurement**

Data is collected in the Technical Assistance database maintained by SC-CCCCD. Monthly, quarterly and annual reports are generated from this system to monitor productivity and effectiveness.

## **Research**

Coaching and other individualized, on-site assistance models are being implemented as strategies to support the application of teaching/caregiving practices and overall quality improvement in early care and education settings. There are several different terminologies being used for technical assistance that are subtly different but with considerable overlap.\* Regardless of the terminology, the evidence presented here are delivery models that involve on-site specialized (tailored) assistance which is the bulk of the work at SC-CCRRN.

\*Early Childhood Education Professional Development: Training and Technical Assistance Glossary. National Association for the Education of Young Children, National Association of Child Care Resource & Referral Agencies, 2011 [http://www.naeyc.org/GlossaryTraining\\_TA.pdf](http://www.naeyc.org/GlossaryTraining_TA.pdf)



# **Evidence 1: SC Child Care Resource and Referral Network (SC-CCRRN)**

## **Source**

Isner, T., Tout, K., Zaslow, M., Soli, M., Quinn, K., Rothenberg, L., & Burkhauser, M. (2011). Coaching in early care and education programs and Quality Rating and Improvement Systems (QRIS): Identifying promising features. Retrieved March 27, 2012, from Child Trends at <http://www.childtrends.org/wp-content/uploads/2013/05/2011-35CoachingQualityImprovement.pdf>

## **Evidence Type**

Research Synthesis and case study on four child care programs using coaching

## **Data Type**

Interviews

## **Program Aspects addressed in the study**

Direct technical assistance at child care provider locations.

## **Brief Findings**

This study reported descriptions of four case studies involving coaching. However, the literature review at the beginning of this report that included 48 articles and met the research standards of the authors provided a great synthesis of research in this area. The outcomes measured included practitioners' attitudes, knowledge and satisfaction; quality of practices and/or observed quality of the learning environment; and children's developmental outcomes. In studies that addressed practitioner outcomes, 13 of the 21 studies reviewed found positive outcomes for practitioners. These outcomes included satisfaction with the coaching (6 studies), increased knowledge (2 studies), and positive attitudes about childrearing (7 studies). Twenty-seven (27) out of the 31 studies that examined quality reported positive outcomes. Of the 21 studies that examined the impact on outcomes for children (including language and literacy, math, print knowledge, vocabulary and behavioral measures), 19 reached positive conclusions.

## **Alignment with SC**

SC-CCRRN staff provide coaching and assistance on a variety of topics and issues that are customized to the provider's needs and motivation. All activities are conducted with the goal to improve the quality of the provider and better serve children.

## **Related Research**

Zaslow, M., Tout, K., Halle, T., Vick, J., & Lavelle, B. (2010). Towards the identification of features of effective professional development for early childhood educators: A review of the literature. *Submitted to US Department of Education, Washington, DC, Child Trends.*

Smith, S., Schneider, W. J., & Kreader, J. L. (2010). Features of professional development and on-site assistance in child care quality rating improvement systems: A survey of state-wide systems.

## **Evidence 2: SC Child Care Resource and Referral Network (SC-CCRRN)**

### **Source**

Neuman, S. B., & Cunningham, L. (2009). The impact of professional development and coaching on early language and literacy instructional practices. *American educational research journal*, 46(2), 532-566.

### **Evidence Type**

Pre and post-test experimental design

### **Data Type**

Data collected from Project Great Start Professional Development Initiative Funded through the U.S. Department of Education Office of Elementary and Secondary Education.

Teacher Knowledge Assessment of Early Language and Literacy Development

Teacher Practice measured by ELLCO and CHELLO

### **Program Aspects addressed in the study**

Professional development and coaching as support for teachers practices that promote early literacy learning.

### **Brief Findings**

Statistically significant improvements were found in the group of teachers who receive the required course work plus coaching in the area of teaching literacy to young children. The study shows that practice-based professional approach is effective.

### **Alignment with SC**

The SC-CCRRN quality coaches use a practice-based professional development model similar to the one researched through this study. Specifically the SC-CCRRN Quality Coaches work within the target classroom to observe teacher practices, identify the strengths of the teacher practices, then provides feedback and modeling to demonstrate opportunities for improvement.

### **Related Research**

Justice, L., Mashburn, A., Hamre, B., & Pianta, R. (2008). Quality of language and literacy instruction in preschool classrooms serving at-risk pupils. *Early Childhood Research Quarterly*, 23, 51–68.

