

## AGENDA

### Early Readiness Assessment Subcommittee

November 17, 2014  
Lexington 4 Early Childhood Center  
135 Lewis Rast Road, Swansea

- |      |  |  |
|------|--|--|
| I.   | Introductions  | Ms. Barbara Hairfield, Chair   |
| II.  | Overview of Subcommittee Mission and Timeline  | Ms. Barbara Hairfield  |
| III. | Overview of Readiness Domains  |  |
|      | Dr. Leigh Kale D'Amico<br><i>Research Assistant Professor, USC College of Education</i>  |  |
|      | Leigh Bolick<br><i>Director, DSS Division of Early Care and Education</i>  |  |
|      | Mary Lynne Diggs<br><i>Director, SC Head Start Collaboration Office</i>  |  |
| IV.  | Discussion of Approaches to Learning and Social/Emotional Domains  | David Whittemore<br>CHAIR  |
|      | Lillian Atkins<br><i>Principal, Lexington 4 Early Childhood Center</i>   | Daniel B. Merck<br>VICE CHAIR  |
|      | Dave Morley<br><i>Early Childhood Task Force Chair, New Carolina</i>   | J. Phillip Bowers<br>Anne H. Bull<br>Mike Fair   |
| V.   | Adjournment  | Margaret Anne Gaffney<br>Barbara B. Hairfield<br>Nikki Haley   |
| VI.  | Lunch  | R. Wesley Hayes, Jr.<br>Deb. Marks<br>Alex Martin  |
|      | <u>Subcommittee Members:</u><br>Barbara Hairfield, Chair<br>Margaret Anne Gaffney, Co-Chair<br>Anne Bull<br>Sen. Mike Fair<br>Deb Marks<br>Rep. Andy Patrick<br>Patti Tate | John W. Matthews, Jr.<br>Joseph H. Neal<br>Andrew S. Patrick<br>Neil C. Robinson, Jr.<br>J. Roland Smith<br>Patti J. Tate<br>Mick Zais |

## Early Readiness Assessment Subcommittee Timeline (with Meeting Dates)

---

Date	Time & Location	Focus	Discussion
11.17.14	9:30-10 (Tour) 10-12 noon	Overview and Approaches to Learning and Social/Emotional	<ul style="list-style-type: none"> <li>• Background on Assessment and Domains</li> <li>• Current efforts regarding early learning standards, assessment</li> <li>• Lexington 4's experience with high-impact early education for ages three through five, with a focus on these two domains</li> </ul>
1.26.15	TBD	Language/Literacy and Cognitive	<ul style="list-style-type: none"> <li>• Overview and status of Circle assessment implementation (part of CDEP Evaluation).</li> <li>• Within discussion about Cognitive, address math</li> </ul>
3.23.15	TBD	Physical Well-Being and Health; Wrap Up	<ul style="list-style-type: none"> <li>• Current state efforts</li> <li>• Institute for Child Success input about readiness research</li> </ul>
4.17.15		Draft recommendations to ERAS members for review.	
4.20.15-5.1.15		Public comment on draft recommendations.	
5.8.15		Draft recommendations revised and forwarded to EOC.	
6.8.15		ERAS recommendations to EOC for approval. Recs sent to State Board of Education.	

## EARLY READINESS ASSESSMENT SUBCOMMITTEE (ERAS)

### ERAS Charge

---

Proviso 1A.76 of the 2014-15 General Appropriation Act (ratified by the General Assembly on June 5, 2014) requires the EOC to recommend the characteristics of a readiness assessment for children in prekindergarten and kindergarten, focused on early language and literacy development, to the State Board of Education no later than July 30, 2015.

**1A.76.** (SDE-EIA: Prekindergarten and Kindergarten Assessments) For the current fiscal year, all students entering a publicly funded prekindergarten or public kindergarten must be administered a readiness assessment that shall focus on early language and literacy development no later than the forty fifth day of the school year. The readiness assessment must be approved by the State Board of Education. The approved readiness assessment must be aligned with kindergarten and first grade standards for English/language arts and mathematics. The results of the assessment and the developmental intervention strategies recommended or services needed to address the child's identified needs must be provided, in writing, to the parent or guardian. The readiness assessment may not be used to deny a student admission or to progress to kindergarten or first grade.

The Education Oversight Committee shall recommend the characteristics of the readiness assessment for children in prekindergarten and kindergarten, focused on early language and literacy development, to the State Board of Education no later than July thirtieth. Prior to submitting the recommendation to the State Board, the Education Oversight Committee shall seek input from the South Carolina First Steps to School Readiness Board of Trustees and other early childhood advocates. The State Board must move expeditiously to approve or modify the criteria submitted by the committee. Once approved, with the assistance of the Education Oversight Committee, the board shall develop a solicitation to be used in procuring the assessment. The solicitation must be forwarded to the Executive Director of the Budget and Control Board who must immediately move to procure the readiness assessment in order to meet the forty-five day requirement. The Executive Director is authorized to make changes to the solicitation with the consent of the Chairman of the State Board of Education and the Chairman of the Education Oversight Committee. The Department of Education must bear the costs of the procurement.

Act 287, the First Steps to School Readiness Initiative, describes school readiness as:

*the level of child development necessary to ensure early school success as measured in the following domains: physical health and motor skills; emotional and social competence; language and literacy development; and mathematical thinking and cognitive skills. School readiness is supported by the knowledge and practices of families, caregivers, healthcare providers, educations, and communities.<sup>1</sup>*

---

<sup>1</sup> Act 287, *First Steps to School Readiness*, Section 59-152-25(G).

## **EARLY READINESS ASSESSMENT SUBCOMMITTEE (ERAS)**

Act 284, the Read to Succeed Act, defines a readiness assessment as an assessment “used to analyze students’ literacy, mathematical, physical, social, and emotional-behavioral competencies in prekindergarten or kindergarten” (Section 59-155-120 (4)). For full detail, see attached memo.

The early childhood community in the state has been very engaged around this issue and has progressed toward defining the domains and determining the components of each domain. Over the past two years, a ten-state consortium has considered the domains and determining the components. While South Carolina is not a formal partner in the consortium, it has been a participant in the discussions. Preliminary findings from the consortium’s work are expected at the end of October.

### **ERAS Subcommittee Members**

---

Barbara Hairfield, Chair  
Margaret Anne Gaffney, Vice Chair  
Anne Bull  
Sen. Mike Fair  
Deb Marks  
Rep. Andy Patrick  
Patti Tate

## EARLY READINESS ASSESSMENT SUBCOMMITTEE (ERAS)

### Early Readiness Assessment Subcommittee Timeline (with Meeting Dates)

---

Date	Time & Location	Focus	Discussion
11.17.14	9:30-10 (Tour) 10-12 noon	Overview and Approaches to Learning and Social/Emotional	<ul style="list-style-type: none"> <li>• Background on Assessment and Domains</li> <li>• Current efforts regarding early learning standards, assessment</li> <li>• Lexington 4's experience with high-impact early education for ages three through five, with a focus on these two domains</li> </ul>
1.26.15	TBD	Language/Literacy and Cognitive	<ul style="list-style-type: none"> <li>• Overview and status of Circle assessment implementation (part of CDEP Evaluation).</li> <li>• Within discussion about Cognitive, address math</li> </ul>
3.23.15	TBD	Physical Well-Being and Health; Wrap Up	<ul style="list-style-type: none"> <li>• Current state efforts</li> <li>• Institute for Child Success input about readiness research</li> </ul>
4.17.15		Draft recommendations to ERAS members for review.	
4.20.15-5.1.15		Public comment on draft recommendations.	
5.8.15		Draft recommendations revised and forwarded to EOC.	
6.8.15		ERAS recommendations to EOC for approval. Recs sent to State Board of Education.	

## EARLY READINESS ASSESSMENT SUBCOMMITTEE (ERAS)

### MEMORANDUM

**TO:** Barry Bolen, Chair of State Board of Education  
Traci Young Cooper, Chair Elect of State Board of Education

**FROM:** Melanie Barton 

**DATE:** June 30, 2014

**IN RE:** Early Readiness Assessment Characteristics

On behalf of the Education Oversight Committee (EOC), I am forwarding to you the recommendations of the Committee regarding proviso 1A.76. of the 2014-15 General Appropriation Act as ratified by the General Assembly on June 5, 2014.

**1A.76.** (SDE-EIA: Prekindergarten and Kindergarten Assessments)

For the current fiscal year, all students entering a publicly funded prekindergarten or public kindergarten must be administered a readiness assessment that shall focus on early language and literacy development no later than the forty fifth day of the school year. The readiness assessment must be approved by the State Board of Education. The approved readiness assessment must be aligned with kindergarten and first grade standards for English/language arts and mathematics. The results of the assessment and the developmental intervention strategies recommended or services needed to address the child's identified needs must be provided, in writing, to the parent or guardian. The readiness assessment may not be used to deny a student admission or to progress to kindergarten or first grade.

The Education Oversight Committee shall recommend the characteristics of the readiness assessment for children in prekindergarten and kindergarten, focused on early language and literacy development, to the State Board of Education no later than July 30. Prior to submitting the recommendation to the State Board, the Education Oversight Committee shall seek input from the South Carolina First Steps to School Readiness Board of Trustees and other early childhood advocates. The State Board must move expeditiously to approve or modify the criteria submitted by the committee. Once approved, with the assistance of the

David Whittemore  
CHAIR

Daniel B. Merck  
VICE CHAIR

J. Phillip Bowers

Anne H. Bull

Mike Fair

Margaret Anne Gaffney

Barbara B. Hairfield

Nikki Haley

R. Wesley Hayes, Jr.

Alex Martin

John W. Matthews, Jr.

Joseph H. Neal

Andrew S. Patrick

Neil C. Robinson, Jr.

J. Roland Smith

Patti J. Tate

John Warner

Mick Zais

Melanie D. Barton  
EXECUTIVE DIRECTOR

## EARLY READINESS ASSESSMENT SUBCOMMITTEE (ERAS)

Education Oversight Committee, the board shall develop a solicitation to be used in procuring the assessment. The solicitation must be forwarded to the Executive Director of the Budget and Control Board who must immediately move to procure the readiness assessment in order to meet the forty- five day requirement. The Executive Director is authorized to make changes to the solicitation with the consent of the Chairman of the State Board of Education and the Chairman of the Education Oversight Committee. The Department of Education must bear the costs of the procurement.

The proviso specifically requires that the EOC recommend “no later than July 30” to the State Board of Education the characteristics of a readiness assessment for children entering publicly funded prekindergarten (four-year-old kindergarten) and kindergarten (five-year-old kindergarten) by the 45<sup>th</sup> day of the school year, which equates to the first nine weeks of school. Prior to submitting its recommendations, the EOC is required to seek input from the Office of First Steps to School Readiness Board of Trustees and other early childhood advocates.

### Background

The General Assembly focused several of its key public education initiatives on improving reading achievement. The General Assembly this session enacted the Read to Succeed legislation that addresses the importance of early identification and intervention of struggling readers, of teacher preparation and training, and of parental involvement and community support to systemically improve reading achievement. Furthermore, the General Assembly expanded the Child Development Education Pilot Program (CDEPP). Any four-year-old who qualifies for the free or reduced price Federal lunch program and/or Medicaid and who resides in a school district where at a poverty index of least 70 percent or more is eligible to participate in a full-day education program in a public or private center at no cost. The legislature also addressed the importance of a readiness assessment focused on early literacy based on evidence that:

*The assessment of emergent literacy skills can serve to identify those children who may be at risk for later reading difficulties. Furthermore, assessment can guide the content and delivery of early literacy instruction. Failure to identify children early and provide appropriate intervention to promote emergent literacy skills is likely to have serious repercussions for later development of conventional reading skills.<sup>2</sup>*

In the fall of 2013 the EOC contacted Dr. William H. Brown, leader of the previous CDEPP evaluations to assist the agency in planning and implementing an evaluation of the CDEPP Expansion. Dr. Brown and colleagues from the University of South Carolina convened a well-informed task force of individuals familiar with CDEPP and early childhood services including:<sup>3</sup>

- Dr. Lorin Anderson, Distinguished Professor Emeritus, University of South Carolina
- Dr. Kevin Andrews, EOC
- Lillian Atkins, Lexington School District 4, Early Childhood Center

---

<sup>2</sup> Spencer, E., Spencer, T., Goldstein, H., & Scheider, N. (2013). Identifying early literacy learning needs: Implications for child outcome standards and assessment systems. In T. Shanahan & C. Lonigan (Eds.), *Literacy in preschool and kindergarten children: The National Early Literacy Panel and beyond* (pp. 45-70). Baltimore, MD: Paul H. Brookes.

<sup>3</sup> 2013-14 Expansion of the SC Child Development Education Pilot Program (CDEPP) Report. Appendix I. SC Education Oversight Committee. January 21, 2014. 2013-14

## EARLY READINESS ASSESSMENT SUBCOMMITTEE (ERAS)

- Melanie Barton, EOC
- Leigh Bolick, DSS Early Care and Education
- Dr. Bill Brown, University of South Carolina
- Floyd Creech, Florence School District 1
- Dr. Leigh D'Amico, Office of Program Evaluation, University of South Carolina
- Penny Danielson, SC Department of Education
- Mary Lynn Diggs, Head Start Collaboration
- Pam Dinkins, Central Carolina Technical College
- Dr. Christine DiStefano, University of South Carolina
- Dewayne Frederick, Beaufort Jasper EOC Head Start
- Rachael Fulmer, State Budget Division
- Dr. Susan Gehlmann, Berkeley County Schools, Director of Elementary Education
- Betty Harrington, Clarendon School District 2, Manning Early Childhood Center
- Ashley Hutchinson, Beaufort County Schools
- Debbie Hylar, The School Foundation, Florence School District 1
- Mellanie Jinnette, SC Department of Education
- Kassie Mae Miller, Office of Program Evaluation, University of South Carolina
- Jenny May, Children's Law Center, University of South Carolina
- Katy Sides, Institute for Child Success
- Dr. Reginald Williams, South Carolina State University
- Dr. Dan Wuori, Office of First Steps to School Readiness
- Dana Yow, EOC

The stakeholders met on November 1, 2013 in Columbia and began working on a framework and glossary. The framework and glossary were recommended and published in the EOC's annual evaluation of CDEPP.<sup>3</sup> The framework identifies key academic and social accomplishments that must be addressed if children are to succeed in kindergarten. Included in these accomplishments are language and literacy skills defined as:

*Critical language and literacy skills included but are not necessarily limited to communication of needs and preferences, listening, receptive and expressive vocabulary, phonological awareness, alphabetic principal and knowledge, print and book knowledge, prewriting and writing skills, and reading comprehension.*

In addition the EOC has been working since last summer with officials from the Florida Center for Reading Research at Florida State University and from the Florida Just Read! Office and with early childhood experts in South Carolina at the school, district, higher education and state levels on the P-20 reading initiative.

In April of 2014, the EOC staff participated in a Think Tank on School Readiness in Greenville, sponsored by the Institute for Child Success (ICS) in Greenville. ICS had published an issue brief and extended white paper, School Readiness: Moving Toward a Shared Definition, Standardized Assessment, and Unifying Language. On June 16, 2014 the EOC contacted the staff of ICS and asked ICS to review the nine characteristics of a readiness assessment focused on early language and literacy development that were tentatively approved by the EOC on June 8. Based upon the input of the Think Tank and the research paper, ICS concurred that the nine

---

<sup>3</sup> 2013-14 Expansion of the SC Child Development Education Pilot Program (CDEPP) Report. Section V. SC Education Oversight Committee. January 21, 2014.

## EARLY READINESS ASSESSMENT SUBCOMMITTEE (ERAS)

characteristics capture many of the elements ICS considers “essential to an effective early language and literacy assessment. ICS sees print awareness and orientation, verbal communication, picture and letter recognition, ability to tell a story, beginning of proper oral word use and sentence structure, alphabetic principle and knowledge, prewriting and writing/pretend, listening/story recall and vocabulary as important elements of this assessment, which are in line with the elements included in the EOC recommended assessment characteristics.”<sup>i</sup>

On June 10, 2014 the EOC staff mailed and emailed letters to the Executive Director and Deputy Director of the Office of First Steps to School Readiness, to the Governor and to the Vice-Chair of the Board of Trustees to the Office of First Steps requesting input on the proposed nine characteristics. The First Steps Board of Trustees met on June 26, 2014 and voted to recommend three additional characteristics of the assessment to the EOC. These recommendations are included in the following:

### **Recommendation:**

Consequently, per the requirements of Proviso 1A.76. the Education Oversight Committee recommends to the State Board of Education, the following characteristics of an early language and literacy assessment for students entering four-year-old and five-year-old kindergarten programs during the 2014-15 school year.

A readiness assessment administered to children in four-year-old and five-year-old kindergarten in school year 2014-15 and focused on early language and literacy development should have the following characteristics:

1. The assessment should measure critical language and literacy skills including, but not limited to communication of needs and preferences, listening, receptive and expressive vocabulary, phonological awareness, alphabetic principles and knowledge, print and book knowledge, prewriting and writing skills, and reading comprehension.
2. The assessment must be supported by empirical data or evidence documenting that it measures these critical language and literacy skills and that these competencies are predictive of later reading and writing success.
3. The assessment should provide student-level results that can then inform individual literacy instruction by teachers.
4. The assessment should provide student-level results that can assist parents or guardians in providing appropriate support to assist their child’s language development.
5. The assessment should be able to measure student growth from one year to the next, from 4K to 5K, at a minimum.
6. The assessment should provide accommodations for children with disabilities and children who are English language learners.
7. The assessment should give timely, student-level feedback and reports to parents, teachers, schools and the state.

## EARLY READINESS ASSESSMENT SUBCOMMITTEE (ERAS)

8. The assessment should demonstrate alignment with South Carolina English language arts standards.
9. The assessment should have a well-documented and detailed description of its development and history, including what states use the assessment to guarantee the assessment's reliability and validity.
10. The assessment should be curriculum neutral and therefore not require the use of any specific early childhood curriculum in the publicly funded prekindergarten or public kindergarten programs.

In addition, based upon the input received, the EOC also recommends to the State Board of Education that vendors responding to the request for proposal be asked to:

- Document the specific components of the assessment, including but not limited to, print awareness and orientation, verbal communication, picture and letter recognition, ability to tell a story, beginning of proper oral word use and sentence structure, alphabetic principle and knowledge, prewriting and writing/pretend, listening/story recall and vocabulary;
- Document the amount of ongoing professional development that can be provided to schools and districts; and
- Document the amount of time that will be required to administer the assessment so that the assessment is respectful of classroom teachers' time and need for professional development.

C: Nancy Busbee, SC Department of Education  
Liz Jones, SC Department of Education

---

<sup>1</sup> Email from Katy Sides, Director of Research and Grants, Institute for Child Success, to Melanie Barton, Executive Director of the EOC, dated June 21, 2014.

## Proviso Language for Early Childhood Assessment

**1A.76.** (SDE-EIA: Prekindergarten and Kindergarten Assessments) For the current fiscal year, all students entering a publicly funded prekindergarten or public kindergarten must be administered a readiness assessment that shall focus on early language and literacy development no later than the forty fifth day of the school year. The readiness assessment must be approved by the State Board of Education. The approved readiness assessment must be aligned with kindergarten and first grade standards for English/language arts and mathematics. The results of the assessment and the developmental intervention strategies recommended or services needed to address the child's identified needs must be provided, in writing, to the parent or guardian. The readiness assessment may not be used to deny a student admission or to progress to kindergarten or first grade.

The **Education Oversight Committee shall recommend the characteristics of the readiness assessment for children in prekindergarten and kindergarten, focused on early language and literacy development,** to the State Board of Education **no later than July thirtieth.** Prior to submitting the recommendation to the State Board, **the Education Oversight Committee shall seek input from the South Carolina First Steps to School Readiness Board of Trustees and other early childhood advocates.** The State Board must move expeditiously to approve or modify the criteria submitted by the committee. **Once approved, with the assistance of the Education Oversight Committee, the board shall develop a solicitation to be used in procuring the assessment.** The solicitation must be forwarded to the Executive Director of the Budget and Control Board who must immediately move to procure the readiness assessment in order to meet the forty-five day requirement. The Executive Director is authorized to make changes to the solicitation with the consent of the Chairman of the State Board of Education and the Chairman of the Education Oversight Committee. The Department of Education must bear the costs of the procurement.