## **Evidence 3: SC Child Care Resource and Referral Network (SC-CCRRN)**

### **Source**

Stoney, L., & Blank, S. (2011). Delivering quality: Strengthening the business side of early care and education. Opportunities Exchange, July.

### **Evidence Type**

Descriptive

### **Data Type**

Interview

### **Program Aspects addressed in the study**

Technical assistance provided to child care programs to improve business practices

### **Brief Findings**

Two broad approaches that promote early care and education program (ECE) stability are: 1) Training and technical assistance to improve the business skills of ECE providers, and 2) shared services that enable organizations to share cost by managing some or all aspects of their business collectively. Despite the fact that sound fiscal management is key to sustainability, business management is rarely a top priority for the ECE field. Effective technical assistance must be specific to clients' needs and delivery of TA in small, concrete steps with opportunities for applied experience is important. Moreover, technical assistance providers should be aware of motivating clients. TA providers should not only offer professional development opportunities in business practices, they should also provide resources and personnel when professional development is not a good option for clients.

### **Alignment with SC**

The SC-CCRRN has a key focus on supporting program administrators to develop effective business management skills as well as robust personnel support practices. Program administrators are actively engaged in all aspects of program improvement initiatives. Often times, the focus of Center-Based Technical Assistance is related to supporting business management practices.

### **Related Research**

Mitchell, A. (2010). Lessons from cost modeling: The link between ECE business management and program quality. Available online at [www.earlychildhoodfinance.org/finance/cost-modeling](http://www.earlychildhoodfinance.org/finance/cost-modeling)



# SOUTH CAROLINA



## Child Care Inclusion Collaborative

### SC Child Care Inclusion Collaborative (SCIC)

#### **Description**

The SC Child Care Inclusion Collaborative (SCIC) provides individualized training and technical assistance (i.e., coaching and/or consultation) for child care providers to support the inclusion of children with disabilities/developmental delays in child care programs. Inclusion specialists work directly with child care staff and program administrators to increase the use of evidence-based practices that lead to access and meaningful participation for all children. Through active collaboration with partnering agencies and organizations, the SCIC helps child care providers stay connected with resources and opportunities to increase the quality of care and education provided to children and families in South Carolina.

The SC Department of Social Services Division of Early Care and Education funds this program using federal child care development funds. Services are provided to child care providers in at no additional cost.

#### **Delivery Method**

Technical assistance providers respond to referrals by providing onsite training and technical assistance (i.e., coaching) to child care programs throughout South Carolina.

#### **Target Population**

Child care teachers and directors/administrators

#### **Target Outcomes**

Build capacity among the child care providers to use inclusive practices to support access and participation of children with disabilities within their programs.

## **SC Presence**

This program is available to any legally operating child care program in the state.

## **Data Collection System and Measurement**

Training and technical assistance data are collected through two different data systems maintained by the SC Center for Child Care Career Development.

## **Research**

The Americans with Disabilities Act provides access to community-based child care programs for young children with disabilities. The research literature is clear that children who are at-risk for developmental delays or who have disabilities need high quality early learning experiences to support their development. Preparation of early care and education providers to implement inclusive practices will contribute to the overall quality of the environment for all young children.

# Evidence 1: SC Child Care Inclusion Collaborative (SCIC)

## Source

Buyse, V., & Hollingsworth, H. L. (2009). Program quality and early childhood inclusion: Recommendations for professional development. *Topics in Early Childhood Special Education*, 29, 119-128. doi: 10.1177/0271121409332233

## Evidence Type

Concept paper

## Data Type

N/A

## Program Aspects addressed in the study

Global program quality and child outcomes and additional quality indicators related to inclusion. Additionally, recommendations for professional development are included.

## Brief Findings

The authors of this concept paper provided three recommendations regarding professional development to effect quality of early childhood programs particularly related to inclusion. The first recommendation is to consider the characteristics of the learners and providers of professional development within the quality improvement system. Professional development activities should be designed with the learner in mind (i.e., teacher, administrator, para-professional). The second recommendation encourages readers to focus on the content of the professional development offered. Systems should consider what practices are foundational to providing high quality inclusion. The third recommendation was for systems to attend to how the professional development is offered. There is growing evidence that professional development should be: (a) focused on specific practices, (b) aligned with standards and curriculum used, and (c) intensive and include feedback (e.g., coaching).

## Alignment with SC

The SCIC provides professional development to child care teachers and directors to support the use of evidence-based inclusive practices. The practices selected are aligned with Developmentally Appropriate Practice (NAEYC, 2009) and DEC Recommended practices for early intervention/early childhood special education (DEC, 2014). The SCIC works directly with providers onsite to determine their particular professional development goals. Face-to-face training is followed by onsite coaching in order for providers to practice newly learned strategies and to receive feedback from a coach.

## Related Research

Division for Early Childhood (DEC). (2014). *DEC recommended practices in early intervention/early childhood special education 2014*. Retrieved from <http://www.dec-sped.org/recommendedpractices>

National Association for the Education of Young Children (NAEYC). (2009). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8: A position statement of the National Association for the Education of Young Children*. NAEYC: Washington, DC.

## Evidence 2: SC Child Care Inclusion Collaborative (SCIC)

### Source

Trivette, C. M., Dunst, C. J., Hamby, D. W. & O'Herin, C. E. (2010). Effects of different types of adaptations on the behavior of young children with disabilities. Research Brief, 4(1). Tots-n-Tech Institute: <http://www.tnt.asu>.

### Evidence Type

Research Synthesis

### Data Type

Nineteen individual studies with various research designs, mostly single-subject

### Program Aspects addressed in the study

Adaptations made to the environment, materials, and activities for young children with disabilities.

### Brief Findings

This study is a synthesis of research related to adaptations made to the environment, materials, and activities for young children with disabilities. The authors included 19 studies in which 104 young children (i.e., 5-80 months of age) were participants. All of the studies included adaptations to the environment, materials, or activities to promote child participation in typical routines and activities. All of the studies reported child behavioral outcomes. Seventy-nine percent of the studies used single-subject designs. There were two case studies and two studies with a contrasting conditions design. The studies were conducted in various settings (i.e., classroom, home, clinic, or playground/gym). After calculating the means and standard deviations for the baseline and intervention conditions, the authors of this synthesis calculated effect sizes for all of the single-subject studies using Cohen's *d*. For the case study and contrasting design studies, researchers used a 5-point scale to rate how consistency of the outcomes with the investigator expected outcomes. Trivette and colleagues included intervention variables (i.e., type of adaptation, number of intervention sessions, and setting the intervention was implemented), moderator variables (i.e., child gender, age, and disability and research design), and outcome variables (i.e., cognitive, communication, social, or gross motor).

Overall, all three types of adaptations had moderate to large effect sizes related to child behavioral outcomes (i.e., increased participation). The adaptations were more effective when they were used more often. These findings support the use of adaptations with young children to increase participation in everyday routines and activities. Participation in activities in all likelihood promotes learning by offering more opportunities for children to acquire new skills.

### Alignment with SC

Part of the SCIC professional development curriculum is focused on teaching child care teachers and directors how to make adaptations to the environment, materials, and activities to increase participation for young children with disabilities. The SCIC has developed a comprehensive professional development framework to support the use of these strategies based on *CARA's Kit: Creating Adaptations for Routines and Activities* (Milbourne & Campbell, 2007; Campbell, Milbourne & Kennedy, 2010), which includes face-to-face training and onsite coaching.

### Related Research

Campbell, P. H., Milbourne, S. A., & Wilcox, M. J. (2008). Adaptation interventions to promote participation in natural settings. *Infants & Young Children*, 21, 94-106.

Campbell, P. H., Milbourne, S. A., & Kennedy, A. A. (2012). *CARA's Kit for toddlers: Creating adaptations for routines and activities*. Baltimore, MD: Paul H. Brookes Publishing Co.

Hsieh, H.-C. (2008). Effects of ordinary and adaptive toys on pre-school children with developmental disabilities. *Research on Developmental Disabilities*, 29, 459-466.

Milbourne, S. A., & Campbell, P. H. (2007). *CARA's Kit: Creating adaptations for routines and activities*. Philadelphia, PA: Child and Family Studies Research Programs, Thomas Jefferson University.



## **Evidence 3: SC Child Care Inclusion Collaborative (SCIC)**

### **Source**

Fox, L., Hemmeter, M. L., Snyder, P., Binder, D. P., & Clarke, S. (2011). Coaching early childhood special education teachers to implement a comprehensive model for promoting young children's social competence. *Topics in Early Childhood Special Education, 31*, 178-192. doi: 10.1177/0271121411404440

### **Evidence Type**

Single-Subject multiple probe experimental design

### **Data Type**

Fidelity of implementation using an observational measure developed by the authors

### **Program Aspects addressed in the study**

Coaching teachers to use strategies to prevent challenging behavior, promote social and emotional development and competence, and intervene with children exhibiting severe challenging behavior.