**South Carolina General Assembly**  
120th Session, 2013-2014

**A287, R295, H3428**

**STATUS INFORMATION**

General Bill

Sponsors: Reps. Allison, Erickson, M.S. McLeod, J.E. Smith, Spires, Hiott, Owens, Whitmire, Douglas, Hamilton, Bannister, Neal, Alexander, Weeks, Powers Norrell, Bales, Anderson, Robinson-Simpson, Williams, Henderson, Sottile, Munnerlyn, Rutherford, Vick, R.L. Brown, Whipper, Branham, Govan, J.R. Smith, Hayes, George, Funderburk, W.J. McLeod, Bernstein, Felder, Wood, Patrick and Jefferson  
Document Path: I:\council\bill\agm\19837ab13.docx

Introduced in the House on January 24, 2013

Introduced in the Senate on March 5, 2014

Last Amended on June 4, 2014

Passed by the General Assembly on June 5, 2014

Governor's Action: June 11, 2014, Vetoed

Legislative veto action(s): Veto overridden

Summary: First Steps to School Readiness Initiative

**HISTORY OF LEGISLATIVE ACTIONS**

Date	Body	Action Description with journal page number
1/24/2013	House	Introduced and read first time ( <a href="#">House Journal-page 30</a> )
1/24/2013	House	Referred to Committee on <b>Education and Public Works</b> ( <a href="#">House Journal-page 30</a> )
1/29/2013	House	Member(s) request name added as sponsor: Douglas, Hamilton, Bannister, Neal, Alexander, Weeks, Powers Norrell, Bales, Anderson, Robinson-Simpson, Williams
1/30/2013	House	Member(s) request name added as sponsor: Henderson, Sottile, Munnerlyn, Rutherford, Vick, R.L.Brown, Whipper, Branham, Govan, J.R.Smith, Hayes, George
2/6/2013	House	Member(s) request name added as sponsor: Funderburk
2/7/2013	House	Member(s) request name added as sponsor: W.J.McLeod
2/20/2013	House	Member(s) request name added as sponsor: Bernstein
2/27/2013	House	Member(s) request name added as sponsor: Felder
2/20/2014	House	Member(s) request name added as sponsor: Wood
2/26/2014	House	Committee report: Favorable with amendment <b>Education and Public Works</b> ( <a href="#">House Journal-page 51</a> )
3/4/2014	House	Member(s) request name added as sponsor: Patrick, Jefferson
3/4/2014	House	Amended ( <a href="#">House Journal-page 42</a> )
3/4/2014	House	Read second time ( <a href="#">House Journal-page 42</a> )
3/4/2014	House	Roll call Yeas-113 Nays-0 ( <a href="#">House Journal-page 69</a> )
3/5/2014	House	Read third time and sent to Senate ( <a href="#">House Journal-page 13</a> )
3/5/2014	Senate	Introduced and read first time ( <a href="#">Senate Journal-page 5</a> )
3/5/2014	Senate	Referred to Committee on <b>Education</b> ( <a href="#">Senate Journal-page 5</a> )
5/6/2014	Senate	Committee report: Favorable with amendment <b>Education</b> ( <a href="#">Senate Journal-page 8</a> )
6/4/2014	Senate	Committee Amendment Amended and Adopted ( <a href="#">Senate Journal-page 35</a> )
6/4/2014	Senate	Read second time ( <a href="#">Senate Journal-page 35</a> )
6/4/2014	Senate	Roll call Ayes-40 Nays-3 ( <a href="#">Senate Journal-page 35</a> )
6/4/2014	Senate	Unanimous consent for third reading on next legislative day ( <a href="#">Senate</a>

[Journal-page 35](#))  
6/5/2014 Senate Read third time and returned to House with amendments ([Senate Journal-page 20](#))  
6/5/2014 House Concurred in Senate amendment and enrolled ([House Journal-page 27](#))  
6/5/2014 House Roll call Yeas-105 Nays-0 ([House Journal-page 29](#))  
6/5/2014 Ratified R 295  
6/11/2014 Vetoed by Governor  
6/17/2014 House Veto overridden by originating body Yeas-106 Nays-0  
6/18/2014 Senate Veto overridden Ayes-38 Nays-2  
7/2/2014 Effective date 06/18/14  
7/9/2014 Act No. 287

View the latest [legislative information](#) at the LPITS web site

## **VERSIONS OF THIS BILL**

[1/24/2013](#)

[2/26/2014](#)

[3/4/2014](#)

[5/6/2014](#)

[6/4/2014](#)

**NOTE: THIS COPY IS A TEMPORARY VERSION. THIS DOCUMENT WILL REMAIN IN THIS VERSION UNTIL PUBLISHED IN THE ADVANCE SHEETS TO THE ACTS AND JOINT RESOLUTIONS. WHEN THIS DOCUMENT IS PUBLISHED IN THE ADVANCE SHEET, THIS NOTE WILL BE REMOVED.**

(A287, R295, H3428)

**AN ACT TO AMEND THE CODE OF LAWS OF SOUTH CAROLINA, 1976, BY ADDING SECTION 59-152-25 SO AS TO DEFINE TERMS CONCERNING THE FIRST STEPS TO SCHOOL READINESS INITIATIVE; BY ADDING SECTION 59-152-32 SO AS TO PROVIDE THE FIRST STEPS BOARD OF TRUSTEES SHALL DEVELOP A COMPREHENSIVE LONG-RANGE INITIATIVE FOR SCHOOL READINESS AND A STRATEGY FOR FULFILLING THIS INITIATIVE; BY ADDING SECTION 59-152-33 SO AS TO PROVIDE A STATEWIDE ASSESSMENT OF STUDENT SCHOOL READINESS; BY ADDING SECTION 63-11-1725 SO AS TO PROVIDE FOR THE COMPOSITION, FUNCTION, AND DUTIES OF THE SOUTH CAROLINA EARLY CHILDHOOD ADVISORY COUNCIL; BY ADDING SECTION 63-11-1735 SO AS TO PROVIDE FIRST STEPS SHALL ENSURE THE COMPLIANCE OF BABYNET WITH FEDERAL MAINTENANCE OF EFFORT REQUIREMENTS, AND TO DEFINE CERTAIN TERMS; TO AMEND SECTION 59-152-10, RELATING TO THE ESTABLISHMENT OF FIRST STEPS, SO AS TO REDESIGNATE COUNTY FIRST STEPS PARTNERSHIPS AS LOCAL FIRST STEPS PARTNERSHIPS AND PROVIDE FOR THE CONTINUANCE OF CERTAIN COLLABORATIONS AND PARTNERSHIPS; TO AMEND SECTION 59-152-20, RELATING TO THE PURPOSE OF FIRST STEPS, SO AS TO REDESIGNATE COUNTY PARTNERSHIPS AS LOCAL PARTNERSHIPS; TO AMEND SECTION 59-152-30, RELATING TO THE GOALS OF FIRST STEPS, SO AS TO RESTATE CERTAIN GOALS OF STUDENT READINESS; TO AMEND SECTION 59-152-40, RELATING TO OVERSIGHT OF THE INITIATIVE BY THE FIRST STEPS BOARD OF TRUSTEES, SO AS TO REQUIRE THE BOARD ALSO BE ACCOUNTABLE FOR THE INITIATIVE; TO AMEND SECTION 59-152-50, RELATING TO THE ESTABLISHMENT OF THE OFFICE OF FIRST STEPS TO SCHOOL READINESS,**

SO AS TO REVISE THE TIME AND MANNER FOR REQUIRED PERFORMANCE AUDITS, REVISE ONGOING DATA COLLECTION PROVISIONS, AND TO CORRECT AN OBSOLETE REFERENCE; TO AMEND SECTION 59-152-60, RELATING TO FIRST STEPS PARTNERSHIPS, SO AS TO PROVIDE EACH COUNTY MUST BE REPRESENTED AND SERVED BY A LOCAL PARTNERSHIP BOARD, TO PROVIDE THAT MEETINGS AND ELECTIONS OF LOCAL PARTNERSHIP BOARDS ARE SUBJECT TO THE FREEDOM OF INFORMATION ACT AND TO IMPOSE CERTAIN DISCLOSURE REQUIREMENTS, TO SPECIFY AND REVISE REQUIREMENTS FOR THE MEMBERSHIP COMPOSITION OF A LOCAL PARTNERSHIP BOARD, TO PROVIDE THE BOARD OF TRUSTEES SHALL CONDUCT A FORMAL REVIEW OF THE MEMBERSHIP CATEGORIES OF FIRST STEPS PARTNERSHIP BOARD COMPOSITION, MAKE RELATED FINDINGS CONCERNING THE CONTINUED APPLICABILITY AND APPROPRIATENESS OF THESE CATEGORIES, TO REPORT ITS FINDINGS TO THE GENERAL ASSEMBLY, AND TO MAKE CONFORMING CHANGES, TO AMEND SECTION 59-152-70, RELATING TO THE POWERS AND DUTIES OF A LOCAL PARTNERSHIP BOARD, SO AS TO PROVIDE REQUIREMENTS CONCERNING THE COMPREHENSIVE PLAN OF EACH LOCAL PARTNERSHIP BOARD, TO REVISE THE REQUIREMENTS CONCERNING COUNTY NEEDS ASSESSMENTS, RECORD KEEPING AND REPORTING, TO PROVIDE STAFFING PURSUANT TO LOCAL BYLAWS, AND TO PROVIDE MULTIPLE LOCAL PARTNERSHIPS MAY COLLABORATE TO MAXIMIZE EFFICIENT DELIVERY OF SERVICES AND THE EXECUTION OF THEIR DUTIES AND POWERS; TO AMEND SECTION 59-152-90, RELATING TO FIRST STEPS GRANTS, SO AS TO ESTABLISH THE GRANTS AS LOCAL PARTNERSHIP GRANTS, AND TO REVISE THE PROCESS FOR OBTAINING A GRANT AND THE METHOD OF ALLOCATING GRANT FUNDS; TO AMEND SECTION 59-152-100, RELATING TO USE OF FIRST STEPS GRANT FUNDS, SO AS TO PROVIDE THE SECTION APPLIES TO GRANTS EXPENDED BY A FIRST STEPS PARTNERSHIP, AND TO REVISE THE PERMISSIBLE USES OF GRANT FUNDS; TO AMEND SECTION 59-152-120, RELATING TO THE USE OF GRANT FUNDS FOR CAPITAL EXPENDITURES, SO AS TO REVISE THE PURPOSE FOR

**WHICH FUNDS MAY BE USED AND TO REQUIRE PRIOR APPROVAL OF THE BOARD OF TRUSTEES; TO AMEND SECTION 59-152-130, RELATING TO A MANDATORY MATCHING OF FUNDS BY LOCAL PARTNERSHIPS, SO AS TO REVISE THE MANDATORY AMOUNT, TO ENCOURAGE PRIVATE CONTRIBUTIONS TO HELP LOCAL PARTNERSHIPS MEET THEIR MANDATORY MATCHING REQUIREMENT, AND TO DELETE A PROVISION ALLOWING CERTAIN EXPENSES TO BE INCLUDED IN DETERMINING MATCHING FUNDS; TO AMEND SECTION 59-152-140, RELATING TO THE PERMISSIBILITY OF CARRY FORWARD FUNDS BY A LOCAL PARTNERSHIP, SO AS TO MAKE A CONFORMING CHANGE; TO AMEND SECTION 59-152-150, RELATING TO ACCOUNTABILITY SYSTEMS, SO AS TO PROVIDE FOR THE EXCLUSIVE USE OF ALL PRIVATE AND NONSTATE FUNDS SOUGHT BY LOCAL PARTNERSHIPS; TO AMEND SECTION 59-152-160, RELATING TO PROGRESS EVALUATIONS, SO AS TO REVISE RELATED REQUIREMENTS TO INCLUDE AN INDEPENDENT EVALUATION OF EACH PREVALENT PROGRAM INVESTMENT IN A CERTAIN MANNER AND TO IMPOSE RELATED REPORTING REQUIREMENTS; TO AMEND SECTION 63-11-1720, RELATING TO THE FIRST STEPS BOARD OF TRUSTEES, SO AS TO REVISE THE COMPOSITION OF THE BOARD, TO CREATE THE OFFICE OF FIRST STEPS STUDY COMMITTEE AND PROVIDE FOR ITS FUNCTIONS AND COMPOSITION, AND TO REAUTHORIZE THE PROVISIONS OF ACT 99 OF 1999 UNTIL JULY 1, 2016; TO AMEND SECTION 63-11-1730, RELATING TO POWERS OF THE BOARD OF TRUSTEES, SO AS TO MAKE CONFORMING CHANGES, DELETE OBSOLETE LANGUAGE, AND ADD MISCELLANEOUS PROVISIONS; TO AMEND SECTION 1-5-40, RELATING TO DUTIES OF THE SECRETARY OF STATE TO MONITOR STATE BOARD AND COMMISSIONS, SO AS TO INCLUDE THE BOARD OF TRUSTEES; AND TO REPEAL SECTION 59-152-80 RELATING TO FIRST STEPS GRANTS AND SECTION 59-152-110 RELATING TO THE USE OF FIRST STEPS LOCAL PARTNERSHIP GRANT FUNDS.**

Be it enacted by the General Assembly of the State of South Carolina:

**Definitions**

SECTION 1. Chapter 152, Title 59 of the 1976 Code is amended by adding:

“Section 59-152-25. For the purposes of this title:

(A) ‘Evidence-based program’ means a program based on a clear and consistent program model that is designated as such by the South Carolina First Steps to School Readiness Board of Trustees because the program:

(1)(a) is grounded in published, peer-reviewed research that is linked to determined outcomes;

(b) employs well-trained and competent staff to whom the program provides continual professional development that is relevant to the specific model being delivered;

(c) demonstrates strong linkages to other community-based services; and

(d) is operated to ensure program fidelity; or

(2) is commonly recognized by experts in the field as such a program.

(B) ‘Board of trustees’ or ‘board’ means the First Steps to School Readiness Board of Trustees pursuant to Article 17, Title 63.

(C) ‘Evidence-informed program’ means a program that does not satisfy the criteria of an evidenced-based program model but that the South Carolina First Steps to School Readiness Board of Trustees determines is supported by research indicating its potential effectiveness.

(D) ‘Partnership’ refers to a local First Steps organization designated as such by the South Carolina First Steps to School Readiness Board of Trustees, organized under Section 501(c)(3) of the Internal Revenue Code as a nonprofit corporation, and formed to further, within the coverage area, the purpose and goals of the First Steps initiative as stated in Sections 59-152-20 and 59-152-30.

(E) ‘Preschool child’ means a child from the prenatal stage to entry into five-year-old kindergarten.

(F) ‘Prevalent program investment’ means a program administered by a partnership and funded with state grant money, which accounts for at least ten percent of total programmatic spending in First Steps.

(G) ‘School readiness’ means the level of child development necessary to ensure early school success as measured in the following domains: physical health and motor skills; emotional and social competence; language and literacy development; and mathematical thinking and cognitive skills. School readiness is supported by the

knowledge and practices of families, caregivers, healthcare providers, educators, and communities.”

### **Comprehensive long-range initiative**

SECTION 2. Chapter 152, Title 59 of the 1976 Code is amended by adding:

“Section 59-152-32. (A) In Section 63-11-1720, the South Carolina First Steps to School Readiness Board of Trustees may carry out its assigned functions by developing a comprehensive long-range initiative for improving early childhood development, increasing school readiness and literacy, establishing results-oriented measures and objectives, and assessing whether services provided by First Steps Partnerships to children and families are meeting the goals and achieving the results established in this chapter. The board shall do the following to fulfill these duties before July 1, 2015:

(1) in consultation with the State Board of Education, and with the advice and consent of that board, adopt a description of school readiness that includes specific:

(a) characteristics and development levels of a ready child that must include, but are not limited to, emerging literacy, numeracy, and physical, social, and emotional competencies;

(b) characteristics of school, educators, and caregivers that the board considers necessary to create an optimal learning environment for the early years of students’ lives; and

(c) characteristics of the optimal environment which would lead to the readiness of students and their continued success;

(2) establish specific benchmarks and objectives for use by the board of trustees, local partnership boards, and any agency that administers a program to benefit preschool children;

(3) determine whether state and local programs and activities are effective and contribute to achieving the goals established in Section 59-152-30; and

(4) publish and distribute a list of approved evidence-based and evidence-informed programs.

(B) The board of trustees shall review the school readiness description, benchmarks, and objectives and adopt any revisions it considers appropriate before December 31, 2014, again before December 31, 2019, and every five years afterward.”

### **School readiness assessment**

SECTION 3. Chapter 152, Title 59 of the 1976 Code is amended by adding:

“Section 59-152-33. (A) Before July 1, 2015, the South Carolina Education Oversight Committee shall recommend an assessment to evaluate and measure the school readiness of students prior to their entrance into a prekindergarten or kindergarten program per the goals pursuant to Section 59-152-30 to the State Board of Education. Prior to submitting the recommendation to the State Board, the Education Oversight Committee shall seek input from the South Carolina First Steps to School Readiness Board of Trustees and other early childhood advocates. In making the recommendation, the South Carolina Education Oversight Committee shall consider assessments that are research-based, reliable, and appropriate for measuring readiness. The assessment chosen must evaluate each child’s early language and literacy development, numeracy skills, physical well-being, social and emotional development, and approaches to learning. The assessment of academic readiness must be aligned with first and second grade standards for English language arts and mathematics. The purpose of the assessment is to provide teachers, administrators, and parents or guardians with information to address the readiness needs of each student, especially by identifying language, cognitive, social, emotional, and health needs, and providing appropriate instruction and support for each child. The results of the screenings and the developmental intervention strategies recommended to address the child’s identified needs must be provided, in writing, to the parent or guardian. Reading instructional strategies and developmental activities for children whose oral language and emergent literacy skills are assessed to be below the national standards must be aligned with the district’s reading proficiency plan for addressing the readiness needs of each student. The school readiness assessment adopted by the State Board of Education may not be used to deny a student admission or progress to kindergarten or first grade. Every student entering the public schools for the first time in prekindergarten and kindergarten must be administered a readiness screening by the forty-fifth day of the school year.

(B) The results of individual students in a school readiness assessment may not be publicly reported.

(C) Following adoption of a school readiness assessment, the State Board of Education shall adopt a system for reporting population-level results that provides baseline data for measuring overall change and improvement in the skills and knowledge of students over time. The Department of Education shall house and monitor the system.

(D) The South Carolina First Steps to School Readiness Board of Trustees shall support the implementation of the school readiness assessment and must provide professional development to support the readiness assessment for teachers and parents of programs supported with First Steps funds. The board shall utilize the annual aggregate literacy and other readiness assessment information in establishing standards and practices to support all early childhood providers served by First Steps.”

### **Advisory council**

SECTION 4. Article 17, Chapter 11, Title 63 of the 1976 Code is amended by adding:

“Section 63-11-1725. (A) For the purposes of this article, ‘advisory council’ means the South Carolina Advisory Council established by Executive Order Number 2010-06 in compliance with the Improving Head Start for School Readiness Act of 2007, 42 U.S.C. Section 9837b, et seq.

(B) The membership of the advisory council is exclusively composed of the membership of the Board of Trustees of the South Carolina First Steps to School Readiness Initiative. Each voting and nonvoting member shall serve as a voting member of the South Carolina Advisory Council, concurrent with his service on the board.

(C) The advisory council is an entity distinct from the Board of Trustees and must act accordingly to fulfill its responsibilities under 42 U.S.C. Section 9837b(b)(1)(D)(i) of the Improving Head Start for School Readiness Act of 2007. The advisory council shall keep separate minutes that explicitly distinguish its actions and votes from those made when acting in the capacity of the board of trustees. The advisory council must officially adjourn before acting as the board of trustees, and the board of trustees shall adjourn before acting as the advisory council.

(D) The State Director of First Steps shall coordinate the activities of the advisory council. Pursuant to 42 U.S.C. Section 9837b(b)(1)(D)(i), the advisory council shall:

(1) conduct a periodic statewide needs assessment concerning the quality and availability of early childhood education and development programs and services for children from birth to the age of school entry, including an assessment of the availability of high-quality prekindergarten services for low income children in the State;

(2) identify opportunities for, and barriers to, collaboration and coordination among federally funded and state-funded child

development, child care, and early childhood education programs and services, including collaboration and coordination among state agencies responsible for administering these programs;

(3) develop recommendations for increasing the overall participation of children in existing federal, state, and local child care and early childhood education programs, including outreach to underrepresented and special populations;

(4) develop recommendations regarding the establishment of a unified data collection system for public early childhood education and development programs and services throughout the State;

(5) develop recommendations regarding statewide professional development and career advancement plans for early childhood educators in the State;

(6) assess the capacity and effectiveness of two-year and four-year public and private institutions of higher education in the State for supporting the development of early childhood educators, including the extent to which these institutions have in place articulation agreements, professional development and career advancement plans, and practice or internships for students to spend time in a Head Start or prekindergarten program;

(7) make recommendations for improvements in state early learning standards and undertake efforts to develop high-quality comprehensive early learning standards, as appropriate;

(8) develop and publish, using available demographic data, an indicators-based measure of school readiness at the state and community level;

(9) incorporate, within the periodic statewide needs assessments required in 42 U.S.C. Section 9837b, any data related to the capacity and efforts of private sector providers, Head Start providers, and local school districts to serve children from birth to age five, including fiscal, enrollment, and capacity data; and

(10) perform all other functions, as permitted under federal and state law, to improve coordination and delivery of early childhood education and development to children in this State.

(E) The advisory council shall designate a meeting as its annual meeting. All of the chief executive officers of the state agencies represented on the Early Childhood Advisory Council must attend the annual meeting in person.

(F) The advisory council shall prepare an annual report of its activities for presentation to the Governor and General Assembly.”

### **BabyNet, definitions, compliance with federal law**

SECTION 5. Article 17, Chapter 11, Title 63 of the 1976 Code is amended by adding:

“Section 63-11-1735. (A) For the purposes of this article:

(1) ‘BabyNet’ is the interagency early intervention system that is the Part C program in South Carolina.

(2) ‘I.D.E.A.’ means the Individuals with Disabilities Education Act, 20 U.S.C. Section 1400, et seq.

(3) ‘Maintenance of effort’ means the requirement of Part C that relevant state and local agencies maintain a specified level of financial support for early intervention services in compliance with 34 C.F.R. 303.124.

(4) ‘Part C program’ means a program of early intervention services to infants and toddlers with disabilities required in each state by I.D.E.A. and for which South Carolina First Steps to School Readiness is designated as the lead agency to administer the Part C program in South Carolina by Executive Order Number 2009-12 in compliance with Subchapter VIII, Chapter 33, Title 20, U.S. Code Annotated relating to Head Start programs, and as provided in Section 44-7-2520(A), which relates to definitions concerning the South Carolina Infants and Toddlers with Disabilities Act.

(B) First Steps shall ensure that BabyNet complies with the maintenance of effort requirement by coordinating with all agencies that provide early intervention services in this State to ensure they each properly document all Part C expenditures annually.”

#### **Establishment provision, conforming changes**

SECTION 6. Section 59-152-10 of the 1976 Code is amended to read:

“Section 59-152-10. There is established the South Carolina First Steps to School Readiness, a comprehensive, results-oriented initiative for improving early childhood development by providing, through local partnerships, public and private funds, and support for high-quality early childhood development and education services for children by providing support for their families’ efforts toward enabling their children to reach school ready to succeed.”

#### **Purposes revised**

SECTION 7. Section 59-152-20 of the 1976 Code is amended to read:

“Section 59-152-20. The purpose of the First Steps initiative is to develop, promote, and assist efforts of agencies, private providers, and public and private organizations and entities, at the state level and the community level, to collaborate and cooperate in order to focus and intensify services, assure the most efficient use of all available resources, and eliminate duplication of efforts to serve the needs of young children and their families. First Steps funds must not be used to supplant or replace any other funds being spent on services but must be used to expand, extend, improve, or increase access to services or to enable a community to begin to offer new or previously unavailable services in their community. The South Carolina First Steps to School Readiness Board of Trustees, Office of First Steps to School Readiness, and the local First Steps Partnerships shall ensure that collaborations, the existence and continued development of partnerships, and the sharing and maximizing of resources occur so that the funding of grants and services, as provided in this chapter, may continue.”

### **Goals, conforming changes**

SECTION 8. Section 59-152-30 of the 1976 Code is amended to read:

“Section 59-152-30. The goals for South Carolina First Steps to School Readiness are to:

- (1) provide parents with access to the support they might seek and want to strengthen their families and to promote the optimal development of their preschool children;
- (2) increase comprehensive services so children have reduced risk for major physical, developmental, and learning problems;
- (3) promote high-quality preschool programs that provide a healthy environment that will promote normal growth and development;
- (4) provide services so all children receive the protection, nutrition, and health care needed to thrive in the early years of life so they arrive at school ready to succeed; and
- (5) mobilize communities to focus efforts on providing enhanced services to support families and their young children so as to enable every child to reach school healthy and ready to succeed.”

### **Board of trustees’ obligations, accountability for initiative added**

SECTION 9. Section 59-152-40 of the 1976 Code is amended to read:

“Section 59-152-40. The South Carolina First Steps to School Readiness Board of Trustees established in Section 63-11-1720 shall

oversee and be accountable for the South Carolina First Steps to School Readiness initiative.”

**First Steps office, supervision, program evaluations, risk factors, data collection**

SECTION 10. Section 59-152-50 of the 1976 Code is amended to read:

“Section 59-152-50. Under supervision of the South Carolina First Steps to School Readiness Board of Trustees, there is created an Office of South Carolina First Steps to School Readiness. The office shall:

(1) provide to the board information on best practice, successful strategies, model programs, and financing mechanisms;

(2) review the local partnerships’ plans and budgets in order to provide technical assistance and recommendations regarding local grant proposals and improvement in meeting statewide and local goals;

(3) provide technical assistance, consultation, and support to local partnerships to facilitate their success including, but not limited to, model programs, strategic planning, leadership development, best practice, successful strategies, collaboration, financing, and evaluation;

(4) evaluate each program funded by the South Carolina First Steps to School Readiness Board of Trustees on a regular cycle to determine its effectiveness and whether it should continue to receive funding;

(5) recommend to the board the applicants meeting the criteria for First Steps partnerships and the grants to be awarded;

(6) submit an annual report to the board by December first which includes, but is not limited to, the statewide needs and resources available to meet the goals and purposes of the First Steps to School Readiness initiative, a list of risk factors the office considers to affect school readiness, identification of areas where client-level data is not available, an explanation of how First Steps programs reach the most at-risk children, the ongoing progress and results of the First Steps to School Readiness initiative statewide and locally, fiscal information on the expenditure of funds, and recommendations and legislative proposals to further implement the South Carolina First Steps to School Readiness initiative statewide;

(7) provide for ongoing data collection. Before June 30, 2015, the board shall develop a response to the November 2014 external evaluation of each prevalent program and the overall goals of the initiative, as provided in Section 59-125-160. The office shall contract with an external evaluator to develop a schedule for an in-depth and independent performance audit designed to measure the success of each

prevalent program in regard to its success in supporting the goals of the State Board and those set forth in Section 59-152-20 and Section 59-152-30. Results of all external performance audits must be published in the First Steps annual report; and

(8) coordinate the First Steps to School Readiness initiative with all other state, federal, and local public and private efforts to promote good health and school readiness of young children and support for their families.”