### **Brief Findings**

Researchers recruited three early childhood special education teachers who had an interest in receiving training and support to implement the Teaching Pyramid model strategies in their classrooms. Prior to receiving training or coaching in the use of Pyramid model strategies, researcher conducted classroom observations using the Teaching Pyramid Observation Tool (Hemmeter, Fox, & Snyder, 2008). This tool was developed to measure the fidelity with which teachers are implementing strategies and practices included in the Pyramid model. The teachers received workshop training on the Teaching Pyramid Model followed by coaching. Baseline levels of implementation for all three teachers were lower than implementation during the intervention phase (i.e., coaching). This study is a good examination of coaching teachers to use strategies with the specific focus of promoting social-emotional competence and preventing challenging behaviors in young children. However, this investigation only includes three teachers. The teachers had 12, 16, and 32 years of teaching experience. This study may not generalize to other early childhood or early childhood special education teachers. Future studies should include more teachers in the context of program-wide implementation.

### **Alignment with SC**

Part of the SCIC professional development curriculum is focused on teaching child care teachers and directors how to prevent challenging behaviors and teach skills that support social and emotional competence for young children. The SCIC uses the Teaching Pyramid Model framework and strategies through face-to-face training and coaching to support child care providers' implementation of these strategies.

### **Related Research**

Conroy, M. A., Dunlap, G., Clarke, S., & Alter, P. J. (2005). A descriptive analysis of positive behavioral intervention research with young children with challenging behavior. *Topics in Early Childhood Special Education, 25*, 157-166. doi: 10.1177/02711214050250030301

Dunlap, G., Strain, P. S., Fox, L., Carta, J., Conroy, M., Smith, B. J., Sowell, C. (2006). Prevention and intervention with young children's challenging behavior: A summary of current knowledge. *Behavioral Disorders, 32*, 29-45.





## SC Program for Infant/Toddler Care (SCPITC)

### Target Population

Infant/toddler caregivers, center directors and family child care home providers

### Target Outcomes

Implementation of program policies that support a relationship-based model of care. Teachers learn to use reflection as a tool for continuous improvement and to aid in intentional decision making that is responsive and respectful to the young children in their care. Program directors provide feedback and support to staff and maintain ongoing efforts for quality enhancement. Benefits infants and toddlers who attend.

### SC Presence

Statewide program provides assistance to providers in all SC counties

### Data Collection System and Measurement

A customized data management system is maintained by a private contractor. Data is pulled from the system regularly for program monitoring, as requested by DSS and at a minimum for bi-annual reporting to DSS.

### Research

Coaching and other curricular-based on-site assistance models are being implemented as strategies to support the application of teaching/caregiving practices and overall quality improvement in early care and education settings. There are several different terminologies being used for technical assistance that are subtly different but with considerable overlap.\* Regardless of the terminology, the evidence presented here are delivery models that involve on-site specialized technical assistance which is the bulk of the work at SC PITC.

\*Early Childhood Education Professional Development: Training and Technical Assistance Glossary. National Association for the Education of Young Children, National Association of Child Care Resource & Referral Agencies, 2011 [http://www.naeyc.org/GlossaryTraining\\_TA.pdf](http://www.naeyc.org/GlossaryTraining_TA.pdf)

# Evidence 1: SC Program for Infant/Toddler Care (SCPITC)

## Source

Conroy, M.A., Sutherland, K.S., Algina, J.J., Wilson, R. E., Martinez, J.R., & Whalon, K. J. (2014). Measuring teacher implementation of the Best in CLASS Intervention program and corollary child outcomes. *Journal of Emotional and Behavioral Disorders*. Retrieved October 26, 2014, from Sage Publications: <http://ebx.sagepub.com/content/early/2014/04/30/1063426614532949>. doi: 10.1177/1063426614532949

## Evidence Type

Randomized Efficacy Trial/ Randomized Control Trial

## Data Type

Fidelity of implementation using an observational measure developed by the authors as well as child observation data to measure impact on child behavior.

## Program Aspects addressed in the study

The focus of the intervention is to support increased teacher effectiveness in interactions with young children exhibiting challenging behaviors. The intervention relied on a structured teacher education curriculum that paired workshop style training with performance-based coaching experiences.