### **Local partnership boards, obligations, bylaws, membership**

SECTION 11. Section 59-152-60 of the 1976 Code is amended to read:

“Section 59-152-60. (A) Each county must be represented by a Local First Steps Partnership Board and each local board must provide services within every county it represents. A local partnership board must be comprised of individuals with resources, skills, knowledge, and interest in improving the readiness of young children for school. A list of all local partnership board members must be published in the partnership’s annual report, be reported annually to the local legislative delegation, and be on file with the Office of First Steps.

(B) The South Carolina First Steps to School Readiness Board of Trustees must establish bylaws for use by each local partnership board. These bylaws must, in addition to other requirements provided in this section, require that a meeting or election of a local partnership board comply with all Freedom of Information Act and IRS disclosure requirements.

(C) In accordance with the bylaws established by the board of trustees, each local partnership board shall maintain a total minimum membership of twelve and a maximum membership of thirty elected, appointed, and designated individuals. Elected and appointed members shall comprise a voting majority of the board.

(1) No more than four from any of the following categories may be elected to sit on a First Steps Partnership Board:

- (a) prekindergarten through primary educator;
- (b) family education, training, and support provider;
- (c) childcare or early childhood development/education provider;
- (d) healthcare provider;
- (e) local government;
- (f) nonprofit organization that provides services to families and children;

- (g) faith community;
- (h) business community;
- (i) philanthropic community; and
- (j) parents of preschool children.

(2) To assure that all areas of the county or multicounty region are adequately represented and reflect the diversity of the coverage area, each county legislative delegation may appoint up to four members to a local partnership board. Of these members, two are appointed by the Senate members and two by the House of Representative members of the delegation from persons with resources, skills, or knowledge that have specific interests in improving the readiness of young children for school.

(3) Each of the following entities located within a particular First Steps Partnership coverage area shall designate one member to serve as a member of the local First Steps Partnership Board:

- (a) county department of social services;
- (b) county department of health and environmental control;
- (c) Head Start or early Head Start;
- (d) county library; and
- (e) each of the school districts in the county.

(D) In conjunction with the independent external program evaluation established in Section 59-152-160, the South Carolina First Steps to School Readiness Board of Trustees shall conduct a formal review of the membership categories for First Steps Partnership Board composition. Upon completion of the review, the South Carolina First Steps to School Readiness Board of Trustees shall submit to the General Assembly a statement either verifying the continued applicability and appropriateness of the composition categories for First Steps Partnership Boards in place at that time, or recommending any appropriate and necessary changes.

(E) Members who miss more than three consecutive meetings without excuse or members who resign must be replaced from the same categories as their predecessor. The terms of the members of a local First Steps Partnership Board are for four years; however, membership on the board may not exceed eight consecutive years.

(F) The chairman of a local partnership board must be elected by majority vote of the board. The chairman shall serve a one-year term; however, the chairman may be elected to subsequent terms not to exceed a total of four consecutive years.

(G) A local First Steps Partnership board must have policies and procedures for conducting meetings and disclosing records comparable to those provided for in the Freedom of Information Act. Prior to every vote taken by the board, members must abstain from voting if the issue

being considered would result in a conflict of interest. The abstention must be noted in the minutes of the meeting.”

**Local partnership boards, comprehensive plans, staff costs, efficiency collaborations, performance reviews**

SECTION 12. Section 59-152-70 of the 1976 Code is amended to read:

“Section 59-152-70. (A) A First Steps Partnership Board shall, among its other powers and duties:

(1) adopt bylaws as established by the First Steps to School Readiness Board to effectuate the provisions of this chapter which must include the creation of a periodic meeting schedule;

(2) coordinate a collaborative effort at the county or multicounty level which will bring the community together to identify the area needs related to the goals of First Steps to School Readiness; develop a strategic long-term plan for meeting those needs; develop specific initiatives to implement the elements of the plan; and integrate service delivery where possible;

(3) coordinate and oversee the implementation of the comprehensive strategic plan including, but not limited to, direct service provision, contracting for service provision, and organization and management of volunteer programs;

(4) effective July 1, 2016, each partnership’s comprehensive plan shall include the following core functions:

(a) service as a local portal connecting families of preschool children to community-based services they may need or desire to ensure the school readiness of their children;

(b) service as a community convener around the needs of preschool children and their families; and

(c) support of state-level school readiness priorities as determined by the State Board;

(5) update a needs assessment every three years;

(6) implement fiscal policies and procedures as required by the First Steps office and as needed to ensure fiscal accountability of all funds appropriated to the partnership;

(7) keep accurate records of the partnership’s board meetings, board member’s attendance, programs, and activities for annual submission to the First Steps to School Readiness Board of Trustees;

(8) collect information and submit an annual report by October first to the First Steps to School Readiness Board of Trustees, and otherwise participate in the annual review and the three-year evaluation

of operations and programs. Reports must include, but not be limited to:

(a) determination of the current level and data pertaining to the delivery and effectiveness of services for young children and their families, including the numbers of preschool children and their families served;

(b) strategic goals for increased availability, accessibility, quality, and efficiency of activities and services for young children and their families which will enable children to reach school ready to succeed;

(c) monitoring of progress toward strategic goals;

(d) report on implementation activities;

(e) recommendations for changes to the strategic plan which may include new areas of implementation;

(f) evaluation and report of program effectiveness and client satisfaction before, during, and after the implementation of the strategic plan, where available; and

(g) estimation of cost savings attributable to increased efficiency and effectiveness of delivery of services to young children and their families, where available.

(B) Each local partnership may, in the performance of its duties, employ or acquire staff pursuant to the local partnership bylaws established by the South Carolina First Steps School to Readiness Board of Trustees. Overhead costs of a First Step partnership's operations may not exceed eight percent of the total state funds appropriated for partnership grants. The South Carolina First Steps to School Readiness Board of Trustees shall contract with an independent cost accountant to provide recommendations as to an adequate, and not excessive, overhead cost rate for individual partnerships no later than July 1, 2017. Once these recommendations are received, the First Steps to School Readiness Board of Trustees may adjust the overhead percentage for the local partnership.

(C) Each First Steps partnership may apply for, receive, and expend federal, state, and local funds, grants, and other funding in order to improve programs as provided in Section 59-152-25(A).

(D) To be designated a First Steps partnership, the local partnership must be a private nonprofit corporation organized under Section 501(c)(3) of the Internal Revenue Code.

(E) Multiple First Steps local partnerships may collaborate in a manner they determine will maximize the efficient and effective provision of First Steps services and programs to children and their families and best enable the partnerships to execute their duties and powers established in this chapter. In such a collaboration, partnerships

may merge or work in concert with one or more of their program, administrative, or development functions or establish multicounty partnerships. The decision to collaborate in the manner permitted in this subsection rests entirely with the local partnership boards of directors involved.

(F) As a condition of receiving state funds, each local partnership must be subject to performance reviews by South Carolina First Steps, including, but not limited to, local board functioning and collaboration and compliance with state standards and fiscal accountability. If any significant operational deficiencies or misconduct is identified within the partnership, the South Carolina First Steps Board of Trustees must identify a remedy with input from the local legislative delegation.”

### **Local partnership boards, grant funding**

SECTION 13. Section 59-152-90 of the 1976 Code is amended to read:

“Section 59-152-90. (A) A local partnership’s grant may be funded annually by the First Steps School to Readiness Board of Trustees and must be contingent on the General Assembly’s appropriation of funds to use for offering grants.

(B) To obtain a grant, a First Steps partnership must qualify by meeting the grant requirements established pursuant to subsection (C). A First Steps Partnership shall submit an application to the Office of First Steps in a format specified by the First Steps to School Readiness Board. The application shall include the level of funding requested, a description of needs of children and families; assets and resources available; and the proposed strategies to address needs as they relate to the goals of South Carolina First Steps to School Readiness.

(C)(1) Pursuant to Section 63-11-1730, the South Carolina First Steps to School Readiness Board of Trustees shall establish the grant qualification requirements. The board shall develop and promulgate grant qualification requirements in regulation pursuant to the Administrative Procedures Act. These requirements must include, but not be limited to, the following:

(a) adoption and adherence to bylaws promulgated by the South Carolina First Steps to School Readiness Board of Trustees, which includes, but is not limited to, compliance with the board composition, attendance, voting, and disclosure requirements;

(b) utilization of the South Carolina First Steps to School Readiness benchmarks and objectives;

(c) implementation of programs and activities, which are effective and contributing to state goals, and otherwise acceptable pursuant to the requirements of Chapter 152, Title 59; and

(d) fulfillment of all the duties in Section 59-152-70.

(2) The South Carolina First Steps to School Readiness Board of Trustees shall establish a formula, which includes the identification of the most relevant and effective factors, by which the allocations for qualifying partnership grants are calculated. The board shall identify the factors, develop the funding formula, and promulgate both in regulation pursuant to the Administrative Procedures Act. The factors utilized in the funding formula, and the weight given to each factor by the formula, must reflect that the intent of the General Assembly is to ensure that the money allocated to each local partnership is in proportion to the following:

(a) population of eligible children;

(b) population of at-risk children; and

(c) population with below average income.

(3) First Steps shall include the grant qualification requirements and funding formula on its website. The website information shall include formula details, announcements regarding proposed changes to the formula, and directions for public input.

(E) In conjunction with the independent external program evaluation established pursuant to Section 59-152-160, the board of trustees shall conduct a formal review of the grant qualification requirements and funding process adopted pursuant to subsections (C) and (D) and, upon completion of the review, shall submit to the General Assembly a statement either verifying the continued applicability and appropriateness of the grant qualification requirements and funding process in use at that time or recommending any appropriate and necessary changes.

(F) Funding must reflect the combined total allocations of the coverage area of a multicounty partnership.”

### **Local partnership boards, grant funding**

SECTION 14. Section 59-152-100 of the 1976 Code is amended to read:

“Section 59-152-100. (A) Grant funds expended by First Steps partnerships must be used to address the needs of young children and their families as identified in the partnerships’ comprehensive plans. The funds must be used to expand, extend, or improve the quality of provided services if there is evidence as to existing programs’

effectiveness; offer new or previously unavailable services in the area; or increase access to services. Partnership grant funds may not supplant comparable current expenditures by counties or state agencies on behalf of young children and their families, and may not be used where other state or federal funding sources are available. Partnerships are expected to collaborate with other community organizations or entities expending funds on early childhood services designed to impact school readiness in order to maximize impact and minimize duplication of efforts.

(B) At least seventy-five percent of state funds appropriated for programs must be used by the local partnership for evidence-based programs. Not more than twenty-five percent of state funds appropriated for programs to a local partnership may be used for evidence-informed programs.

(C) All activities and services provided by a local partnership must be made available to young children and families on a voluntary basis and must focus solely on ‘school readiness’ as defined in Section 59-152-25 by implementing programs geared specifically toward the achievement of First Steps goals pursuant to Section 59-152-30.

(D) Any part of the initiative within the county strategic plan using local district resources within a school district must be conducted only with approval of the district’s board of trustees.”

### **Local partnerships, funding use restrictions**

SECTION 15. Section 59-152-120 of the 1976 Code is amended to read:

“Section 59-152-120. Funds received by a local partnership may not be used for capital expenses, new construction, or to renovate, refurbish, or upgrade existing facilities without prior approval by the South Carolina First Steps to School Readiness Board of Trustees.”

### **Matching funds**

SECTION 16. Section 59-152-130 of the 1976 Code is amended to read:

“Section 59-152-130. (A) Local partnerships shall provide an annual match of at least fifteen percent, to include private donations, grant funds, and in-kind donated resources, or any combination of them. The South Carolina First Steps to School Readiness Board of Trustees may decrease this percentage requirement for a partnership

based on their capacity to provide that match. The First Step partnership shall encourage private individuals and groups to contribute to a partnership's efforts to meet its match. The match required of individual partnerships by the First Steps board should take into consideration such factors as:

(1) local wealth, using such indicators as the number and percentage of children eligible for free and reduced lunches in grades 1-3; and

(2) in-kind donated resources.

Only in-kind donations, as defined by the standard fiscal accountability system provided for in Section 59-152-150, which meet the criteria established by the South Carolina First Steps to School Readiness Board of Trustees and that are quantifiable may be applied to the in-kind match requirement.

(B) The Office of South Carolina First Steps to School Readiness shall establish guidelines and reporting formats for partnerships to document expenses to ensure they meet matching fund requirements. The office shall compile a report annually on the private cash and in-kind contributions received by the South Carolina First Steps to School Readiness Board of Trustees and First Steps partnerships.”

### **Carry forward funds, conforming change**

SECTION 17. Section 59-152-140 of the 1976 Code is amended to read:

“Section 59-152-140. To ensure effective use of funds, awards under contract for First Steps Partnerships, with the approval of the Office of First Steps to School Readiness, may be carried forward and used in the following fiscal year. Funds appropriated to South Carolina First Steps to School Readiness may also be carried forward into subsequent years.”

### **Private and nonstate funds**

SECTION 18. Section 59-152-150 of the 1976 Code is amended to read:

“Section 59-152-150. (A) The Office of South Carolina First Steps to School Readiness shall develop and require local partnerships to adopt and implement a standard fiscal accountability system including, but not limited to, a uniform, standardized system of accounting, internal controls, payroll, fidelity bonding, chart of accounts, and

contract management and monitoring. Additionally, the accountability system shall require competitive bids for the purchase or procurement of goods and services of ten thousand dollars or more. A bid other than the lowest bid may be accepted by a majority vote of the partnership board if other considerations outweigh the cost factor; however, written justification must be filed with the Office of First Steps. The Office of First Steps may contract with outside firms to develop and ensure implementation of this standard fiscal accountability system, and the Office of First Steps may inspect fiscal and program records of partnerships and developing partnerships to ensure their compliance with the required system. The Office of First Steps may contract with a state entity with existing means for developing contracts and disbursing funds in order to make use of the existing infrastructure, if it is efficient and not administratively burdensome to partnerships.

(B) Each local First Steps partnership shall expend funds through the South Carolina First Steps to School Readiness Board of Trustees or its fiscal designees until the capacity of the local partnership to manage its fiscal and administrative responsibilities in compliance with the standard accountability system has been reviewed and certified by the South Carolina First Steps to School Readiness Board of Trustees or its designee.

(C) All private and nonstate funds sought by local partnerships must be used exclusively for meeting the goals and purpose of First Steps as specified in Section 59-152-20 and Section 59-152-30. Private funds received by a First Steps partnership must be deposited in a separate fund subject to review by the Office of First Steps and the State Board.

(D) Disbursements may be made only on the written authorization of the individual designated by the partnership board and only for the purposes specified. A person violating this section is guilty of a misdemeanor and, upon conviction, must be fined five thousand dollars or imprisoned for six months, or both.

(E) The offenses of misuse, misappropriation, and embezzlement of public funds apply to this chapter.”

### **Progress evaluations, revisions**

SECTION 19. Section 59-125-160 of the 1976 Code is amended to read:

“Section 59-125-160. (A) The South Carolina First Steps to School Readiness Board of Trustees shall establish internal evaluation policies and procedures for local partnerships for an annual review of the functioning of the partnership, implementation of strategies, and

progress toward the interim goals and benchmarks. In instances where no progress has been made, the Office of First Steps to School Readiness shall provide targeted assistance and/or the South Carolina First Steps to School Readiness Board of Trustees may terminate the grant. An independent evaluation of each prevalent program investment using valid and reliable measures must be completed and published by the First Steps Board of Trustees no less than every five years. The First Steps board shall adopt a cyclical evaluation calendar including each major program investment no later than June 30, 2015. After publication of a baseline report for each major program investment as defined in Section 59-152-25, subsequent reports will be published no later than five calendar years from the date of each prior publication. In addition to the independent evaluation of each prevalent program, an evaluation of the progress on the initiative's goals and purpose must be completed by November 1, 2014, and every five years thereafter by an independent, external evaluator under contract with the South Carolina First Steps to School Readiness Board of Trustees. The purpose of this evaluation will be to gauge First Steps' progress in meeting the goals established in Section 59-152-20 and Section 59-52-30.

(B) Local partnerships must agree to participate in such an evaluation in order to receive a First Steps grant. Subsequent grant approval and grant allocations must be dependent, in part, on the results of the evaluations. If an evaluation finds no progress has been made in meeting local goals or implementing strategies as agreed to in the First Steps grant, the grant may be terminated.

(C) The purpose of the evaluation is to assess progress toward achieving the First Steps goals and to determine the impact of each strategy in supporting improved school readiness as defined in Section 52-152-15. The impact assessment shall include, but is not limited to, school readiness measures; benefits from child development services; immunization status; low birth-weight rates; parent literacy; parenting skills; parental involvement; transportation; and developmental screening results. During the course of the evaluation, if an evaluator determines that any state agency has failed to comply with the coordination and collaboration provisions as required in this chapter, the final report must reflect that information. Each program evaluation report must be reported to the General Assembly no later than three months after conclusion of the evaluation. Local partnerships shall cooperate fully in collecting and providing data and information for the evaluation of their funded strategies.”

**Board of trustees, composition revisited, study committee, act reauthorization**

SECTION 20. A. Section 63-11-1720 of the 1976 Code is amended to read:

“Section 63-11-1720. (A) There is created the South Carolina First Steps to School Readiness Board of Trustees which must be chaired by the Governor, or his designee, and must include the State Superintendent of Education, or his designee, who shall serve as ex officio voting members of the board.

(B) In making the appointments specified in subsection (C)(1), (2), and (3) of this section, the Governor, President Pro Tempore of the Senate, and the Speaker of the House of Representatives shall seek to ensure diverse geographical representation on the board by appointing individuals from each congressional district as possible.

(C) The board shall include members appointed in the following manner:

(1) the Governor shall appoint one member from each of the following sectors:

- (a) parents of young children;
- (b) business community;
- (c) early childhood educators;
- (d) medical providers;
- (e) child care and development providers; and
- (f) the General Assembly, one member from the Senate and one member from the House of Representatives;

(2) the President Pro Tempore of the Senate shall appoint one member from each of the following sectors:

- (a) parents of young children;
- (b) business community;
- (c) early childhood educators; and
- (d) medical or child care and development providers;

(3) the Speaker of the House of Representatives shall appoint one member from each of the following sectors:

- (a) parents of young children;
- (b) business community;
- (c) early childhood educators; and
- (d) medical or child care and development;

(4) the chairman of the Senate Education Committee or his designee;

(5) the chairman of the House Education and Public Works Committee or his designee; and

(6) the chief executive officer of each of the following shall serve as an ex officio voting member:

- (a) Department of Social Services;
- (b) Department of Health and Environmental Control;
- (c) Department of Health and Human Services;
- (d) Department of Disabilities and Special Needs;
- (e) State Head Start Collaboration Officer; and
- (f) Children's Trust of South Carolina.

(D) The terms of the members are for four years and until their successors are appointed and qualify. The appointments of the members from the General Assembly shall be coterminous with their terms of office.

(E) Vacancies for any reason must be filled in the manner of the original appointment for the unexpired term. A member may not serve more than two terms or eight years, whichever is longer. A member who misses more than three consecutive meetings without excuse or a member who resigns must be replaced in the same manner as his predecessor. Members may be paid per diem, mileage, and subsistence as established by the board not to exceed standards provided by law for boards, committees, and commissions. A complete report of the activities of the First Steps to School Readiness Board of Trustees must be made annually to the General Assembly.

(F)(1) There is created the Office of First Steps Study Committee to review the structure, responsibilities, governance by an organization exempt from federal income tax pursuant to Section 501(c)(3) of the Internal Revenue Code of 1986, and administration of the Office of First Steps. The goal of the study committee is to guarantee that children from birth to school-age receive needed services from the Office of First Steps in the most effective way through coordination with other agencies that serve the same population. Also, the study committee shall determine whether the services provided by the Office of First Steps are provided in the most cost-effective and direct manner to entities served by the Office of First Steps, including County First Steps Partnerships Boards. The study committee shall evaluate the structure and costs of the Office of First Steps becoming an independent agency and make a recommendation as to whether the Office of First Steps should become an agency, remain as a program at the Department of Education, be relocated within a state agency other than the Department of Education, or any other alternative structure the study committee deems fit. The study committee shall also address the issues concerning the governance of an organization exempt from federal income tax pursuant to Section 501(c)(3) of the Internal Revenue Code of 1986 relative to the structure recommended by the

study committee. When making its recommendation as to the structure, the study committee must include an analysis of the costs associated with a change in structure. Such costs include, but are not limited to, personnel, data security, data management, and fiscal services.

(2) The study committee shall be composed of:

(a) four members of the Senate appointed by the Chairman of the Senate Education Committee. Of these members, one must be appointed upon the recommendation of the Senate Majority Leader, one must be appointed upon the recommendation of the Senate Minority Leader, and one must be a member of the South Carolina First Steps to School Readiness Board of Trustees;

(b) four members of the House of Representatives appointed by the Chairman of the House Education and Public Works Committee. Of these members, one must be appointed upon the recommendation of the House Majority Leader, one must be appointed upon the recommendation of the House Minority Leader, and one must be a member of the South Carolina First Steps to School Readiness Board of Trustees;

(c) one member appointed by the Governor, who shall serve as chairman;

(d) the President of the Institute for Child Success, or his designee;

(e) the Chairman of the Education Oversight Committee, or his designee; and

(f) the Chairman of the Joint Citizens Legislative Committee on Children, or his designee.

Except for the two members of South Carolina First Steps to School Readiness Board of Trustees appointed pursuant to subitems (a) and (b), no member of the study committee may be a member of the South Carolina First Steps to School Readiness Board of Trustees or a member of a County First Steps Partnership Board.

(3) The study committee must be staffed by the staff of the Senate Education Committee and the House Education and Public Works Committee.

(4) The study committee shall complete its review and submit its recommendation to the General Assembly no later than March 15, 2015. Upon submission of its recommendation, the study committee is dissolved.”

B. Act 99 of 1999, South Carolina First Steps to School Readiness Act, is reauthorized until July 1, 2016.

**Board of trustees, promulgation of comprehensive long-term initiative, regulations, and policies**

SECTION 21. Section 63-11-1730 of the 1976 Code is amended to read:

“Section 63-11-1730. To oversee and be accountable for the South Carolina First Steps to School Readiness Initiative, in accordance with the APA, the board shall:

(1) develop and promulgate a comprehensive long-range initiative for improving early childhood development and increasing school readiness and literacy, which shall include the specific requirements of Chapter 152, Title 59;

(2) in accordance with the APA, promulgate regulations and establish guidelines, policies, and procedures for the continued implementation of the South Carolina First Steps to School Readiness initiative;

(3) provide oversight on the continued implementation and evaluation of the South Carolina First Steps to School Readiness initiative at the state and local levels;

(4) establish and promulgate grant qualification requirements and a formula by which allocations for qualifying partnership grants shall be calculated;

(5) ensure the provision of technical assistance, consultation services and support to First Steps Partnerships including: the creation and annual revision of county needs assessments; the prioritization, implementation, and evaluation of each First Steps Partnership’s strategic plans based on needs assessments; and the identification of assets from other funding sources;

(6) assess and develop recommendations: for ensuring coordination and collaboration among service providers at both the state and county level, for increasing the efficiency and effectiveness of state programs and funding and other programs and funding sources, as allowable, as necessary to carry out the First Steps to School Readiness initiative, including additional fiscal strategies, redeployment of state resources, and development of new programs;

(7) establish and promulgate results-oriented measures and objectives and assess whether services provided by First Steps Partnerships to children and families are meeting the goals and achieving the results established for the First Steps initiative pursuant to Chapter 152, Title 59;

(8) receive gifts, bequests, and devisees for deposit for awarding grants to First Steps Partnerships;

(9) report annually to the General Assembly by January first on activities and progress to include recommendations for changes and legislative initiatives and results of program evaluations;

(10) establish and promulgate internal policies and procedures to allow the board to operate optimally, which shall include, but not be limited to, an established and consistent process for decision making;

(11) develop, implement, and document an annual performance process for the Director of the Office of South Carolina First Steps;

(12) establish and promulgate bylaws for adoption by local First Steps Partnerships;

(13) establish and promulgate internal evaluation policies and procedures for local partnerships for annual review pursuant to Chapter 152, Title 59; and

(14) arrange for the conduction of an independent external program evaluation pursuant to Chapter 152, Title 59.”