## Brief Findings

Researchers recruited 53 early childhood teachers to participate in the study. Of these teachers 26 participated in the intervention whereas 27 were in the comparison group. Following a structured interactive workshop the intervention group teachers were provided the BEST in CLASS Teacher Manual as well as Practice-based coaching. The structured plan of delivering the workshop then providing specific on-the-job coaching and feedback targeted key practices identified as essential to the fidelity of implementation of the curriculum. Results indicate that teachers that received the intervention significantly increased the overall percentage of observed intervals from baseline to post-test in all of the key practice areas and from baseline to maintenance in 5 of the 6 key practice areas. IN addition, the overall percentage of child engagement significantly increase for the intervention group from baseline to post-test and maintenance. The overall percentage of disruptive, aggressive, defiant behavior significantly decreased for the intervention group while the percentage of positive interactions significantly increased. These findings suggest that focused training when paired with practice-based coaching are supportive of teacher behavior change and ultimately increased quality interactions between teachers and children in early childhood classrooms.

## Alignment with SC

The SC PITC professional development model provides a specific series of workshop style training to participating teachers then follows up with teachers in their classrooms to provide coaching experiences where the Infant-Toddler Specialist models, observes, and provides specific feedback to support implementation of the 6 essential practices of the PITC philosophy.

## Related Research

Conroy, M. A., Sutherland, K. S., Vo, A. K., Carr, S. E., & Ogston, P. (2014). Early childhood teachers' use of effective instructional practices and the collateral effects on young children's behavior. *Journal of Positive Behavior*

Snyder, P., & Wolfe, B. (2008). The big three process components of effective professional development: Needs assessment, evaluation, and follow-up. In P.J. Winton, J.A. McCollum, & C. Catlett (Eds.), *Practical approaches to early childhood professional development: Evidence, strategies, and resources* (pp. 13-51). Washington, DC: Zero to Three Press.

## **Evidence 2: SC Program for Infant/Toddler Care (SCPITC)**

### **Source**

Neuman, S. B., & Cunningham, L. (2009). The impact of professional development and coaching on early language and literacy instructional practices. *American educational research journal*, 46(2), 532-566.

### **Evidence Type**

Pre and post-test experimental design

### **Data Type**

Data collected from Project Great Start Professional Development Initiative Funded through the U.S. Department of Education Office of Elementary and Secondary Education.

Teacher Knowledge Assessment of Early Language and Literacy Development

Teacher Practice measured by ELLCO and CHELLO

### **Program Aspects addressed in the study**

Professional development and coaching as support for teachers practices that promote early literacy learning.

### **Brief Findings**

Statistically significant improvements were found in the group of teachers who receive the required course work plus coaching in the area of teaching literacy to young children. The study shows that practice-based professional approach is effective.

### **Alignment with SC**

The SC-PITC infant-toddler specialists use a practice-based professional development model similar to the one researched through this study. Specifically the SC-PITC Infant-Toddler Specialists work within the target classroom to observe teacher practices, identify the strengths of the teacher practices, then provides feedback and modeling to demonstrate opportunities for improvement as they relate to the specific PITC 6 essential policies.

### **Related Research**

Justice, L., Mashburn, A., Hamre, B., & Pianta, R. (2008). Quality of language and literacy instruction in preschool classrooms serving at-risk pupils. *Early Childhood Research Quarterly*, 23, 51-68.

## **Evidence 3: SC Program for Infant/Toddler Care (SCPITC)**

### **Source**

Lally, R. J. (2009). The science and psychology of infant-toddler care. *Zero to Three*, 30(2), 47-53.

### **Evidence Type**

Concept Paper

### **Data Type**

N/A

### **Program Aspects addressed in the publication**

Articulation of the underlying philosophy of the Program for Infant-Toddler Care and connection with relevant psychological studies.

### **Brief Findings**

Recent research on how infants and toddlers grow and learn had provided new evidence for creating child care practices that support healthy development. The author describes 6 program practices (Primary Care; Small Groups; Continuity; Individualized Care; Inclusion of Children with Special Needs; and Cultural Continuity) drawn from this research. The article discusses practices that support secure attachments, identity formation, family practices, and attention to developmental trajectories, responsive caregiving, and reflective curriculum planning.

### **Alignment with SC**

The SC PITC professional development curriculum is built on the foundation of the PITC philosophy developed by R. Lally and his team at WestEd. Child Care providers that participate in the PITC professional development and technical assistance program agree to adopt the 6 essential policies and training and technical assistance provided by the SC PITC Infant-Toddler Specialists are focused on supporting child care providers in their implementation of the 6 essential policies.

### **Related Publications**

*Concepts for Care: 20 Essays on Infant/Toddler Development and Learning*. J. Ronald Lally, Peter L. Mangione & Deborah Greenwald (Editors). San Francisco: WestEd