**Secretary of State monitoring of boards and commissions, First Steps board added**

SECTION 22. Section 1-5-40(A) of the 1976 Code is amended by adding an item at the end to read:

“(107) South Carolina First Steps to School Readiness Board of Trustees.”

**Repeal**

SECTION 23. Sections 59-152-80 and 59-152-110 of the 1976 Code are repealed.

**Time effective**

SECTION 24. This act takes effect upon approval by the Governor.

Ratified the 5<sup>th</sup> day of June, 2014.

Vetoed by the Governor -- 6/11/14.

Veto overridden by House -- 6/17/14.

Veto overridden by Senate -- 6/18/14.

**South Carolina General Assembly**  
120th Session, 2013-2014

**A284, R313, S516**

**STATUS INFORMATION**

General Bill

Sponsors: Senators Peeler, Fair, Hayes, Courson, Young, Setzler, Malloy, Leatherman, Lourie, L. Martin, Johnson, Jackson, Allen, Rankin, Scott and Pinckney

Document Path: I:\council\bills\agm\19935ab13.docx

Companion/Similar bill(s): 3926, 3994

Introduced in the Senate on March 12, 2013

Introduced in the House on April 10, 2014

Last Amended on June 5, 2014

Passed by the General Assembly on June 5, 2014

Governor's Action: June 11, 2014, Signed

Summary: Read To Succeed Act

**HISTORY OF LEGISLATIVE ACTIONS**

Date	Body	Action Description with journal page number
3/12/2013	Senate	Introduced and read first time ( <a href="#">Senate Journal-page 7</a> )
3/12/2013	Senate	Referred to Committee on <b>Education</b> ( <a href="#">Senate Journal-page 7</a> )
5/9/2013	Senate	Committee report: Favorable with amendment <b>Education</b> ( <a href="#">Senate Journal-page 3</a> )
5/13/2013		Scrivener's error corrected
3/4/2014	Senate	Special order, set for March 4, 2014 ( <a href="#">Senate Journal-page 28</a> )
3/4/2014	Senate	Roll call Ayes-32 Nays-13 ( <a href="#">Senate Journal-page 35</a> )
3/26/2014	Senate	Debate interrupted ( <a href="#">Senate Journal-page 64</a> )
4/1/2014	Senate	Debate interrupted ( <a href="#">Senate Journal-page 46</a> )
4/2/2014	Senate	Debate interrupted ( <a href="#">Senate Journal-page 80</a> )
4/3/2014	Senate	Debate interrupted ( <a href="#">Senate Journal-page 46</a> )
4/9/2014	Senate	Amended ( <a href="#">Senate Journal-page 103</a> )
4/9/2014	Senate	Read second time ( <a href="#">Senate Journal-page 103</a> )
4/9/2014	Senate	Roll call Ayes-36 Nays-6 ( <a href="#">Senate Journal-page 103</a> )
4/10/2014	Senate	Read third time and sent to House ( <a href="#">Senate Journal-page 26</a> )
4/10/2014	House	Introduced and read first time
4/10/2014	House	Referred to Committee on <b>Education and Public Works</b>
5/15/2014	House	Committee report: Favorable with amendment <b>Education and Public Works</b> ( <a href="#">House Journal-page 41</a> )
5/22/2014	House	Debate adjourned until Tues., 5-27-14 ( <a href="#">House Journal-page 20</a> )
5/27/2014	House	Amended ( <a href="#">House Journal-page 14</a> )
5/27/2014	House	Debate adjourned until Wed, 5-28-14 ( <a href="#">House Journal-page 14</a> )
5/28/2014	House	Debate adjourned until Thur., 5-29-14 ( <a href="#">House Journal-page 14</a> )
5/29/2014	House	Debate adjourned until Tues., 6-3-14 ( <a href="#">House Journal-page 27</a> )
6/3/2014	House	Debate adjourned until Wed., 6-4-14 ( <a href="#">House Journal-page 20</a> )
6/4/2014	House	Read second time ( <a href="#">House Journal-page 13</a> )
6/4/2014	House	Roll call Yeas-75 Nays-20 ( <a href="#">House Journal-page 13</a> )
6/5/2014		Scrivener's error corrected
6/5/2014	House	Amended ( <a href="#">House Journal-page 75</a> )
6/5/2014	House	Roll call Yeas-66 Nays-5 ( <a href="#">House Journal-page 75</a> )

6/5/2014	House	Read third time and returned to Senate with amendments ( <a href="#">House Journal-page 75</a> )
6/5/2014	Senate	Concurred in House amendment and enrolled ( <a href="#">Senate Journal-page 72</a> )
6/5/2014	Senate	Roll call Ayes-40 Nays-4 ( <a href="#">Senate Journal-page 72</a> )
6/9/2014		Ratified R 313
6/11/2014		Signed By Governor
6/18/2014		Effective date See Act for Effective Date
6/26/2014		Act No. 284

View the latest [legislative information](#) at the LPITS web site

## **VERSIONS OF THIS BILL**

[3/12/2013](#)

[5/9/2013](#)

[5/13/2013](#)

[4/9/2014](#)

[5/15/2014](#)

[5/27/2014](#)

[6/4/2014](#)

[6/5/2014](#)

[6/5/2014-A](#)

(A284, R313, S516)

**AN ACT TO AMEND THE CODE OF LAWS OF SOUTH CAROLINA, 1976, BY ADDING CHAPTER 155 TO TITLE 59 SO AS TO CREATE THE SOUTH CAROLINA READ TO SUCCEED OFFICE AND TO PROVIDE FOR ITS PURPOSES, TO PROVIDE NECESSARY DEFINITIONS, TO PROVIDE FOR A COMPREHENSIVE STATE PLAN TO IMPROVE READING ACHIEVEMENT IN PUBLIC SCHOOLS BY ASSESSING THE READINESS AND READING PROFICIENCY OF STUDENTS PROGRESSING FROM PREKINDERGARTEN THROUGH THIRD GRADE AND PROVIDING APPROPRIATE INTERVENTIONS AND OTHER ASSISTANCE TO STUDENTS, AS APPROPRIATE, TO PROVIDE RELATED OBLIGATIONS OF THE STATE DEPARTMENT OF EDUCATION, READ TO SUCCEED OFFICE, STATE BOARD OF EDUCATION, AND EACH SCHOOL CONCERNING THE PLAN AND RELATED PROVISIONS, TO PROVIDE THAT BEGINNING WITH THE 2017-2018 SCHOOL YEAR A STUDENT MUST BE RETAINED IN THE THIRD GRADE IF HE FAILS TO DEMONSTRATE READING PROFICIENCY AT THE END OF THE THIRD GRADE AS INDICATED BY SCORING AT A CERTAIN ACHIEVEMENT LEVEL ON THE STATE SUMMATIVE READING ASSESSMENT, TO PROVIDE EXCEPTIONS, TO PROVIDE FOR THE ASSISTANCE OF RETAINED STUDENTS THROUGH CERTAIN SUPPORT AND SERVICES, TO PROVIDE RELATED EDUCATION REQUIREMENTS FOR TEACHERS AND ADMINISTRATORS IMPLEMENTED OVER SEVERAL YEARS, TO ENCOURAGE LOCAL SCHOOL DISTRICTS TO CREATE FAMILY-SCHOOL-COMMUNITY PARTNERSHIPS TO PROMOTE AND ENHANCE READING DEVELOPMENT AND PROFICIENCY THROUGHOUT THE YEAR IN HOMES AND IN THE COMMUNITY, TO REQUIRE THE READ TO SUCCEED OFFICE AND EACH DISTRICT TO PLAN FOR AND ACT DECISIVELY TO ENGAGE THE FAMILIES OF STUDENTS AS FULL PARTICIPATING PARTNERS IN PROMOTING THE READING AND WRITING HABITS AND SKILLS DEVELOPMENT OF THEIR CHILDREN IN A CERTAIN MANNER, AND TO PROVIDE THE BOARD AND DEPARTMENT SHALL TRANSLATE THE STATUTORY REQUIREMENTS FOR READING AND WRITING SPECIFIED IN THIS CHAPTER INTO STANDARDS, PRACTICES, AND PROCEDURES FOR**

SCHOOL DISTRICTS, BOARDS, AND THEIR EMPLOYEES AND FOR OTHER ORGANIZATIONS, AS APPROPRIATE, AND IN A CERTAIN MANNER; BY ADDING CHAPTER 156 TO TITLE 59 SO AS TO CREATE THE CHILD EARLY READING DEVELOPMENT AND EDUCATION PROGRAM, TO PROVIDE A FULL DAY, FOUR-YEAR-OLD KINDERGARTEN PROGRAM FOR AT-RISK CHILDREN WHICH MUST BE MADE AVAILABLE TO QUALIFIED CHILDREN IN ALL PUBLIC SCHOOL DISTRICTS WITHIN THE STATE, TO SPECIFY REQUIREMENTS OF THE PROGRAM, TO PROVIDE THE PROGRAM FIRST MUST BE MADE AVAILABLE TO ELIGIBLE CHILDREN IN EIGHT SPECIFIC TRIAL DISTRICTS AND THAT REMAINING FUNDS MAY BE USED TO EXPAND THE PROGRAM IN A SPECIFIC MANNER, TO PROVIDE ELIGIBILITY CRITERIA, TO PROVIDE REQUIREMENTS AND PROCEDURES FOR DETERMINING ELIGIBILITY, TO PROVIDE RELATED REQUIREMENTS OF THE DEPARTMENT OF EDUCATION, READ TO SUCCEED OFFICE, AND THE OFFICE OF FIRST STEPS TO SCHOOL READINESS, TO REQUIRE PROVIDERS OF THE SOUTH CAROLINA CHILD EARLY READING DEVELOPMENT AND EDUCATION PROGRAM SHALL OFFER A COMPLETE EDUCATIONAL PROGRAM IN ACCORDANCE WITH AGE-APPROPRIATE INSTRUCTIONAL PRACTICE AND A RESEARCH-BASED PRESCHOOL CURRICULUM ALIGNED WITH SCHOOL SUCCESS, TO PROVIDE RELATED REQUIREMENTS, TO RECOGNIZE AND IMPROVE RELATIONSHIPS BETWEEN THE SKILLS AND PREPARATION OF PREKINDERGARTEN INSTRUCTORS AND THE EDUCATIONAL OUTCOMES OF STUDENTS, TO PROVIDE PUBLIC AND PRIVATE PROVIDERS ARE ELIGIBLE FOR TRANSPORTATION FUNDS PURSUANT TO CERTAIN CRITERIA AND REQUIREMENTS, TO PROVIDE SPECIFIC DUTIES OF THE READ TO SUCCEED OFFICE WITH RESPECT TO APPROVED PRIVATE PROVIDERS AND PUBLIC PROVIDERS, TO PROVIDE FUNDING FORMULAS, TO PROVIDE THE DEPARTMENT OF SOCIAL SERVICES SHALL MAINTAIN A LIST OF ALL APPROVED PUBLIC AND PRIVATE PROVIDERS AND PROVIDE THE DEPARTMENT OF EDUCATION AND THE OFFICE OF FIRST STEPS INFORMATION NECESSARY TO CARRY OUT THE REQUIREMENTS OF THIS CHAPTER, TO PROVIDE THE

**OFFICE OF FIRST STEPS TO SCHOOL READINESS IS RESPONSIBLE FOR THE COLLECTION AND MAINTENANCE OF DATA ON THE STATE-FUNDED PROGRAMS PROVIDED THROUGH PRIVATE PROVIDERS, AND TO MAKE THESE REQUIREMENTS CONTINGENT ON STATE FUNDING.**

Whereas, the South Carolina General Assembly finds that national research has documented that students unable to comprehend grade-level text struggle in all their courses; and

Whereas, the South Carolina General Assembly finds that while reading typically has been assessed through standardized tests beginning in third grade, research has found that many struggling readers reach preschool or kindergarten with low oral language skills and limited print awareness. Once in school, they and other students fail to develop proficiency with reading and comprehension because of inadequate instruction and engaged practice; and

Whereas, the South Carolina General Assembly finds that research has also shown that students who have difficulty comprehending texts struggle academically in their content area courses but seldom receive effective instructional intervention during middle and high school to improve their reading comprehension. These are the students least likely to graduate; and

Whereas, the South Carolina General Assembly finds that one recent longitudinal study found that students reading below grade level at the end of third grade were six times more likely to leave school without a high school diploma; and

Whereas, the South Carolina General Assembly finds that reading proficiency is a fundamental life skill vital for the educational and economic success of our citizens and State. In accordance with the ruling of the South Carolina Supreme Court that all students must be given “an opportunity to acquire the ability to read, write, and speak the English language”, the South Carolina General Assembly finds that all students must be given high quality instruction and engage in ample time actually reading and writing in order to learn to read, comprehend, write, speak, listen, and use language effectively across all content areas; and

Whereas, to guarantee that all students exhibit these abilities and behaviors, the State of South Carolina must implement a comprehensive and strategic approach to reading proficiency for students in prekindergarten through twelfth grade that begins when each student enters the public school system and continues until he or she graduates. Now, therefore,

Be it enacted by the General Assembly of the State of South Carolina:

### **South Carolina Read to Succeed Act**

SECTION 1. Title 59 of the 1976 Code is amended by adding:

#### “CHAPTER 155

#### South Carolina Read to Succeed Act

Section 59-155-110. There is established within the South Carolina Department of Education the South Carolina Read to Succeed Office to implement a comprehensive, systemic approach to reading which will ensure that:

(1) classroom teachers use evidence-based reading instruction in prekindergarten through grade twelve, to include oral language, phonological awareness, phonics, fluency, vocabulary, and comprehension; administer and interpret valid and reliable assessments; analyze data to inform reading instruction; and provide evidence-based interventions as needed so that all students develop proficiency with literacy skills and comprehension;

(2) classroom teachers periodically reassess their curriculum and instruction to determine if they are helping each student progress as a proficient reader and make modifications as appropriate;

(3) each student who cannot yet comprehend grade-level text is identified and served as early as possible and at all stages of his or her educational process;

(4) each student receives targeted, effective, comprehension support from the classroom teacher and, if needed, supplemental support from a reading interventionist so that ultimately all students can comprehend grade-level texts;

(5) each student and his parent or guardian is continuously informed in writing of:

(a) the student’s reading proficiency needs, progress, and ability to comprehend and write grade-level texts;

(b) specific actions the classroom teacher and other reading professionals have taken and will take to help the student comprehend and write grade-level texts; and

(c) specific actions that the parent or guardian can take to help the student comprehend grade-level texts by providing access to books, assuring time for the student to read independently, reading to students, and talking with the student about books;

(6) classroom teachers receive pre-service and in-service coursework which prepares them to help all students comprehend grade-level texts;

(7) all students develop reading and writing proficiency to prepare them to graduate and to succeed in their career and post-secondary education; and

(8) each school district publishes annually a comprehensive research-based reading plan that includes intervention options available to students and funding for these services.

Section 59-155-120. As used in this chapter:

(1) 'Board' means the State Board of Education.

(2) 'Department' means the State Department of Education.

(3) 'Discipline-specific literacy' means the ability to read, write, listen, and speak across various disciplines and content areas including, but not limited to, English/language arts, science, mathematics, social studies, physical education, health, the arts, and career and technology education.

(4) 'Readiness assessment' means assessments used to analyze students' literacy, mathematical, physical, social, and emotional-behavioral competencies in prekindergarten or kindergarten.

(5) 'Reading interventions' means individual or group assistance in the classroom and supplemental support based on curricular and instructional decisions made by classroom teachers who have proven effectiveness in teaching reading and an add-on literacy endorsement or reading/literacy coaches who meet the minimum qualifications established in guidelines published by the Department of Education.

(6) 'Reading portfolio' means an organized collection of evidence and assessments documenting that the student has demonstrated mastery of the state standards in reading equal to at least a level above the lowest achievement level on the state reading assessment.

(7) 'Reading proficiency' means the ability of students to meet state reading standards in kindergarten through grade twelve, demonstrated by readiness, formative, or summative assessments.

(8) 'Reading proficiency skills' means the ability to understand how written language works at the word, sentence, paragraph, and text

level and mastery of the skills, strategies, and oral and written language needed to comprehend grade-level texts.

(9) ‘Research-based formative assessment’ means assessments used within the school year to analyze strengths and weaknesses in reading comprehension of students individually to adapt instruction to meet student needs, make decisions about appropriate intervention services, and inform placement and instructional planning for the next grade level.

(10) ‘Substantially fails to demonstrate third-grade reading proficiency’ means a student who does not demonstrate reading proficiency at the end of the third grade as indicated by scoring at the lowest achievement level on the statewide summative reading assessment that equates to Not Met 1 on the Palmetto Assessment of State Standards (PASS).

(11) ‘Summative assessment’ means state-approved assessments administered in grades three through eight and any statewide assessment used in grades nine through twelve to determine student mastery of grade-level or content standards.

(12) ‘Summer reading camp’ means an educational program offered in the summer by each local school district or consortia of school districts for students who are unable to comprehend grade-level texts and who qualify for mandatory retention.

(13) ‘Third-grade reading proficiency’ means the ability to read grade-level texts by the end of a student’s third grade year as demonstrated by the results of state-approved assessments administered to third grade students, or through other assessments as noted in this chapter and adopted by the board.

(14) ‘Writing proficiency skills’ means the ability to communicate information, analysis, and persuasive points of view effectively in writing.

Section 59-155-130. The Read to Succeed Office must guide and support districts and collaborate with university teacher training programs to increase reading proficiency through the following functions, including, but not limited to:

(1) providing professional development to teachers, school principals, and other administrative staff on reading and writing instruction and reading assessment that informs instruction;

(2) providing professional development to teachers, school principals, and other administrative staff on reading and writing in content areas;

(3) working collaboratively with institutions of higher learning offering courses in reading and writing and those institutions of higher

education offering accredited master's degrees in reading-literacy to design coursework leading to a literacy teacher add-on endorsement by the State;

(4) providing professional development in reading and coaching for already certified reading/literacy coaches and literacy teachers;

(5) developing information and resources that school districts can use to provide workshops for parents about how they can support their children as readers and writers;

(6) assisting school districts in the development and implementation of their district reading proficiency plans for research-based reading instruction programs and assisting each of their schools to develop its own implementation plan aligned with the district and state plans;

(7) annually designing content and questions for and review and approve the reading proficiency plan of each district;

(8) monitor and report to the State Board of Education the yearly success rate of summer reading camps. Districts must provide statistical data to include the:

(a) number of students enrolled in camps;

(b) number of students by grade level who successfully complete the camps;

(c) number of third-graders promoted to fourth grade;

(d) number of third-graders retained; and

(e) total expenditure made on operating the camps by source of funds to include in-kind donations; and

(9) provide an annual report to the General Assembly regarding the implementation of the South Carolina Read to Succeed Act and the State and the district's progress toward ensuring that at least ninety-five percent of all students are reading at grade level.

Section 59-155-140. (A)(1) The department, with approval by the State Board of Education, shall develop, implement, evaluate, and continuously refine a comprehensive state plan to improve reading achievement in public schools. The State Reading Proficiency Plan must be approved by the board by February 1, 2015, and must include, but not be limited to, sections addressing the following components:

(a) reading process;

(b) professional development to increase teacher reading expertise;

(c) professional development to increase reading expertise and literacy leadership of principals and assistant principals;

(d) reading instruction;

(e) reading assessment;

- (f) discipline-specific literacy;
- (g) writing;
- (h) support for struggling readers;
- (i) early childhood interventions;
- (j) family support of literacy development;
- (k) district guidance and support for reading proficiency;
- (l) state guidance and support for reading proficiency;
- (m) accountability; and
- (n) urgency to improve reading proficiency.

(2) The state plan must be based on reading research and proven-effective practices, applied to the conditions prevailing in reading-literacy education in this State, with special emphasis on addressing instructional and institutional deficiencies that can be remedied through faithful implementation of research-based practices. The plan must provide standards, format, and guidance for districts to use to develop and annually update their plans, as well as to present and explain the research-based rationale for state-level actions to be taken. The plan must be updated annually and must incorporate a state reading proficiency progress report.

(3) The state plan must include specific details and explanations for all substantial uses of state, local, and federal funds promoting reading-literacy and best judgment estimates of the cost of research-supported, thoroughly analyzed proposals for initiation, expansion, or modification of major funding programs addressing reading and writing. Analyses of funding requirements must be prepared by the department for incorporation into the plan.

(B)(1) Beginning in Fiscal Year 2015-2016, each district must prepare a comprehensive annual reading proficiency plan for prekindergarten through twelfth grade consistent with the plan by responding to questions and presenting specific information and data in a format specified by the Read to Succeed Office. Each district's PK-12 reading proficiency plan must present the rationale and details of its blueprint for action and support at the district, school, and classroom levels. Each district shall develop a comprehensive plan for supporting the progress of students as readers and writers, monitoring the impact of its plan, and using data to make improvements and to inform its plan for the subsequent years. The district plan piloted in school districts in Fiscal Year 2013-2014 and revised based on the input of districts shall be used as the initial district reading plan framework in Fiscal Year 2014-2015 to provide interventions for struggling readers and fully implemented in Fiscal Year 2015-2016 to align with the state plan.

(2) Each district PK-12 reading proficiency plan shall:

(a) document the reading and writing assessment and instruction planned for all PK-12 students and the interventions in prekindergarten through twelfth grade to be provided to all struggling readers who are not able to comprehend grade-level texts. Supplemental instruction shall be provided by teachers who have a literacy teacher add-on endorsement and offered during the school day and, as appropriate, before or after school in book clubs, through a summer reading camp, or both;

(b) include a system for helping parents understand how they can support the student as a reader at home;

(c) provide for the monitoring of reading achievement and growth at the classroom, school, and district levels with decisions about intervention based on all available data;

(d) ensure that students are provided with wide selections of texts over a wide range of genres and written on a wide range of reading levels to match the reading levels of students;

(e) provide teacher training in reading and writing instruction; and

(f) include strategically planned and developed partnerships with county libraries, state and local arts organizations, volunteers, social service organizations, and school media specialists to promote reading.

(3)(a) The Read to Succeed Office shall develop the format for the plan and the deadline for districts to submit their plans to the office for its approval. A school district that does not submit a plan or whose plan is not approved shall not receive any state funds for reading until it submits a plan that is approved. All district reading plans must be reviewed and approved by the Read to Succeed Office. The office shall provide written comments to each district on its plan and to all districts on common issues raised in prior or newly submitted district reading plans.

(b) The Read to Succeed Office shall monitor the district and school plans and use their findings to inform the training and support the office provides to districts and schools.

(c) The department may direct a district that is persistently unable to prepare an acceptable PK-12 reading proficiency plan or to help all students comprehend grade-level texts to enter into a multidistrict or contractual arrangement to develop an effective intervention plan.

(C) Each school must prepare an implementation plan aligned with the district reading proficiency plan to enable the district to monitor and support implementation at the school level. The school plan must be a component of the school's strategic plan required by Section

59-18-1310. A school implementation plan shall be sufficiently detailed to provide practical guidance for classroom teachers. Proposed strategies for assessment, instruction, and other activities specified in the school plan must be sufficient to provide to classroom teachers and other instructional staff helpful guidance that can be related to the critical reading and writing needs of students in the school. In consultation with the School Improvement Council, each school must include in its implementation plan the training and support that will be provided to parents as needed to maximize their promotion of reading and writing by students at home and in the community.

Section 59-155-150. (A) With the enactment of this chapter, the State Superintendent of Education shall ensure that every student entering publically funded prekindergarten and kindergarten beginning in Fiscal Year 2014-2015 will be administered a readiness assessment by the forty-fifth day of the school year. Initially the assessment shall focus on early language and literacy development. Beginning in Fiscal Year 2016-2017, the assessment must assess each child's early language and literacy development, mathematical thinking, physical well-being, and social-emotional development. The assessment may include multiple assessments, all of which must be approved by the board. The approved assessments of academic readiness must be aligned with first and second grade standards for English/language arts and mathematics. The purpose of the assessment is to provide teachers and parents or guardians with information to address the readiness needs of each student, especially by identifying language, cognitive, social, emotional, health problems, and concerning appropriate instruction for each child. The results of the assessment and the developmental intervention strategies recommended to address the child's identified needs must be provided, in writing, to the parent or guardian. Reading instructional strategies and developmental activities for children whose oral language skills are assessed to be below the norm of their peers in the State must be aligned with the district's reading proficiency plan for addressing the readiness needs of each student. The results of each assessment also must be reported to the Read to Succeed Office.

(B) Any student enrolled in prekindergarten, kindergarten, first grade, second grade, or third grade who is substantially not demonstrating proficiency in reading, based upon formal diagnostic assessments or through teacher observations, must be provided intensive in-class and supplemental reading intervention immediately upon determination. The intensive interventions must be provided as individualized and small group assistance based on the analysis of

assessment data. All sustained interventions must be aligned with the district's reading proficiency plan. These interventions must be at least thirty minutes in duration and be in addition to ninety minutes of daily reading and writing instruction provided to all students in kindergarten through grade three. The district must continue to provide intensive in-class intervention and at least thirty minutes of supplemental intervention until the student can comprehend and write text at grade-level independently. In addition, the parent or guardian of the student must be notified, in writing, of the child's inability to read grade-level texts, the interventions to be provided, and the child's reading abilities at the end of the planned interventions. The results of the initial assessments and progress monitoring also must be provided to the Read to Succeed Office.

(C) Programs that focus on early childhood literacy development in the State are required to promote:

(1) parent training and support for parent involvement in developing children's literacy; and

(2) development of oral language, print awareness, and emergent writing; and are encouraged to promote community literacy including, but not limited to, primary health care providers, faith-based organizations, county libraries, and service organizations.

(D) Districts that fail to provide reports on summer reading camps pursuant to Section 59-15-130(8) are ineligible to receive state funding for summer reading camps for the following fiscal year; however, districts must continue to operate summer reading camps as defined in this act.

Section 59-155-160. (A) Beginning with the 2017-2018 School Year, a student must be retained in the third grade if the student fails to demonstrate reading proficiency at the end of the third grade as indicated by scoring at the lowest achievement level on the state summative reading assessment that equates to Not Met 1 on the Palmetto Assessment of State Standards (PASS). A student may be exempt for good cause from the mandatory retention but shall continue to receive instructional support and services and reading intervention appropriate for their age and reading level. Good cause exemptions include students:

(1) with limited English proficiency and less than two years of instruction in English as a Second Language program;

(2) with disabilities whose individual education plan indicates the use of alternative assessments or alternative reading interventions and students with disabilities whose Individual Education Plan or Section 504 Plan reflects that the student has received intensive remediation in

reading for more than two years but still does not substantially demonstrate reading proficiency;

(3) who demonstrate third-grade reading proficiency on an alternative assessment approved by the board and which teachers may administer following the administration of the state assessment of reading;

(4) who have received two years of reading intervention and were previously retained;

(5) who through a reading portfolio document, the student's mastery of the state standards in reading equal to at least a level above the lowest achievement level on the state reading assessment. Such evidence must be an organized collection of the student's mastery of the state English/language arts standards that are assessed by the grade three state reading assessment. The Read to Succeed Office shall develop the assessment tool for the student portfolio; however, the student portfolio must meet the following minimum criteria:

(a) be selected by the student's English/language arts teacher or summer reading camp instructor;

(b) be an accurate picture of the student's ability and only include student work that has been independently produced in the classroom;

(c) include evidence that the benchmarks assessed by the grade three state reading assessment have been met. Evidence is to include multiple choice items and passages that are approximately sixty percent literary text and forty percent information text, and that are between one hundred and seven hundred words with an average of five hundred words. Such evidence could include chapter or unit tests from the district or school's adopted core reading curriculum that are aligned with the state English/language arts standards or teacher-prepared assessments;

(d) be an organized collection of evidence of the student's mastery of the English/language arts state standards that are assessed by the grade three state reading assessment. For each benchmark there must be at least three examples of mastery as demonstrated by a grade of seventy percent or above; and

(e) be signed by the teacher and the principal as an accurate assessment of the required reading skills; and

(6) who successfully participate in a summer reading camp at the conclusion of the third grade year and demonstrate through either a reading portfolio or through a norm-referenced, alternative assessment, selected from a list of norm-referenced, alternative assessments approved by the Read to Succeed Office for use in the summer reading camps, that the student's mastery of the state standards in reading is

equal to at least a level above the lowest level on the state reading assessment.

(B) The superintendent of the local school district must determine whether a student in the district may be exempt from the mandatory retention by taking all of the following steps:

(1) The teacher of a student eligible for exemption must submit to the principal documentation on the proposed exemption and evidence that promotion of the student is appropriate based on the student's academic record. This evidence must be limited to the student's individual education program, alternative assessments, or student reading portfolio. The Read to Succeed Office must provide districts with a standardized form to use in the process.

(2) The principal must review the documentation and determine whether the student should be promoted. If the principal determines the student should be promoted, the principal must submit a written recommendation for promotion to the district superintendent for final determination.

(3) The district superintendent's acceptance or rejection of the recommendation must be in writing and a copy must be provided to the parent or guardian of the child.

(4) A parent or legal guardian may appeal the decision to retain a student to the district superintendent if there is a compelling reason why the student should not be retained. A parent or legal guardian must appeal, in writing, within two weeks after the notification of retention. The letter must be addressed to the district superintendent and specify the reasons why the student should not be retained. The district superintendent shall render a decision and provide copies to the parent or legal guardian and the principal.

(C)(1) Students eligible for retention under the provisions in Section 59-155-160(A) may enroll in a summer reading camp provided by their school district or a summer reading camp consortium to which their district belongs prior to being retained the following school year. Summer reading camps must be at least six weeks in duration with a minimum of four days of instruction per week and four hours of instruction per day, or the equivalent minimum hours of instruction in the summer. The camps must be taught by compensated teachers who have at least an add-on literacy endorsement or who have documented and demonstrated substantial success in helping students comprehend grade level texts. The Read to Succeed Office shall assist districts that cannot find qualified teachers to work in the summer camps. Districts also may choose to contract for the services of qualified instructors or collaborate with one or more districts to provide a summer reading camp. Schools and school districts are encouraged to partner with

county or school libraries, institutions of higher learning, community organizations, faith-based institutions, businesses, pediatric and family practice medical personnel, and other groups to provide volunteers, mentors, tutors, space, or other support to assist with the provision of the summer reading camps. A parent or guardian of a student who does not substantially demonstrate proficiency in comprehending texts appropriate for his grade level must make the final decision regarding the student's participation in the summer reading camp.

(2) A district may include in the summer reading camps students who are not exhibiting reading proficiency at any grade and do not meet the good cause exemption. Districts may charge fees for these students to attend the summer reading camps based on a sliding scale pursuant to Section 59-19-90, except where a child is found to be reading below grade level in the first, second, or third grade and does not meet the good cause exemption.

(D) Retained students must be provided intensive instructional services and support, including a minimum of ninety minutes of daily reading and writing instruction, supplemental text-based instruction, and other strategies prescribed by the school district. These strategies may include, but are not limited to, instruction directly focused on improving the student's individual reading proficiency skills through small group instruction, reduced teacher-student ratios, more frequent student progress monitoring, tutoring or mentoring, transition classes containing students in multiple grade spans, and extended school day, week, or year reading support. The school must report to the Read to Succeed Office on the progress of students in the class at the end of the school year and at other times as required by the office based on the reading progression monitoring requirements of these students.

(E) If the student is not demonstrating third-grade reading proficiency by the end of the second grading period of the third grade:

(1)(a) his parent or guardian timely must be notified, in writing, that the student is being considered for retention and a conference with the parent or guardian must be held prior to a determination regarding retention is made, and conferences must be documented;

(b) within two weeks following the parent/teacher conference, copies of the conference form must be provided to the principal, parent or guardian, teacher and other school personnel who are working with the child on literacy, and summary statements must be sent to parents or legal guardians who do not attend the conference;

(c) following the parent/teacher retention conference, the principal, classroom teacher, and other school personnel who are working with the child on literacy must review the recommendation for retention and provide suggestions for supplemental instruction; and

(d) recommendations and observations of the principal, teacher, parent or legal guardian, and other school personnel who are working with the child on literacy must be considered when determining whether to retain the student.

(2) The parent or guardian may designate another person as an education advocate also to act on their behalf to receive notification and to assume the responsibility of promoting the reading success of the child. The parent or guardian of a retained student must be offered supplemental tutoring for the retained student in evidenced-based services outside the instructional day.

(F) For students in grades four and above who are substantially not demonstrating reading proficiency, interventions shall be provided by reading interventionists in the classroom and supplementally by teachers with a literacy teacher add-on endorsement or reading/literacy coaches. This supplemental support will be provided during the school day and, as appropriate, before or after school as documented in the district reading plan, and may include book clubs or summer reading camps.

Section 59-155-170. (A) To help students develop and apply their reading and writing skills across the school day in all the academic disciplines, including, but not limited to, English/language arts, mathematics, science, social studies, the arts, career and technology education, and physical and health education, teachers of these content areas at all grade levels must focus on helping students comprehend print and nonprint texts authentic to the content area. The Read to Succeed Program is intended to institutionalize in the public schools a comprehensive system to promote high achievement in the content areas described in this chapter through extensive reading and writing. Research-based practices must be employed to promote comprehension skills through, but not limited to:

- (1) vocabulary;
- (2) connotation of words;
- (3) connotations of words in context with adjoining or prior text;
- (4) concepts from prior text;
- (5) personal background knowledge;
- (6) ability to interpret meaning through sentence structure features;
- (7) questioning;
- (8) visualization; and
- (9) discussion of text with peers.

(B) These practices must be mastered by teachers through high-quality training and addressed through well-designed and

effectively executed assessment and instruction implemented with fidelity to research-based instructional practices presented in the state, district, and school reading plans. All teachers, administrators, and support staff must be trained adequately in reading comprehension in order to perform effectively their roles enabling each student to become proficient in content area reading and writing.

(C) During Fiscal Year 2014-2015, the Read to Succeed Office shall establish a set of essential competencies that describe what certified teachers at the early childhood, elementary, middle or secondary levels must know and be able to do so that all students can comprehend grade-level texts. These competencies, developed collaboratively with the faculty of higher education institutions and based on research and national standards, must then be incorporated into the coursework required by Section 59-155-180. The Read to Succeed Office, in collaboration with South Carolina Educational Television, shall provide professional development courses to ensure that educators have access to multiple avenues of receiving endorsements.

Section 59-155-180. (A) As a student progresses through school, reading comprehension in content areas such as science, mathematics, social studies, English/language arts, career and technology education, and the arts is critical to the student's academic success. Therefore, to improve the academic success of all students in prekindergarten through grade twelve, the State shall strengthen its pre-service and in-service teacher education programs.

(B)(1) Beginning with students entering a teacher education program in the fall semester of the 2016-2017 School Year, all pre-service teacher education programs including MAT degree programs must require all candidates seeking certification at the early childhood or elementary level to complete a twelve credit hour sequence in literacy that includes a school-based practicum and ensures that candidates grasp the theory, research, and practices that support and guide the teaching of reading. The six components of the reading process that are comprehension, oral language, phonological awareness, phonics, fluency, and vocabulary will provide the focus for this sequence to ensure that all teacher candidates are skilled in diagnosing a child's reading problems and are capable of providing an effective intervention. All teacher preparation programs must be approved for licensure by the State Department of Education to ensure that all teacher education candidates possess the knowledge and skills to assist effectively all children in becoming proficient readers. The General Assembly is not mandating an increase in the number of credit hours required for teacher candidates, but is requiring that pre-service teacher

education programs prioritize their missions and resources so all early and elementary education teachers have the knowledge and skills to provide effective instruction in reading and numeracy to all students.

(2) Beginning with students entering a teacher education program in the fall semester of the 2016-2017 School Year, all pre-service teacher education programs, including MAT degree programs, must require all candidates seeking certification at the middle or secondary level to complete a six credit hour sequence in literacy that includes a course in the foundations of literacy and a course in content-area reading. All middle and secondary teacher preparation programs must be approved by the department to ensure that all teacher candidates possess the necessary knowledge and skills to assist effectively all adolescents in becoming proficient readers. The General Assembly is not mandating an increase in the number of semester hours required for teacher candidates but rather is requiring that pre-service teacher education programs prioritize their mission and resources so all middle and secondary education teachers have the knowledge and skills to provide effective instruction in reading and numeracy to all students.

(C)(1) To ensure that practicing professionals possess the knowledge and skills necessary to assist all children and adolescents in becoming proficient readers, multiple pathways are needed for developing this capacity.

(2) A reading/literacy coach shall be employed in each elementary school. Reading coaches shall serve as job-embedded, stable resources for professional development throughout schools in order to generate improvement in reading and literacy instruction and student achievement. Reading coaches shall support and provide initial and ongoing professional development to teachers based on an analysis of student assessment and the provision of differentiated instruction and intensive intervention. The reading coach shall:

(a) model effective instructional strategies for teachers by working weekly with students in whole, and small groups, or individually;

(b) facilitate study groups;

(c) train teachers in data analysis and using data to differentiate instruction;

(d) coaching and mentoring colleagues;

(e) work with teachers to ensure that research-based reading programs are implemented with fidelity;

(f) work with all teachers (including content area and elective areas) at the school they serve, and help prioritize time for those teachers, activities, and roles that will have the greatest impact on

student achievement, namely coaching and mentoring in the classrooms; and

(g) help lead and support reading leadership teams.

(3) The reading coach must not be assigned a regular classroom teaching assignment, must not perform administrative functions that deter from the flow of improving reading instruction and reading performance of students and must not devote a significant portion of his or her time to administering or coordinating assessments. By August 1, 2014, the department must publish guidelines that define the minimum qualifications for a reading coach. Beginning in Fiscal Year 2014-2015, reading/literacy coaches are required to earn the add-on certification within six years, except as exempted in items (4) and (5), by completing the necessary courses or professional development as required by the department for the add-on. During the six-year period, to increase the number of qualified reading coaches, the Read to Succeed Office shall identify and secure courses and professional development opportunities to assist educators in becoming reading coaches and in earning the literacy add-on endorsement. In addition, the Read to Succeed Office will establish a process through which a district may be permitted to use state appropriations for reading coaches to obtain in-school services from department-approved consultants or vendors, in the event that the school is not successful in identifying and directly employing a qualified candidate. Districts must provide to the Read to Succeed Office information on the name and qualifications of reading coaches funded by the state appropriations.

(4) Beginning in Fiscal Year 2015-2016, early childhood and elementary education certified classroom teachers, reading interventionists, and those special education teachers who provide learning disability and speech services to students who need to substantially improve their low reading and writing proficiency skills, are required to earn the literacy teacher add-on endorsement within ten years of their most recent certification by taking at least two courses or six credit hours every five years, or the equivalent professional development hours as determined by the South Carolina Read to Succeed Office, consistent with existing recertification requirements. Inservice hours earned through professional development for the literacy teacher endorsement must be used for renewal of teaching certificates in all subject areas. The courses and professional development leading to the endorsement must be approved by the State Board of Education and must include foundations, assessment, content area reading and writing, instructional strategies, and an embedded or stand-alone practicum. Whenever possible these courses shall be

offered at a professional development rate which is lower than the certified teacher rate. Early childhood and elementary education certified classroom teachers, reading specialists, and special education teachers who provide learning disability and speech services to students who need to improve substantially their reading and writing proficiency and who already possess their add-on reading teacher certification can take a content area reading course to obtain their literacy teacher add-on endorsement. Individuals who possess a literacy teacher add-on endorsement or who have earned a master's or doctorate degree in reading are exempt from this requirement. Individuals who have completed an intensive and prolonged professional development program like Reading Recovery, Project Read, the South Carolina Reading Initiative, or another similar program should submit their transcripts to the Office of Educator Licensure to determine if they have completed the coursework required for the literacy teacher add-on certificate.

(5) Beginning in Fiscal Year 2015-2016, middle and secondary licensed classroom teachers are required to take at least one course or three credit hours, or the equivalent professional development hours as determined by the South Carolina Read to Succeed Office, to improve reading instruction within five years of their most recent certification. The courses and professional development must be approved by the State Board of Education and include courses and professional development leading to the literacy teacher add-on endorsement. Coursework and professional development in reading must include a course in reading in the content areas. Whenever possible these courses will be offered at a professional development rate which is lower than the certified teacher rate. Individuals who possess a literacy teacher add-on endorsement or who have earned a master's or doctorate degree in reading are exempt from this requirement. Individuals who have completed an intensive, prolonged professional development program like Reading Recovery, Project Read, the South Carolina Reading Initiative, or another similar program should submit their transcripts to the Office of Educator Licensure to determine if they have completed the coursework or professional development required for the literacy teacher add-on certificate.

(6) Beginning in Fiscal Year 2015-2016, principals and administrators who are responsible for reading instruction or intervention and school psychologists in a school district or school are required to take at least one course or three credit hours within five years of their most recent certification, or the equivalent professional development hours as determined by the South Carolina Read to Succeed Office. The course or professional development shall include

information about reading process, instruction, assessment, or content area literacy and shall be approved by the Read to Succeed Office.

(7) The Read to Succeed Office shall publish by August 1, 2014, the guidelines and procedures used in evaluating all courses and professional development, including virtual courses and professional development, leading to the literacy teacher add-on endorsement. Annually by January first, the Read to Succeed Office shall publish the approved courses and approved professional development leading to the literacy teacher add-on endorsement.

Section 59-155-190. Local school districts are encouraged to create family-school-community partnerships that focus on increasing the volume of reading, in school and at home, during the year and at home and in the community over the summer. Schools and districts should partner with county libraries, community organizations, local arts organizations, faith-based institutions, pediatric and family practice medical personnel, businesses, and other groups to provide volunteers, mentors, or tutors to assist with the provision of instructional supports, services, and books that enhance reading development and proficiency. A district shall include specific actions taken to accomplish the requirements of this section in its reading proficiency plan.

Section 59-155-200. The Read to Succeed Office and each school district must plan for and act decisively to engage the families of students as full participating partners in promoting the reading and writing habits and skills development of their children. With support from the Read to Succeed Office, districts and individual schools shall provide families with information about how children progress as readers and writers and how they can support this progress. This family support must include providing time for their child to read, as well as reading to the child. To ensure that all families have access to a considerable number and diverse range of books appealing to their children, schools should develop plans for enhancing home libraries and for accessing books from county libraries and school libraries and to inform families about their child's ability to comprehend grade-level texts and how to interpret information about reading that is sent home. The districts and schools shall help families learn about reading and writing through open houses, South Carolina Educational Television, video and audio tapes, websites, and school-family events and collaborations that help link the home and school of the student. The information should enable family members to understand the reading and writing skills required for graduation and essential for success in a career. Each institution of higher learning may operate a year-round

program similar to a summer reading camp to assist students not reading at grade level.

Section 59-155-210. The board and department shall translate the statutory requirements for reading and writing specified in this chapter into standards, practices, and procedures for school districts, boards, and their employees and for other organizations as appropriate. In this effort, they shall solicit the advice of education stakeholders who have a deep understanding of reading, as well as school boards, administrators, and others who play key roles in facilitating support for and implementation of effective reading instruction.”

### **Child Early Reading Development and Education Program**

SECTION 2. Title 59 of the 1976 Code is amended by adding:

#### “CHAPTER 156

##### Child Early Reading Development and Education Program

Section 59-156-110. There is created the South Carolina Child Early Reading Development and Education Program which is a full day, four-year-old kindergarten program for at-risk children which must be made available to qualified children in all public school districts within the State. The program must focus on:

- (1) a comprehensive, systemic approach to reading that follows the State Reading Proficiency Plan and the district’s comprehensive annual reading proficiency plan, both adopted pursuant to Chapter 155, Title 59;
- (2) successfully completing the readiness assessment administered pursuant to Section 59-155-150;
- (3) the developmental and learning support that children must have in order to be ready for school;
- (4) incorporating parenting education, including educating the parents as to methods that may assist the child pursuant to Section 59-155-110, 59-155-130, and 59-155-140; and
- (5) identifying community and civic organizations that can support early literacy efforts.

Section 59-156-120. (A)(1) The South Carolina Child Early Reading Development and Education Program first must be made available to eligible children from the following eight trial districts in Abbeville County School District et al vs. South Carolina: Allendale,

Dillon 2, Florence 4, Hampton 2, Jasper, Lee, Marion 7, and Orangeburg 3.

(2) With any funds remaining after funding the eight trial districts, the program must be expanded to the remaining plaintiff school districts in Abbeville County School District et al vs. South Carolina and then expanded to eligible children residing in school districts with a poverty index of ninety percent or greater. Priority must be given to implementing the program first in those of the plaintiff districts which participated in the pilot program during the 2006-2007 School Year, then in the plaintiff districts having proportionally the largest population of underserved at-risk four-year-old children.

(3) With any funds remaining after funding the school districts delineated in items (1) and (2), the program must be expanded statewide. The General Assembly, in the annual general appropriations bill, shall set forth the priority schedule, the funding, and the manner in which the program is expanded.

(B) Unexpended funds from the prior fiscal year for this program shall be carried forward and shall remain in the program. In rare instances, students with documented kindergarten readiness barriers, especially reading barriers, may be permitted to enroll for a second year, or at age five, at the discretion of the Department of Education for students being served by a public provider or at the discretion of the Office of South Carolina First Steps to School Readiness for students being served by a private provider.

Section 59-156-130. (A) Each child residing in the program's district, who has attained the age of four years on or before September first of the school year and meets the at-risk criteria, is eligible for enrollment in the South Carolina Child Early Reading Development and Education Program for one year.

(B)(1) The parent of each eligible child may enroll the child in one of the following programs:

(a) a school-year four-year-old kindergarten program delivered by an approved public provider; or

(b) a school-year four-year-old kindergarten program delivered by an approved private provider.

(2) The parent enrolling a child must complete and submit an application to the approved provider of choice. The application must be submitted on forms and must be accompanied by a copy of the child's birth certificate, immunization documentation, and documentation of the student's eligibility as evidenced by family income documentation showing an annual family income of one hundred eighty-five percent or less of the federal poverty guidelines as

promulgated annually by the United States Department of Health and Human Services or a statement of Medicaid eligibility.

(3) In submitting an application for enrollment, the parent agrees to comply with provider attendance policies during the school year. The attendance policy must state that the program consists of six and one-half hours of instructional time daily and operates for a period of not less than one hundred eighty days a year. Pursuant to program guidelines, noncompliance with attendance policies may result in removal from the program.

(C)(1) No parent is required to pay tuition or fees solely for the purpose of enrolling in or attending the program established under this chapter. Nothing in this chapter prohibits charging fees for childcare that may be provided outside the times of the instructional day provided in these programs.

(2) If by October first of the school year at least seventy-five percent of the total number of children eligible for the Child Early Reading Development and Education Program in a district or county are projected to be enrolled in that program, Head Start, or ABC Child Care Program as determined by the Department of Education and the Office of First Steps, Child Early Reading Development and Education Program providers may then enroll pay-lunch children who score at or below the twenty-fifth national percentile on two of the three DIAL-3 subscales and may receive reimbursement for these children if funds are available.

Section 59-156-140. (A) Public school providers participating in the South Carolina Child Early Reading Development and Education Program must submit an application to the Department of Education. Private providers participating in the South Carolina Child Early Reading Development and Education Program must submit an application to the Office of First Steps. The application must be submitted on the forms prescribed, contain assurances that the provider meets all program criteria set forth in this section, and will comply with all reporting and assessment requirements.

(B) Providers shall:

(1) comply with all federal and state laws and constitutional provisions prohibiting discrimination on the basis of disability, race, creed, color, gender, national origin, religion, ancestry, or need for special education services;

(2) comply with all state and local health and safety laws and codes;

(3) comply with all state laws that apply regarding criminal background checks for employees and exclude from employment any individual not permitted by state law to work with children;

(4) be accountable for meeting the educational needs of the child and report at least quarterly to the parent or guardian on his progress;

(5) comply with all program, reporting, and assessment criteria required of providers;

(6) maintain individual student records for each child enrolled in the program, including, but not limited to, assessment data, health data, records of teacher observations, and records of parent or guardian and teacher conferences;

(7) designate whether extended day services will be offered to the parents and guardians of children participating in the program;

(8) be approved, registered, or licensed by the Department of Social Services; and

(9) comply with all state and federal laws and requirements specific to program providers.

(C) Providers may limit student enrollment based upon space available, but, if enrollment exceeds available space, providers shall enroll children with first priority given to children with the lowest scores on an approved prekindergarten readiness assessment. Private providers must not be required to expand their programs to accommodate all children desiring enrollment, but are encouraged to keep a waiting list for students they are unable to serve because of space limitations.

Section 59-156-150. The Department of Education, the Read to Succeed Office, and the Office of First Steps to School Readiness shall:

(1) develop the provider application form;

(2) develop the child enrollment application form;

(3) develop a list of approved research-based preschool curricula for use in the program based upon the South Carolina Content Standards, and provide training and technical assistance to support its effective use in approved classrooms serving children;

(4) develop a list of approved prekindergarten readiness assessments to be used in conjunction with the program, and provide assessments and technical assistance to support assessment administration in approved classrooms serving children;

(5) establish criteria for awarding new classroom equipping grants;

(6) establish criteria for the parenting education program providers must offer;

(7) establish a list of early childhood related fields that may be used in meeting the lead teacher qualifications;

- (8) develop a list of data-collection needs to be used in implementation and evaluation of the program;
- (9) identify teacher preparation program options and assist lead teachers in meeting teacher program requirements;
- (10) establish criteria for granting student retention waivers; and
- (11) establish criteria for granting classroom-size requirements waivers.

Section 59-156-160. (A) Providers of the South Carolina Child Early Reading Development and Education Program shall offer a complete educational program in accordance with age-appropriate instructional practice and a research-based preschool curriculum aligned with school success. The program must focus on:

- (1) a comprehensive, systemic approach to reading that follows the State Reading Proficiency Plan and the district's comprehensive annual reading proficiency plan, both adopted pursuant to Chapter 155, Title 59;
- (2) successfully completing the readiness assessment administered pursuant to Section 59-155-150;
- (3) the developmental and learning support that children must have in order to be ready for school;
- (4) incorporating parenting education, including educating the parents as to methods that may assist the child pursuant to Section 59-155-110, 59-155-130, and 59-155-140, including strengthening parent involvement in the learning process with an emphasis on interactive literacy; and
- (5) identifying community and civic organizations that can support early literacy efforts.

(B) Providers shall offer high-quality, center-based programs, including, but not limited to, the following:

- (1) employ a lead teacher with a two-year degree in early childhood education or related field or be granted a waiver of this requirement from the Department of Education for public schools or from the Office of First Steps to School Readiness for private centers;
- (2) employ an education assistant with pre-service or in-service training in early childhood education;
- (3) maintain classrooms with at least ten four-year-old children, but no more than twenty four-year-old children, with an adult to child ratio of 1:10. With classrooms having a minimum of ten children, the 1:10 ratio must be a lead teacher to child ratio. Waivers of the minimum class size requirement may be granted by the South Carolina Department of Education for public providers or by the Office of First

Steps to School Readiness for private providers on a case-by-case basis;

(4) offer a full day, center-based program with six and one-half hours of instruction daily for one hundred eighty school days;

(5) provide an approved research-based preschool curriculum that focuses on critical child development skills, especially early literacy, numeracy, and social and emotional development;

(6) engage parents' participation in their child's educational experience that shall include a minimum of two documented conferences for each year; and

(7) adhere to professional development requirements outlined in this chapter.

Section 59-156-170. (A) Every classroom providing services to four-year-old children established pursuant to this chapter must have a qualified lead teacher and an education assistant as needed to maintain an adult to child ratio of 1:10.

(B)(1) In classrooms in private centers, the lead teacher must have at least a two-year degree in early childhood education or a related field and who is enrolled and is demonstrating progress toward the completion of a teacher education program within four years.

(2) In classrooms in public schools, the lead teacher must meet state requirements pertaining to certification.

(C) All education assistants in private centers and public schools must have the minimum of a high school diploma or the equivalent, and at least two years of experience working with children under five years old. The assistant must have completed the Early Childhood Development Credential (ECD) 101 or enroll and complete this course within twelve months of hire. Providers may request waivers to the ECD 101 requirement for those assistants who have demonstrated sufficient experience in teaching children five years old and younger. The providers must request this waiver in writing to First Steps or the Department of Education, as applicable, and provide appropriate documentation as to the qualifications of the teaching assistant.

Section 59-156-180. The General Assembly recognizes there is a strong relationship between the skills and preparation of prekindergarten instructors and the educational outcomes of students. To improve these educational outcomes, participating providers shall require all personnel providing instruction and classroom support to students participating in the South Carolina Child Early Reading Development and Education Program to participate annually in a minimum of fifteen hours of professional development, including,

teaching children from poverty. Professional development should provide instruction in strategies and techniques to address the age-appropriate progress of prekindergarten students in developing emergent literacy skills, including, but not limited to, oral communication, knowledge of print and letters, phonemic and phonological awareness, and vocabulary and comprehension development.

Section 59-156-190. Both public and private providers are eligible for transportation funds for the transportation of children to and from school. Nothing in this section prohibits providers from contracting with another entity to provide transportation services provided the entities adhere to the requirements of Section 56-5-195. Providers must not be responsible for transporting students attending programs outside the district lines. Parents choosing program providers located outside of their resident district shall be responsible for transportation. When transporting four-year-old child development students, providers shall make every effort to transport them with students of similar ages attending the same school. Of the amount appropriated for the program, not more than one hundred eighty-five dollars for each student may be retained by the Department of Education for the purposes of transporting four-year-old students. This amount annually must be increased by the same projected rate of inflation as determined by the Office of Research and Statistics of the State Budget and Control Board for the Education Finance Act.

Section 59-156-200. For all private providers approved to offer services pursuant to this chapter, the Office of First Steps to School Readiness shall:

- (1) serve as the fiscal agent;
- (2) verify student enrollment eligibility;
- (3) recruit, review, and approve eligible providers. In considering approval of providers, consideration must be given to the provider's availability of permanent space for program service and whether temporary classroom space is necessary to provide services to any children;
- (4) coordinate oversight, monitoring, technical assistance, coordination, and training for classroom providers;
- (5) serve as a clearing house for information and best practices related to four-year-old kindergarten programs;
- (6) receive, review, and approve new classroom grant applications and make recommendations for approval based on approved criteria;

(7) coordinate activities and promote collaboration with other private and public providers in developing and supporting four-year-old kindergarten programs;

(8) maintain a database of the children enrolled in the program; and

(9) promulgate guidelines as necessary for the implementation of the program.

Section 59-156-210. For all public school providers approved to offer services pursuant to this chapter, the Department of Education shall:

(1) serve as the fiscal agent;

(2) verify student enrollment eligibility;

(3) recruit, review, and approve eligible providers. In considering approval of providers, consideration must be given to the provider's availability of permanent space for program service and whether temporary classroom space is necessary to provide services to any children;

(4) coordinate oversight, monitoring, technical assistance, coordination, and training for classroom providers;

(5) serve as a clearing house for information and best practices related to four-year-old kindergarten programs;

(6) receive, review, and approve new classroom grant applications and make recommendations for approval based on approved criteria;

(7) coordinate activities and promote collaboration with other private and public providers in developing and supporting four-year-old kindergarten programs;

(8) maintain a database of the children enrolled in the program; and

(9) promulgate guidelines as necessary for the implementation of the program.

Section 59-156-220. (A) Eligible students enrolling with private providers during the school year must be funded on a pro rata basis determined by the length of their enrollment.

(B) Private providers transporting eligible children to and from school must be eligible for a reimbursement of up to five hundred fifty dollars for each eligible child transported, funded on a pro rata basis determined by the length of the child's enrollment. Providers who are reimbursed are required to retain records as required by their fiscal agent.

(C) Providers enrolling between one and six eligible children must be eligible to receive up to one thousand dollars for each child in materials and equipment grant funding, with providers enrolling seven

or more such children eligible for grants not to exceed ten thousand dollars.

(D) Providers receiving equipment grants are expected to participate in the program and provide high-quality, center-based programs for a minimum of three years. A provider who fails to participate for three years shall return a portion of the equipment allocation at a level determined by the Department of Education and the Office of First Steps to School Readiness. Funding to providers is contingent upon receipt of data as requested by the Department of Education and the Office of First Steps.

Section 59-156-230. The Department of Social Services shall:

- (1) maintain a list of all approved public and private providers; and
- (2) provide the Department of Education and the Office of First Steps information necessary to carry out the requirements of this chapter.

Section 59-156-240. The Office of First Steps to School Readiness is responsible for the collection and maintenance of data on the state-funded programs provided through private providers.”

**Time effective, contingent on funding**

SECTION 3. This act takes effect upon approval by the Governor and is subject to the availability of state funding.

Ratified the 9<sup>th</sup> day of June, 2014.

Approved the 11<sup>th</sup> day of June, 2014.

\_\_\_\_\_

# EARLY CHILDHOOD ASSESSMENT

## WHY, WHAT, AND HOW

Committee on Developmental Outcomes and  
Assessments for Young Children

Catherine E. Snow and Susan B. Van Hemel, *Editors*

Board on Children, Youth, and Families

Board on Testing and Assessment

Division of Behavioral and Social Sciences and Education

NATIONAL RESEARCH COUNCIL  
*OF THE NATIONAL ACADEMIES*

THE NATIONAL ACADEMIES PRESS  
Washington, D.C.  
**[www.nap.edu](http://www.nap.edu)**

## Summary

The assessment of young children's development and learning has recently taken on new importance. Private and government organizations are developing programs to enhance the school readiness of all young children, especially children from economically disadvantaged homes and communities and children with special needs. These programs are designed to enhance social, language, and academic skills through responsive early care and education. In addition, they constitute a site where children with developmental problems can be identified and receive appropriate interventions.

Societal and government initiatives have also promoted accountability for these educational programs, especially those that are publicly funded. These initiatives focus on promoting standards of learning and monitoring children's progress in meeting those standards. In this atmosphere, Congress has enacted such laws as the Government Performance and Results Act and the No Child Left Behind Act. School systems and government agencies are asked to set goals, track progress, analyze strengths and weaknesses in programs, and report on their achievements, with consequences for unmet goals. Likewise, early childhood education and intervention programs are increasingly being asked to prove their worth.

In 2006, Congress requested that the National Research Council (NRC) conduct a study of developmental outcomes and appropriate assessment of young children. With funding from the Office of Head Start in the U.S. Department of Health and Human Services, the specific charge to this committee was the identification of important outcomes for children from birth to age 5 and the quality and purposes of different techniques and instruments for developmental assessments.

The committee's review highlights two key principles. First, the purpose of an assessment should guide assessment decisions. Second, assessment activity should be conducted within a coherent system of medical, educational, and family support services that promote optimal development for all children.

Our focus on the need for purposefulness and systematicity is particularly important at this time, because young children are currently being assessed for a wide array of purposes, across a wide array of domains, and in multiple service settings. The increase in the amount of assessment raises understandable worries about whether assessments are selected, implemented, and interpreted correctly. Assessments of children may be used for purposes as diverse as determining the level of functioning of individual children, guiding instruction, or measuring functioning at the program, community, or state level.

Different purposes require different types of assessments, and the evidentiary base that supports the use of an assessment for one purpose may not be suitable for another. As the consequences of assessment findings become weightier, the accuracy and quality of the instruments used to provide findings must be more certain. Decisions based on an assessment that is used to monitor the progress of one child can be important to that child and her family and thus must be taken with caution, but they can also be challenged and revisited more easily than assessments used to determine the fate or funding for groups of children, such as those attending a local child care center, an early education program, or a nationwide program like Head Start. When used for purposes of program evaluation and accountability, often called high stakes,<sup>1</sup>

---

<sup>1</sup>We have adopted the following definition of high-stakes assessment (see Appendix A): Tests and/or assessment processes for which the results lead to sig-

assessments can have major consequences for large numbers of children and families, for the community served by the program, and for policy.

If decisions about individual children or about programs are to be defended, the system of assessment must reflect the highest standards of evidence in three domains: the psychometric properties of the instruments used in the assessment system; the evidence supporting the appropriateness of the assessment instruments for different ethnic, racial, language, functional status, and age group populations; and the domains that serve as the focus of the assessment. In addition, resources need to be directed to the training of assessors, the analysis and reporting of results, and the interpretation of those results. Such attention is especially warranted when making decisions about whether programs will continue to be funded by tax monies.

The purpose and system principles apply as well to the interpretation, use, and communication of assessment data. Collecting data should be preceded by planning how the data will be used, who should have access to them, in what decisions they will play a role, and what stakeholders need to know about them. Ideally, any assessment activity benefits children by providing information that can be used to inform their caregivers and teachers, to improve the quality of their care and educational environments, and to identify child risk factors that can be remedied. But assessments may also have adverse consequences. Direct assessments may make children feel anxious, incompetent, or bored, and indirect assessments may constitute a burden on adults. An assessment activity may also deflect time and resources from instruction, and assessments cost money. It is therefore important to ensure that the value of the information gathered through assessments outweighs any negative effects on adults or children and that it merits the investment of resources.

Purposeful and systematic assessment requires decisions about what to assess. In this study, the committee focuses on five

---

nificant sanctions or rewards for children, their teachers, administrators, schools/programs, and/or school systems. Sanctions may be direct (e.g., retention in grade for children, reassignment for teachers, reorganization for schools) or unintended (e.g., narrowing of the curriculum, increased dropping out).

domains that build on the school readiness work of the National Education Goals Panel (1995):

1. physical well-being and motor development,
2. social and emotional development,
3. approaches toward learning,
4. language development (including emergent literacy), and
5. cognition and general knowledge (including mathematics and science).

This list reflects state early learning standards, guidelines from organizations focused on the welfare of young children, and the status of available assessment instruments. The domains are not specific about many areas of potential interest to parents, to educators, and to society, such as art, music, creativity, prosocial behavior, and morality. Also, for some purposes and for some children, including infants and preschool children with disabilities, a functional rather than a domain-specific approach to assessment may be appropriate.

Once a purpose has been established and a set of domains selected, the next challenge is to identify the best assessment instrument; this may be one that is widely used, or an adaptation of a previously used instrument, or in some cases a newly developed instrument. The varied available approaches, which include conducting direct assessments, interviewing parents or teachers, observing children in natural or slightly structured settings, and analyzing their work, all constitute rich sources of information. Issues of psychometric adequacy, in particular the validity of the instrument chosen for all the subgroups of children to be considered, are paramount, for observational and interview instruments as well as direct assessments.

The remainder of this summary presents guidelines for assessment related to four issues: purposes, domains and measures, implementation, and systems. The summary concludes with key points for a future research agenda.

### **GUIDELINES ON PURPOSES OF ASSESSMENT**

- (P-1) Public and private entities undertaking the assessment of young children should make the purposes of assessment explicit and public.
- (P-2) The assessment strategy—which assessments to use, how often to administer them, how long they should be, how the domain of items or children or programs should be sampled—should match the stated purpose and require the minimum amount of time to obtain valid results for that purpose. Even assessments that do not directly involve children, such as classroom observations, teacher rating forms, and collection of work products, impose a burden on adults and will require advance planning for using the information.
- (P-3) Those charged with selecting assessments need to weigh options carefully, considering the appropriateness of candidate assessments for the desired purpose and for use with all the subgroups of children to be included. Although the same measure may be used for more than one purpose, prior consideration of all potential purposes is essential, as is careful analysis of the actual content of the assessment instrument. Direct examination of the assessment items is important because the title of a measure does not always reflect the content.

### **GUIDELINES ON DOMAINS AND MEASURES OF DEVELOPMENTAL OUTCOMES**

- (D-1) Domains included when assessing child outcomes and the quality of education programs should be expanded beyond those traditionally emphasized (language, literacy, and mathematics) to include others, such as affect, interpersonal interaction, and opportunities for self-expression.
- (D-2) Support is needed to develop measures of approaches to learning and socioemotional functioning, as well as other currently neglected domains, such as art, music, creativity, and interpersonal skills.
- (D-3) Studies of the child outcomes of greatest importance to parents, including those from ethnic minority and immigrant

- groups, are needed to ensure that assessment instruments are available for domains (and thinking about domains) emphasized in different cultural perspectives, for example, proficiency in the native language as well as in English.
- (D-4) For children with disabilities and special needs, domain-based assessments may need to be replaced or supplemented with more functional approaches.
  - (D-5) Selecting domains to assess requires first establishing the purposes of the assessment, then deciding which of the various possible domains dictated by the purposes can best be assessed using available instruments of proven reliability and validity, and considering what the costs will be of omitting domains from the assessment system (e.g., reduction of their importance in the eyes of practitioners or parents).

#### **GUIDELINES ON INSTRUMENT SELECTION AND IMPLEMENTATION**

- (I-1) Selection of a tool or instrument should always include careful attention to its psychometric properties.
  - A. Assessment tools should be chosen that have been shown to have acceptable levels of validity and reliability evidence for the purposes for which they will be used and the populations that will be assessed.
  - B. Those charged with implementing assessment systems need to make sure that procedures are in place to examine validity data as part of instrument selection and then to examine the data being produced with the instrument to ensure that the scores being generated are valid for the purposes for which they are being used.
  - C. Test developers and others need to collect and make available evidence about the validity of inferences for language and cultural minority groups and for children with disabilities.
  - D. Program directors, policy makers, and others who select instruments for assessments should receive instruction in how to select and use assessment instruments.
- (I-2) Assessments should not be given without clear plans for follow-up steps that use the information productively and appropriately.

- (I-3) When assessments are carried out, primary caregivers should be informed in advance about their purposes and focus. When assessments are for screening purposes, primary caregivers should be informed promptly about the results, in particular whether they indicate a need for further diagnostic assessment.
- (I-4) Pediatricians, primary medical caregivers, and other qualified personnel should screen for maternal or family factors that might impact child outcomes—child abuse risk, maternal depression, and other factors known to relate to later outcomes.
- (I-5) Screening assessment should be done only when the available instruments are informative and have good predictive validity.
- (I-6) Assessors, teachers, and program administrators should be able to articulate the purpose of assessments to parents and others.
- (I-7) Assessors should be trained to meet a clearly specified level of expertise in administering assessments, should be monitored systematically, and should be reevaluated occasionally. Teachers or other program staff may administer assessments if they are carefully supervised and if reliability checks and monitoring are in place to ensure adherence to approved procedures.
- (I-8) States or other groups selecting high-stakes assessments should leave an audit trail—a public record of the decision making that was part of the design and development of the assessment system. These decisions would include why the assessment data are being collected, why a particular set of outcomes was selected for assessment, why the particular tools were selected, how the results will be reported and to whom, as well as how the assessors were trained and the assessment process was monitored.
- (I-9) For large-scale assessment systems, decisions regarding instrument selection or development for young children should be made by individuals with the requisite programmatic and technical knowledge and after careful consideration of a variety of factors, including existing research, recommended practice, and available resources. Given the

broad-based knowledge needed to make such decisions wisely, they cannot be made by a single individual or by fiat in legislation. Policy and legislation should allow for the adoption of new instruments as they are developed and validated.

- (I-10) Assessment tools should be constructed and selected for use in accordance with principles of universal design, so they will be accessible to, valid, and appropriate for the greatest possible number of children. Children with disabilities may still need accommodations, but this need should be minimized.
- (I-11) Extreme caution needs to be exercised in reaching conclusions about the status and progress of, as well as the effectiveness of programs serving, young children with special needs, children from language-minority homes, and other children from groups not well represented in norming or validation samples, until more information about assessment use is available and better measures are developed.

### GUIDELINES ON SYSTEMS

- (S-1) An effective early childhood assessment system must be part of a larger system with a strong infrastructure to support children's care and education. The infrastructure is the foundation on which the assessment systems rest and is critical to its smooth and effective functioning. The infrastructure should encompass several components that together form the system:
  - A. **Standards:** A comprehensive, well-articulated set of standards for both program quality and children's learning that are aligned to one another and that define the constructs of interest as well as child outcomes that demonstrate that the learning described in the standard has occurred.
  - B. **Assessments:** Multiple approaches to documenting child development and learning and reviewing program quality that are of high quality and connect to one another in well-defined ways, from which strategic selection can be made depending on specific purposes.

- C. **Reporting:** Maintenance of an integrated database of assessment instruments and results (with appropriate safeguards of confidentiality) that is accessible to potential users, that provides information about how the instruments and scores relate to standards, and that can generate reports for varied audiences and purposes.
  - D. **Professional development:** Ongoing opportunities provided to those at all levels (policy makers, program directors, assessment administrators, practitioners) to understand the standards and the assessments and to learn to use the data and data reports with integrity for their own purposes.
  - E. **Opportunity to learn:** Procedures to assess whether the environments in which children are spending time offer high-quality support for development and learning, as well as safety, enjoyment, and affectively positive relationships, and to direct support to those that fall short.
  - F. **Inclusion:** Methods and procedures for ensuring that all children served by the program will be assessed fairly, regardless of their language, culture, or disabilities, and with tools that provide useful information for fostering their development and learning.
  - G. **Resources:** The assurance that the financial resources needed to ensure the development and implementation of the system components will be available.
  - H. **Monitoring and evaluation:** Continuous monitoring of the system itself to ensure that it is operating effectively and that all elements are working together to serve the interests of the children. This entire infrastructure must be in place to create and sustain an assessment subsystem within a larger system of early childhood care and education.
- (S-2) A successful system of assessments must be coherent in a variety of ways. It should be *horizontally coherent*, with the curriculum, instruction, and assessment all aligned with the early learning and development standards and with the program standards, targeting the same goals for learning, and working together to support children's developing knowledge and skill across all domains. It should be *vertically coherent*, with a shared understanding at all levels of the system of the goals for children's learning and devel-

opment that underlie the standards, as well as consensus about the purposes and uses of assessment. It should be *developmentally coherent*, taking into account what is known about how children's skills and understanding develop over time and the content knowledge, abilities, and understanding that are needed for learning to progress at each stage of the process. The California Desired Results Developmental Profile provides an example of movement toward a multiply coherent system. These coherences drive the design of all the subsystems. For example, the development of early learning standards, curriculum, and the design of teaching practices and assessments should be guided by the same framework for understanding what is being attempted in the classroom that informs the training of beginning teachers and the continuing professional development of experienced teachers. The reporting of assessment results to parents, teachers, and other stakeholders should also be based on this same framework, as should the evaluations of effectiveness built into all systems. Each child should have an equivalent opportunity to achieve the defined goals, and the allocation of resources should reflect those goals.

- (S-3) Following the best possible assessment practices is especially crucial in cases in which assessment can have significant consequences for children, teachers, or programs. The 1999 NRC report *High Stakes: Testing for Tracking, Promotion, and Graduation* urged extreme caution in basing high-stakes decisions on assessment outcomes, and we conclude that even more extreme caution is needed when dealing with young children from birth to age 5 and with the early care and education system. We emphasize that a primary purpose of assessing children or classrooms is to improve the quality of early childhood care and education by identifying where more support, professional development, or funding is needed and by providing classroom personnel with tools to track children's growth and adjust instruction.
- (S-4) Accountability is another important purpose for assessment, especially when significant state or federal investments are made in early childhood programs. Program-level accountability should involve high stakes only under

very well-defined conditions: (a) data about input factors are fully taken into account, (b) quality rating systems or other program quality information has been considered in conjunction with child measures, (c) the programs have been provided with all the supports needed to improve, and (d) it is clear that restructuring or shutting the program down will not have worse consequences for children than leaving it open. Similarly, high stakes for teachers should not be imposed on the basis of classroom functioning or child outcomes alone. Information about access to resources and support for teachers should be gathered and carefully considered in all such decisions, because sanctioning teachers for the failure of the system to support them is inappropriate.

- (S-5) Performance (classroom-based) assessments of children can be used for accountability, if objectivity is ensured by checking a sample of the assessments for reliability and consistency, if the results are appropriately contextualized in information about the program, and if careful safeguards are in place to prevent misuse of information.
- (S-6) Minimizing the burdens of assessment is an important goal; being clear about purpose and embedding any individual assessment decision into a larger system can limit the time and money invested in assessment.
- (S-7) It is important to establish a common way of identifying children for services across the early care and education, family support, health, and welfare sectors.
- (S-8) Implementing assessment procedures requires skilled administrators who have been carefully trained in the assessment procedures to be implemented; because direct assessments with young children can be particularly challenging, more training may be required for such assessments.
- (S-9) Implementation of a system-level approach requires having services available to meet the needs of all children identified through screening, as well as requiring follow-up with more in-depth assessments.
- (S-10) If services are not available, it can be appropriate to use screening assessments and then use the results to argue for expansion of services. Failure to screen when services

are not available may lead to underestimation of the need for services.

## RESEARCH AGENDA

Among the tasks of the committee was the development of a research agenda to improve the quality and suitability of developmental assessment, across a wide array of purposes and for the benefit of all the various subgroups of children who will eventually be entering kindergarten. References to the need for research on assessment tools and the building of an assessment system are distributed throughout this document. Major topics of recommended research, with details in Chapter 11, are

- research related to instrument development,
- research related to assessment processes,
- research on the use of assessment tools and processes with special populations, and
- research related to accountability.

## CONCLUSION

Well-planned and effective assessment can inform teaching and program improvement, and contribute to better outcomes for children. Current assessment practices do not universally reflect the available information about how to do assessment well. This report affirms that assessments can make crucial contributions to the improvement of children's well-being, but only if they are well designed, implemented effectively, developed in the context of systematic planning, and are interpreted and used appropriately. Otherwise, assessment of children and programs can have negative consequences for both. The value of assessments therefore requires fundamental attention to their purpose and the design of the larger systems in which they are used.

# 3

## Perspectives on Early Childhood Learning Standards and Assessment

In a perfect world, participants in the development of a set of early childhood services at either a local or system level would begin by thinking about what is needed to improve the physical well-being and developmental competence of young children. They would decide what outcomes could be anticipated for children who participate in a particular well-designed program or set of services. They would subsequently concern themselves with what standards and processes would be needed to ensure that participating children would benefit from the program. The planners would select formative assessments to track children's progress toward the standards and use this information to guide instructional adjustments. And finally, reliable and valid processes to assess whether children's overall development and learning have met the expectations of the planners would be selected and employed. The results of such assessment would be used to refine the program practices with the expectation that the outcomes for children would improve even further.

In the real world, this rarely happens. The underresourced complex of early childhood care and education settings in the United States is seldom able to implement the ideal sequence of steps at the local, state, or national level. The federal government, individual states, and local providers usually find themselves working at least partially backward to create workable processes

to determine what the expectations for children and their families should be, what program standards lead to the accomplishment of those outcomes, and how to assess children's status related to the standards as a function of program participation.

That picture is changing as the early childhood field, as never before, is influenced by and actively reconfigures itself in response to the burgeoning development of state prekindergarten (pre-K) programs and accompanying expectations for documentation of children's progress, the development of learning standards in K-12 education, the parallel development of state assessment systems, and the accompanying development of quality rating systems across the early care and education sector.

This chapter describes the development of well-defined expectations for child outcomes—that is, early learning standards—as a function of participation in an early childhood setting of some kind, how these learning standards are being used, and how practitioners are able to access information about how to use them. We use the term “early learning standards,” as defined by the Early Childhood Education Assessment Consortium of the Council of Chief State School Officers, in collaboration with several early childhood organizations. Early learning standards are statements that describe expectations for the learning and development of young children across the domains of health and physical well-being, social and emotional well-being, approaches to learning, language development and symbol systems, and general knowledge about the world around them (Council of Chief State School Officers and Early Childhood Education Assessment Consortium, 2007).

Until recently the very idea of defined expectations for what children should know and be able to do at particular times in these very early years of their lives was rejected by many in the early childhood field. Policy makers, researchers, program leaders, and teachers have historically depended on structural program and process standards (e.g., the qualifications of staff, group size and ratio, nature of the curriculum, provisions for parental involvement, the nature of adult and child interaction) to assess whether a program was offering a quality experience for children. These sets of program and process standards exist in forms as diverse as the minimum regulations each state requires for child

care settings, to requirements for operating the federal Head Start program, to regulations for state prekindergarten programs, to standards for National Association for the Education of Young Children accreditation (National Association for the Education of Young Children, 2006). Program standards can reflect the minimum floor under which a program cannot operate, such as in the case of the states' child care regulations, or they can be the highest quality requirements, as in the case of the new Accreditation Standards of the National Association for the Education of Young Children (2006).

## DEVELOPMENT OF EARLY LEARNING STANDARDS

Decades of research on effective programs have demonstrated that children participating in programs adhering to high-quality program and process standards exhibit improved developmental and learning outcomes compared with children with no program or those experiencing a low-quality program (Ackerman and Barnett, 2006; High/Scope Educational Research Foundation, 2002). Many states making an investment in prekindergarten conduct evaluations of program quality and, in some cases, assess child outcomes. These studies are in addition to the regular program monitoring done to ensure that programs meet state standards, and they have increased in number as more and more states have begun to invest public money in prekindergarten (Gilliam and Zigler, 2001). Michigan, for example, has compelling longitudinal program evaluation data on the link between program quality and child outcomes in the Michigan School Readiness Program (High/Scope Educational Research Foundation, in press; National Institute for Early Education Research, 2005). Few other public or private programs (e.g., child care, private preschools) are subject to either quality-driven program standards or requirements for assessing child outcomes.

The earliest state early learning standards were developed by states operating pre-K programs (typically for 3- and 4-year-olds or just 4-year-olds). Such standards were developed on the premise that evaluation of child outcomes could not be done without a set of early learning standards against which to measure children's progress. Since the early 1990s, there has been an explosion of

activity around the development of state learning standards, and every state now has them except North Dakota (where they exist in draft form). National early learning standards, such as those developed for Head Start and by subject-specific professional organizations, have also been created (Council of Chief State School Officers and Early Childhood Education Assessment Consortium, 2003a; U.S. Department of Health and Human Services, Administration for Children and Families, 2003). A set of model early learning standards has been developed by a national committee of experts (Pre-kindergarten Standards Panel, 2002), although a 2003 study found that few states made specific reference to this document (Council of Chief State School Officers and Early Childhood Education Assessment Consortium, 2003b).

Virtually every report or article about states and their development of early learning expectations begins with an expression of surprise about how quickly the development process unfolded across the nation (see Box 3-1). The development and implementation of these standards reflect a significant shift in how the field has viewed the usefulness of setting expectations for young children's learning and development. Appendix C provides more information about state early childhood standards.

While acknowledging that adherence to high-quality program standards substantially increases the likelihood that participating children will benefit from the program, advocates have been forceful in expressing reservations about creating these sets of expectations (Hatch, 2001; National Association for the Education of Young Children and National Association of Early Childhood Specialists in State Departments of Education, 2002). Such reservations include a number of concerns:

- The threat of ignoring the variability of children's development and learning and of their experiences.
- Worry that early labeling of the most vulnerable children as "failures" puts their access to appropriate instruction and thus their future development at risk.
- Unfairly judging programs on the basis of whether participating children meet standards, without taking into account their status at entry to the program or information about the resources available to the program.

### BOX 3-1

#### The Development of Major Early Learning Standards

- 1989 Goal 1, "All children ready to learn," articulated by the nation's governors at education summit
- 1995 Publication of *Reconsidering Children's Early Development and Learning* (Kagan, Moore, and Bredekamp, 1995)
- 1998 Publication of *Preventing Reading Difficulties* (National Research Council, 1998)
- Publication of *Principles and Recommendations for Early Childhood Assessments* (Shepard, Kagan, and Wurtz, 1998)
- 1999 **10 states have standards for children ages 3-4**
- 2000 Publication of *From Neurons to Neighborhoods* (National Research Council and Institute of Medicine, 2000)
- Publication of *Head Start Child Outcomes Framework* (U.S. Department of Health and Human Services, Administration for Children and Families, 2000)
- 2001 Publication of *Eager to Learn* (National Research Council, 2001)
- 2002 **17 states have standards for children ages 3-4; 4 states have standards for children ages 0-3**
- Good Start, Grow Smart* initiative (White House, 2002) launched
- Head Start National Reporting System launched
- 2007 **49 states have standards for children ages 3-4; 18 states have standards for children ages 0-3**
- Publication of *Taking Stock: Assessing and Improving Early Childhood Learning and Program Quality* (National Early Childhood Accountability Task Force, 2007)
- States now required to report outcomes data for children with disabilities served through Part C and Part B of the Individuals with Disabilities Education Act as part of their Annual Performance Report

- The risk of children being unfairly denied program participation based on what they do or do not know.
- The risk that responsibility for meeting the standards will shift from the adults charged with providing high-quality learning opportunities to very young children.
- Whether high-quality teaching will be undermined by the pressure to meet standards, causing the curriculum to become rigid and focused on test content and the erosion of a child-centered approach to curriculum development and instructional practices.
- Whether switching to child outcome standards as the sole criterion for determining the effectiveness of programs or personnel is unfair. Early childhood services continue to be underresourced, and poor child outcomes may reflect the lack of resources.
- Misunderstanding of how to achieve standards frequently appears to engender more teacher-centered, didactic practices.

Although these concerns cannot be dismissed, it is important to note that early learning standards were developed as a tool to improve program quality for all children. Their rapid development has resulted from a combination of policy shifts and an emerging practitioner consensus, influenced by a number of factors:

- The standards-setting activity in K-12 education, which gained momentum after the 1990 establishment of the National Education Goals Panel and the subsequent passage of Goals 2000 by Congress in 1994. This act and its accompanying funding led states to develop or refine K-12 standards in at least the areas of English language arts, mathematics, science, and history.
- Greater understanding about the capabilities of young children. Earlier work of the National Research Council (NRC) has played a key role in informing and developing that understanding and thereby supporting the development of early learning standards. The most influential NRC document influencing the development of standards for

preschool-age children has been *Eager to Learn: Educating Our Preschoolers* (National Research Council, 2001). Other important influences include *From Neurons to Neighborhoods: The Science of Early Childhood Development* (National Research Council and Institute of Medicine, 2000) and *Preventing Reading Difficulties in Young Children* (National Research Council, 1998).

- Linking of the development of early learning standards with receipt of federal funds from the Child Care and Development Fund for each state (U.S. Department of Health and Human Services, Administration for Children and Families, 2002). The requirement that all states develop voluntary early learning guidelines in language, literacy and mathematics followed the release of the 2002 early childhood initiative, Good Start, Grow Smart (White House, 2002).

## HEAD START CHILD OUTCOMES FRAMEWORK

Head Start is a large, well-known federally funded early childhood services program, serving over 909,000 children in FY 2006. Actions taken by Head Start are highly visible and embody federal policies toward early childhood services. The following narrative provides some background for understanding the evolution of the Head Start National Reporting System.

### Development of the Framework

The Head Start Child Outcomes Framework was developed in response to an unfolding set of congressional mandates beginning with the 1994 reauthorization of the Head Start Act, which mandated the development of measures to assess services and administrative and fiscal practices, to be usable for local self-assessment and peer review, to identify Head Start strengths and weaknesses, and to identify problem areas (Section 641A).

The earliest response to this mandate by the Head Start Bureau was the creation of a Pyramid of Services diagram that local programs could use to support and inform continuous program improvement efforts (see Figure 3-1). The pyramid was

also used in the formulation of the Family and Child Experiences Survey (FACES) (McKey and Tarullo, 1998).<sup>1</sup>

When Head Start was reauthorized in 1998, programs were required to include specific child outcomes in their self-assessment process. This requirement led in 2000 to the development of the Child Outcomes Framework (U.S. Department of Health and Human Services, Administration for Children and Families, 2000). The development process was informed by the participation of a committee of outside experts (the Head Start Bureau Technical Work Group on Child Outcomes), who used the Pyramid of Services as a basis for their deliberations.

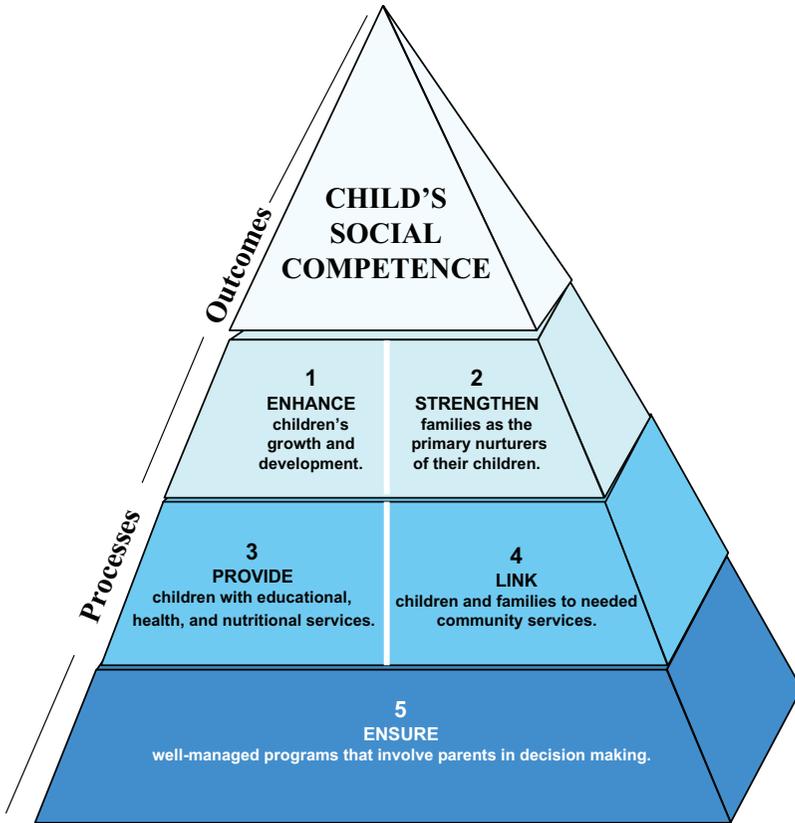
Bureau staff also consulted standards documents from professional associations and the existing state early learning standards, of which 10 sets existed at the time.<sup>2</sup> Although those sets of state standards displayed some common elements, great disparity was reflected in the ways the developmental domains were described and in which domains were included. Some included only a few domains, such as language and literacy; others reflected the five dimensions described by the National Education Goals Panel Goal 1 Technical Planning Group (Kagan, Moore, and Bredekamp, 1995) or additional content-related domains (e.g., social studies, science, mathematics, arts).

As had the state leaders, the developers of the Head Start Child Outcomes Framework struggled with how to organize learning expectations for Head Start children. They settled on eight broad categories that include the domains in the Goal 1 document (Kagan, Moore, and Bredekamp, 1995), with the addition of the content categories of mathematics, science, and the arts. Expectations related to social studies were included under the social emotional domain as “knowledge of families and com-

---

<sup>1</sup>FACES employs direct assessment items from several nationally normed early childhood instruments, along with teacher reports, parent reports, and observation, to assess numerous cognitive and socioemotional outcomes. It follows children from their Head Start experiences through kindergarten and through the 1997 cohort into first grade (U.S. Department of Health and Human Services, Administration for Children and Families, 2006a, available: <http://www.acf.hhs.gov/programs/opre/hs/faces/index.html>).

<sup>2</sup>From Thomas Schultz via personal communication with committee member Harriet Egertson.



**FIGURE 3-1** Head Start Program performance measures conceptual framework.

SOURCE: U.S. Department of Health and Human Services, Administration for Children and Families (2006).

munities.”<sup>3</sup> The eight general domains in the final document—language development, literacy, mathematics, science, creative arts, social and emotional development, approaches to learning, and physical health and development—were divided further into 27 domain elements, and 100 examples of more specific indicators of children’s skills, abilities, knowledge, and behaviors considered to be important for school success (U.S. Department of Health and

<sup>3</sup>From S.A. Andersen via personal communication with committee member Harriet Egertson.

Human Services, Administration for Children and Families, 2003). Among the 100 indicators were 13 specific, legislatively mandated domain elements or indicators in various language, literacy, and numeracy skills. Two indicators are specific to the desired outcomes for young children learning English.

The framework was clearly intended to provide guidance for ongoing child assessment and program improvement efforts. Several caveats are specified in the introduction: the framework is intended to focus on children ages 3 to 5 rather than younger children and to guide local programs in selecting, developing, or adapting an assessment instrument or set of assessment tools.

The framework is not intended to be an exhaustive list of everything a child should know or be able to do by the end of preschool or to be used directly as a checklist for assessing children. There is no mention of its relationship to curriculum development. The introduction further attempts to broaden practitioner understanding of the use of the framework: "Information on children's progress on the Domains, Domain Elements and Indicators can be obtained from multiple sources, such as teacher observations, analysis of samples of children's work and performance, parent reports, or direct assessment of children. Head Start assessment practices should reflect the assumption that children demonstrate progress over time in development and learning on a developmental continuum, in forms such as increasing frequency of a behavior or ability; increasing breadth or depth of knowledge and understanding; or increasing proficiency or independence in exercising a skill or ability" (U.S. Department of Health and Human Services, Administration for Children and Families, 2000).

### **GOOD START, GROW SMART INITIATIVE**

The next step in the federal effort to prepare children to succeed in school with improved Head Start programs came in 2002. President George W. Bush mandated the Good Start, Grow Smart initiative to help states and local communities strengthen early learning for young children. As described in the executive summary of the initiative, President Bush directed the Department of Health and Human Services (HHS) to develop a strategy for assessing the standards of learning in early literacy, language, and

numeracy skills in every Head Start center. Every local program was required to assess all children between the ages of 3 and 5 on these indicators at the beginning, middle, and end of each year and to analyze the assessment data on the progress and accomplishments of all enrolled children. Federal program monitoring teams were to conduct onsite reviews of each program's implementation of these requirements.

HHS was also directed to design a national reporting system to collect data from every local program. This system, combined with ongoing Head Start research and onsite program monitoring reviews, was envisioned as a source of comprehensive information on local program effectiveness. Local program data would be used to target new efforts in staff training and program improvement to enhance the capacity of Head Start to increase children's early literacy and school readiness. In addition, data on whether a program is successfully teaching standards of learning would be used in HHS evaluations of local Head Start agency contracts (White House, 2002).

### HEAD START NATIONAL REPORTING SYSTEM

The Administration for Children and Families (ACF) responded to the mandate of the Good Start, Grow Smart initiative to assess children's progress against uniform national standards by developing the National Reporting System (NRS), an instrument to be used to assess all 4- and 5-year-olds in Head Start.

The NRS was developed by a contractor, Westat, on an accelerated schedule. Work began in August 2002. Westat recruited a Technical Work Group of experts in child development, assessment, measurement, and program evaluation as advisers and also used focus groups and other methods to gather information and plan the NRS. After a field test in spring 2003, ACF approved a 15-minute assessment battery, trained Head Start program personnel as assessors, and implemented the NRS for the first time in fall 2003.

The NRS in its original form assessed skills in four areas: (1) comprehension of spoken English, tested with a "language screener," (2) vocabulary, (3) letter naming, and (4) early mathematical skills. Westat and its advisers did not include other

domains because of the difficulty in finding high-quality instruments that would meet NRS requirements. Most of the items in the NRS battery were taken from existing assessment instruments that had been used in Head Start research or in local Head Start assessment programs.

A Spanish-language version of the assessment was developed as well. In the first year of implementation, it was administered after the English version to children whose home language was Spanish and who passed a Spanish language screener. Thus all children were assessed in English or Spanish only if they had passed the screener for that language.

The NRS aroused much concern on the part of some early childhood experts.<sup>4</sup> More than 200 educators, researchers, and practitioners signed letters to Congress in early 2003 laying out their concerns about the NRS, along with some suggested ways to improve it. The letters ended with the following words: "If we can move ahead on adopting a matrix sampling design for the proposed Reporting System; if we can ensure that the System is composed of subtests that are reliable, valid, and fair; and if we can have adequate time to learn how to mount this historically largest-ever effort to test young children without creating chaos and confusion, then we will have created a system that has a chance of assisting young, at-risk children" (Meisels et al., 2003).

In May 2005, the Government Accountability Office (GAO) released a report on the first year of implementation of the NRS (U.S. Government Accountability Office, 2005). In it, the GAO identified several weaknesses in the system and its implementation, noting: "Currently, results from the first year of the NRS are of limited value for accountability purposes because the Head Start Bureau has not shown that the NRS meets professional standards for such uses, namely that (1) the NRS provides reli-

---

<sup>4</sup>Among the other criticisms of the NRS was dissatisfaction with the omission of any measure of socioemotional development. A socioemotional component, based on teacher observations over a 1-month period, was added to the NRS as of the fall 2006 administration. For that administration, teachers were asked to assess only children who had been in the program for at least 4 weeks. It included items asking the teacher to report on approaches to learning, cooperative classroom behavior, relations with other children, and behavior problems (U.S. Department of Health and Human Services, Administration for Children and Families, 2006b).

able information on children's progress during the Head Start program year, especially for Spanish-speaking children, and (2) its results are valid measures of the learning that takes place" (U.S. Government Accountability Office, 2005, "Highlights").

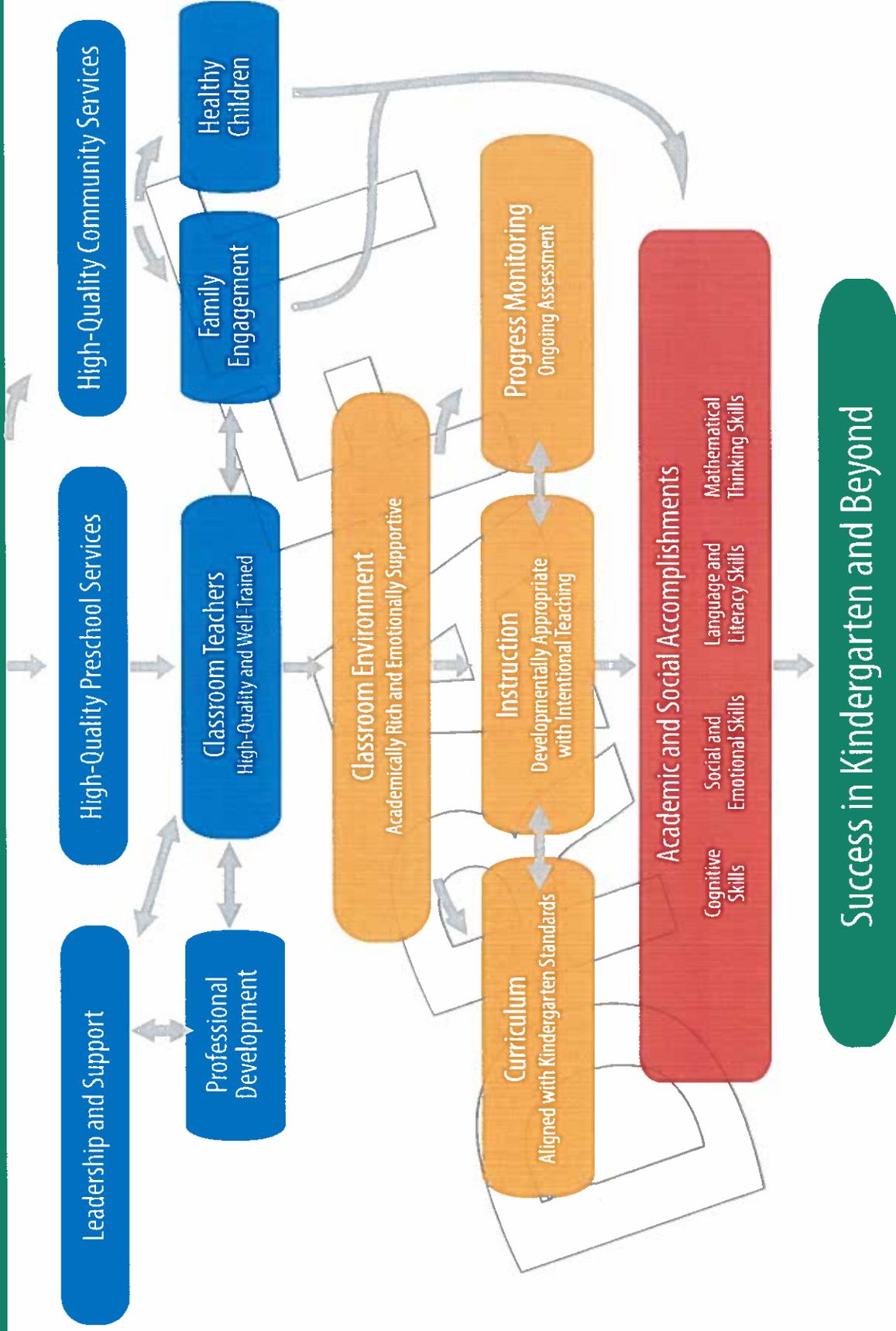
The American Educational Research Association, along with a smaller group of experts, went on record with their reservations about the NRS later in 2005, when legislation was under consideration to suspend its implementation (American Educational Research Association, 2005; Yoshikawa and McCartney, 2005, personal communication to U.S. House of Representatives). The National Head Start Association expressed its concerns in a letter to the Office of Management and Budget (OMB) in 2006, after plans for continuing implementation of the NRS were submitted for OMB clearance. Believing that the burden of the reporting system on Head Start programs had been underestimated by ACF and that the results to be gained by continuing it did not justify the burden, the National Head Start Association requested that implementation of the NRS be suspended.

Reactions like these were among the factors that led to the congressional request for this National Academies study. The reauthorization of the Head Start program (P.L. 110-134, 2007) was signed into law in December 2007, while the current study was under way. It requires ACF to discontinue administration of the NRS in its current form, directing it to take into account the results of this National Academies report and of other scientific research in any new assessment design, development, and implementation.

At the time of this writing, administration of the NRS has been terminated, and ACF is under a requirement to follow a more rigorous process as it develops new assessment tools for Head Start. Other early childhood programs and funders, including state and local agencies charged with overseeing child development programs, are also working to devise assessments that can serve to improve the provision of services to children and to ensure better outcomes. This committee's challenging task is to provide useful guidance for all these efforts.

# South Carolina Child Development Education Pilot Program

Publicly Funded 4-Year-Old Pre-Kindergarten



## South Carolina Child Development Education Pilot Program (CDEPP) Conceptual Framework Definitions<sup>1</sup>

**Academic and Social Accomplishments**—The *American Heritage Dictionary* (Second College Edition) defines accomplishment as “something completed successfully; achievement.” Academic and social accomplishments The *American Heritage Dictionary* (Second College Edition) defines: (a) cognitive skills; (b) social emotional skills; (c) language and literacy skills; and (d) mathematical thinking skills. Critical cognitive skills include but are not necessarily limited to: memory, attention, ability to connect experiences, classification, use of symbols, curiosity and motivation, and meaningful engagement and persistence. Critical social and emotional skills include but are not necessarily limited to the ability to delay gratification, positive interactions and relationships with adults and peers, self-regulation of emotions and behavior, and the ability to follow reasonable and age appropriate limits and adult requests. Critical language and literacy skills include but are not necessarily limited to communication of needs and preferences, listening, receptive and expressive vocabulary, phonological awareness, alphabetic principle and knowledge, print and book knowledge, prewriting and writing skills, and reading comprehension. Critical mathematical thinking skills include but are not necessarily limited to: knowledge of patterns, ability to compare and measure, recognition and use of numbers and number concepts, and basic mathematical operations.

**Classroom Environments**—Classrooms consist of materials and arrangements to support and promote teaching and learning opportunities for young children. Critical aspects include but are not necessarily limited to: (a) space and furnishings (e.g., learning centers, chairs, tables, open areas); (b) materials and equipment to promote children’s meaningful engagement (e.g., writing and art materials, books, blocks, puzzles, electronic tablets, smart boards); and (c) schedules of individual, small group, and whole group learning activities to promote children’s meaningful engagement. In addition, intentional teaching to promote positive and educative interactions with and among children and teachers is a critical part of classroom environments (see Instruction and Intentional Teaching).

**Classroom Teachers**—Typically, early childhood classrooms have a “lead” teacher who is responsible for establishing and maintaining classrooms environments, implementing curriculum, and organizing and supervising other adults who are teaching in classrooms. Nevertheless, the designation of teachers as a generic term refers to any adult who participates in classroom activities and who provides teaching and learning opportunities to children (e.g., assistant teachers, parent and community volunteers, speech and language therapists).

**Curriculum**—Curriculum may be defined “. . . as an organized and sequenced set of content to be taught: It is the ‘what to teach’ . . .” Noonan & McCormick, 2014). In addition, it may be defined as a process to determine what should be taught to whom and when. Some educators also define teaching strategies and tactics or the “how to teach” as part of curriculum (see Instruction). Hence, curriculum may be defined as the content and teaching techniques used to promote high-quality teaching and learning opportunities to enhance young children’s development and learning. Preschool curriculum

---

<sup>1</sup> Our intent with the glossary is to promote common definitions and shared understandings that might support early childhood practitioners, administrators, and advocates communications in pursuit of high-quality learning experiences for young children and their families. Many of the definitions employed are from well-know scholars in the field or by example and are not intended to be exhaustive.

should be aligned with kindergarten and early elementary standards to enhance transition from preschool to kindergarten and future school success.

**Developmentally Appropriate Practice**—The National Association for the Education of Children (NAEYC) has propagated developmentally appropriate practices (DAP) for early childhood educators for over 25 years (Copple, & Bredekamp, 2009). In the last revision of DAP the basic principles increased from two to three. The three interrelated cardinal principles of DAP are: (a) age appropriateness (i.e., for almost all children in most circumstances child development is *an age-related sequence of acquisition and maintenance of skills, abilities, and dispositions*); (b) individual appropriateness (i.e., despite age-related normative developmental sequences *differences among children in their development and learning result in varying rates of acquisition of skills, abilities, and dispositions, which is also known as individual differences*); and (c) cultural appropriateness (i.e., within American culture, we have *many cultures in our nation that might affect the delivery, use, and quality of early childhood and community services*). Moreover, researchers have demonstrated that culture influences children’s development and learning and should be addressed as needed when providing high-quality early childhood services (Tharp & Dalton, 2007).

**Family Engagement**—Supporting and working with families has been a long-standing tradition with early childhood professionals (Copple & Bredekamp, 2009; Sandall, McLean, & Smith, 2000). Activities to promote *families engagement and meaningful participation in early childhood education and services* include but are not necessarily limited to: (a) dissemination of relevant information; (b) linkage of families to needed medical, social, and community services; (c) parent education about strategies and tactics to promote and support children’s development and learning; (d) ongoing assessment information related to children’s progress while receiving early childhood services; and (e) formal and informal meetings and events that highlight participation of families in early childhood services. Family engagement activities may range from relatively passive ones such as sending relevant information home from school to proactive strategies such as coaching of critical parental skills that are related to better development and learning. For example, some parents may benefit greatly from learning basic behavioral guidance strategies to enhance parent child interactions (e.g., ignoring minor misbehavior, “catching a child being good,” teaching self regulation to their children). School personnel have a responsibility to promote and support families’ meaningful engagement in community schools.

**Healthy Children**—Promoting children’s health is fundamental to their development and learning. Critical elements that promote and support young children’s health during early childhood include but are not necessarily limited to: (a) prenatal and perinatal care; (b) access to and regular use of pediatric care (i.e., “medical home”); (c) immunizations; (d) screenings for medical and developmental problems (e.g., hearing and vision screenings, dental screenings, developmental screenings); and (e) access to nutritious food and physical activity.

**High-Quality Community Services**—Families access and use of high-quality community services can contribute greatly to high-quality preschool services and future child outcomes, especially for high-needs families (e.g., living in poverty, dual language learners, children with medical and developmental difficulties). Unfortunately, often medical, social, and community services, are not co-

located in or well linked with preschool programs. For many high needs families the fact that services are dispersed across communities creates challenges of access and timely use of needed community services. Critical community services include but are not necessarily limited to: (a) prenatal and pediatric care; (b) enrollment in social service programs such as TANF, MEDICAID, and SNAP; (c) mental health services; (d) responsive services for children and families who experience child and spousal maltreatment; (e) drug and alcohol treatment; (f) parent education such as how to nurture and better care for their children; and (g) before and after school child care. Given the lack of connection between school and many other community services, school personnel should promote and support families' linkage to and use of needed community services.

**High-Quality Preschool Services**—High-quality preschool services include but are not necessarily limited to: (a) well-trained teachers supported by effective professional development; (b) engagement and participation of families in schools; (c) academically rich and emotionally supportive classrooms; (d) curricula that are well-aligned with kindergarten and early elementary standards and learning progressions; (e) developmentally appropriate instruction with intentional teaching of critical skills; (f) ongoing assessment that is formative for instruction and monitoring children's progress; and (g) critical academic and social accomplishments that promote and support success in kindergarten and beyond.

**Instruction**—Instruction consists of the strategies, tactics, and methods teachers' employ to actively engage children in the process of learning. Hence, instructional procedures are the "*how to teach*" component of curricula. Metaphorically, teachers are similar to movie directors with responsibilities that include (a) arranging classroom environments ("arranging sets and scenes"); (b) implementing instructional activities with intentional teaching ("using a movie script and planning and implementing film scenes"); and (c) providing positive and supportive feedback and monitoring progress to promote children's learning ("collaborating with actors and film technicians to achieve successful scenes and a great movie"). Instruction may be performed with individuals, small groups, and in whole groups of children and in different circumstances (e.g., center time, outside play, snack time, transition to bus, table top activities, large group). Instruction may range from relatively simple embedded questions about personal information (e.g., "How old are you?" "When is your birthday?") to systematic presentation of critical information to be learned (e.g., games focused on rhyming and alliteration, dialogic and shared reading, counting and measuring activities). Instruction is both incidental at "teachable moments" (e.g., pointing out a distinctive feature of a square, teacher naming an unknown object and then asking a child to expressively label the object) and teacher planned with high-quality teaching and learning opportunities for children (e.g., dialogic reading of stories focused on "Wh" questions, counting the number of days in a month).

**Intentional Teaching**—To promote teachers employment of efficient and effective teaching and learning strategies and tactics, Ann Epstein (2006) introduced the term and concept of intentional teaching with a monograph published by the National Association for the Education of Young Children (NAEYC). Whereas Epstein recognized young children learn in varied contexts and circumstances with and without teachers, she strongly recommended that effective teachers be proactive in thoughtful planning and implementation of high-quality teaching and learning activities and experiences throughout the preschool day. She defined intentional teaching as "Teachers act with

specific outcomes or goals in mind for children's development and learning." (p. 1) and further noted that an intentional teacher "... acts with knowledge and purpose to ensure that young children acquire the knowledge and skills (content) they need to succeed in school and in life." (p. 1). To promote efficient and effective learning with young children, especially children living in poverty, dual language learners, and with medical and developmental difficulties, intentional teaching ought to be implemented regularly with children.

**Leadership**—The *American Heritage Dictionary* (Second College Edition) defines leadership as "The capacity or ability to lead." In the field of early care and education, leadership may be exhibited by various individuals including but not necessarily limited to elected officials, agency administrators, principals, coordinators, teachers, parents, faculty at 2- and 4-year Institutions of Higher Education, advocates, and interested laypersons. Historically, many educators have considered leaders to be elected officials, key administrative personnel in local and state agencies, and site-level administrators such as principals and coordinators. Whereas these individuals can and do have essential leadership roles, other models of leadership often stress collaborative leadership among members of teams within organizations (cf. Metz, Halle, Bartley, & Blasberg, 2013). For example, clearly elected officials, critical agency personnel, and well-informed advocates provide leadership in establishing legislation and regulations to support policies and practices in our communities. And site-level administrators also have a critical role in implementing and supporting policies and practices at the local level. Nevertheless, the best-written legislation with clear regulations and high-quality site-level supervision does not necessarily change day-to-day practices for children and families. Contemporary conceptual frameworks such as a bioecological model (cf. Bronfenbrenner & Morris, 2006) and implementation science (cf. Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005) are systems approaches that emphasize collaboration among professionals and consumers to establish and maintain services that can be evaluated, and when indicated, changed to support continued improvement in services. Hence, an effective site-based implementation team at a child development program might include but not be limited to an administrator, teacher representatives, parents, and related service personnel who plan, implement, and evaluate services with the goal of promoting effective child and family outcomes. Leadership "ought" be shared among members of an implementation team, especially when their roles and responsibilities are explicitly defined and publicly reviewed. When clear responsibilities are not delineated one is at risk for the following scenario, "When everyone is responsible, no one is responsible" (anonymous). As an example of a team at a child development program, a local administrator might convene the team and make known what resources are available for professional development (e.g., inservice schedules, funding for trainings, accessible expertise). Teachers and parents on the team might develop a survey to determine practitioners and parents' needs for knowledge and skills in language development and early literacy. Once teachers and parents needs have been decided, the team can identify who will provide the professional development (e.g., accomplished teachers or language specialists, outside consultants), content (e.g., vocabulary development, alphabetic principle and knowledge), and methods of delivery (e.g., webinars, onsite consultation with constructive feedback on performance), and evaluation (e.g., review of teachers and parents' implementation of teaching skills; consumer satisfaction ratings from administrators, teachers, and parents). Models of shared leadership promote and support collaboration, which include various individuals on teams and not merely "top down leadership" from key agency administrators or supervisors (cf. Metz et al., 2013). Moreover,

implementation teams can share explicit roles and responsibilities based on their interests and skills, and whenever possible, develop and nurture their capacity to lead (cf. Wesley & Buysse, 2006).

**Professional Development**—The field of early childhood is characterized by multiple service sectors with different funding streams allocated for well-defined services. Common sectors serving many preschool children are: (a) state-funded pre-kindergarten services; (b) federally funded Head Start Programs; (c) federally and state-funded childcare; (d) federally and state-funded BabyNET Early Intervention Services; (e) for-profit childcare; and (f) private and faith-based preschools. In recent years, given that each sector has different standards and regulations for teachers, the term professional development (PD) has been confusing for many practitioners and has become a generic term that includes both professionals (i.e., academic qualifications and other criteria from a licensing body) and non-professionals (i.e., training related to and required by the sector employers). Other terms that are used commonly along with professional development have been: (a) workforce development; (b) teacher education; (c) preservice and inservice preparation; and (d) continuing education. We adopted the broad definition proposed by Buysse, Winton, and Rous (2009) that defined PD as “facilitated teaching and learning experiences that are transactional and designed to support the acquisition of professional knowledge, skill, and dispositions as well as the application of this knowledge in practice.” Winton (2010) further delineated three fundamental components of the professional development: “1) characteristics and contexts of learners and the children they serve and the PD providers (the *who*); 2) the content focus of professional development (*what* professionals should know and be able to do); and 3) the organization and facilitation of learning experiences (the *how*, or the methods and approaches used to implement PD.” (p. 115). Historically, most professional development has been workshops and presentations in which participants listen to information (“sit and get”). Two contemporary forms of professional development, especially for promoting effective practices include (a) on-site collaborative consultation with coaching to support teachers practices (Dunst & Trivette, 2009); and (b) establishment of communities of practice focused on evidence-based approaches to early childhood services (Wesley & Buysse, 2006). Regardless of the methods of delivery, we believe that efficient and effective professional development should be based on teachers’ needs for evidence-based practices to enhance preschool services, especially those teaching practices related to acquisition of critical skills, abilities, and dispositions.

**Progress Monitoring**—McLean (2004) defined assessment as “. . . a generic term that refers to the process of gathering information for the purpose of making decisions” (p. 13). Assessment in the broadest sense has several purposes including (a) identification and screening; (b) eligibility and diagnosis; (c) child program planning; (d) child progress monitoring; and (e) accountability and program evaluation (Brown & D’Amico, 2012; Snow & Van Hemel, 2008). Assessment methods can be as simple as observing children or asking a single discrete question or as complex as assigning a standardized series of complicated tasks to observe and record children’s performance to compare with same-aged peers (i.e., standardized norm referenced protocols). One type of assessment, *progress monitoring* is an assessment of children’s learning across time. Wolery (2004) delineated three essential purposes for progress monitoring: (a) to validate conclusions from initial assessments; (b) to record and evaluate child progress across time; and (c) to determine whether instruction should be continued or revised. Progress monitoring for instruction is typically performed by classroom

teachers and should be feasible for planning and, when indicated, adjusting instruction with young children.

**Publically funded 4-year-old Prekindergarten**—Across the United States during the last three decades, the majority of states have expanded the quantity and quality of prekindergarten services, especially for 4- and 5-year-old children not yet in kindergarten and high needs children and families (e.g., living in poverty, dual language learners, medical and developmental difficulties) (Barnett, Carolan, Fitzgerald, & Squires, 2012). Publically funded preschool services in South Carolina include but are not necessarily limited to: (a) state-funded Education Improvement Act (EIA), federally funded Title I, and district funded prekindergartens; (b) state-funded CDEPP prekindergartens; (c) federally funded Head Start Programs; and (d) state and federally funded Department of Social Services (SC DSS) Division of Early Care and Education for infants, toddlers, and preschoolers. *Although we believe that the conceptual framework applies to early childhood programs in general, for the purposes of Child Development Education Pilot Program (CDEPP) evaluation the phrase “publically funded prekindergarten” refers to those 4-year-old prekindergarten services funded through the South Carolina Child Development Education Pilot Program that are located in public schools, private preschools and childcare centers, and Head Start Programs.* Although focused on CDEPP, the CDEPP Evaluation and evaluators will, to the greatest extent possible, collaborate with and be informed by services and evaluations of other relevant publically and privately funded prekindergarten programs in South Carolina.

**Success in Kindergarten and Early Elementary**—We differentiate *success* in kindergarten and early elementary from kindergarten and school *readiness*. Kindergarten and school readiness consist of a one time “snapshot” of a child’s current skills, abilities, and dispositions. Prekindergarten and kindergarten entry assessment is helpful in determining which children need individualized and well-targeted educational services. Nevertheless, a one time “snapshot” is too circumscribed for children’s learning that occurs across time. Success is a more dynamic concept that focuses on ongoing teaching and learning opportunities that move children along a continuum of critical skills, abilities, and dispositions needed for school and life preparation. Success in kindergarten and beyond ought to include engaged teachers, children, and families with high-quality instruction and progress monitoring across time.

## References

- Barnett, W. S., Carolan, M. E., Fitzgerald, J., & Squires, J. H. (2012). *The state of preschool 2012: State preschool yearbook*. New Brunswick, NJ: National Institute for Early Education Research.
- Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In R. Lerner (Ed.), *Handbook of child psychology* (6th ed., Vol. 1, pp. 795-828). New York: Wiley.
- Brown, W. H., & D'Amico, L. K. (2012). *Purposes of early childhood assessment: A primer*. Columbia, SC: University of South Carolina.
- Buysse, V., Winton, P. J., & Rous, B. (2009). Reaching consensus on a definition of professional development for the early childhood field. *Topics in Early Childhood Special Education, 28*(4), 235-243.
- Copple, C., & Bredekamp, S. (Eds.). (2009). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8* (3<sup>rd</sup> Edition). Washington, DC: National Association for the Education of Young Children.
- Dunst, C. J., & Trivette, C. M. (2009). *Let's be PALS: An evidence-based approach to professional development*. *Infants & Young Children, 22*(3), 164-176.
- Epstein, A. S. (2007). *The intentional teacher: Choosing the best strategies for young children's learning*. Washington, DC: NAEYC.
- Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M. & Wallace, F. (2005). *Implementation Research: A Synthesis of the Literature*. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231). Retrieved from <http://www.fpg.unc.edu/~nirn/resources/publications/Monograph/pdf/Monograph>
- Houghton Mifflin Company. (1991). *The American Heritage Dictionary* (Second Edition). Boston.
- McLean, M. (2004). Assessment and its importance in early intervention/early childhood special education. In M. McLean, M. Wolery, & D. B. Bailey (Eds.) *Assessing infants and preschoolers with special needs* (3<sup>rd</sup> Edition, pp. 1-21). Upper Saddle River, NJ: Pearson Education, Inc.
- Metz, A., Halle, T., Bartley, L., & Blasberg, A. (2013). The key components of successful implementation. In T. Halle, A. Metz, & I. Martinez-Beck (Eds.). *Applying implementation science in early childhood programs and systems* (pp. 5-19). Baltimore: Brookes.
- Noonan, M. J., & McCormick, L. (Eds.). (2014). *Teaching young children with disabilities in natural environments* (2<sup>nd</sup> Edition). Baltimore: Brookes.
- Sandall, S., McLean, M. E., & Smith, B. J. (Eds.). (2000). *DEC recommended practices in early intervention/early childhood special education*. Longmont, CO: SOPRIS WEST.
- Snow, C. E., & Van Hemel, S. B. (2008). *Early childhood assessment: Why, What, and How?* National Research Council of the National Academies Report. Washington, DC: The National Academy Press.
- Tharp, R. G., & Dalton, S. S. (2007). Orthodoxy, cultural compatibility, and universals in education. *Comparative Education 43*(1), 53-70.
- Wesley, P. W., & Buysse, V. (2006). Building the evidence-base through communities of practice. In P. W. Wesley & V. Buysse (Eds.) *Evidence-based practice in the early childhood field* (pp. 161-194). Washington, DC: ZERO TO THREE PRESS.
- Winton, P. J. (2010). Professional development and quality initiatives: Two essential components of an early childhood system. In P. W. Wesley & V. Buysse (Eds.) *The quest for quality: Promising innovations for early childhood programs* (113-129). Baltimore: Brookes.

Wolery, M. (2004). Using assessment information to plan intervention programs. In M. McLean, M. Wolery, & D. B. Bailey (Eds.) *Assessing infants and preschoolers with special needs* (3<sup>rd</sup> Edition, pp. 517-544). Upper Saddle River, NJ: Pearson Education, Inc.



UNIVERSITY OF  
**SOUTH CAROLINA**

**Defining, Understanding, Assessing, and Evaluating  
School Readiness in South Carolina**

**Commissioned by  
South Carolina Early Childhood Advisory Council  
South Carolina First Steps to School Readiness**

William H. Brown, PhD  
Leigh Kale D'Amico, EdD, MPA  
Kassie Mae Miller, MPH

## Table of Contents

Table of Contents.....	2
Defining, Understanding, Assessing, and Evaluating School Readiness in South Carolina.....	3
Introduction.....	3
Methods.....	5
Defining School Readiness.....	6
Identifying Domains of School Readiness.....	7
Understanding Influences on School Readiness.....	9
Environmental Influences on School Readiness.....	9
Measuring Environmental Influences on School Readiness.....	11
Assessing School Readiness.....	13
Purposes of Assessment.....	13
Child-Level School Readiness Assessments.....	14
School Readiness in Other States.....	16
Early Childhood Assessments Used in South Carolina.....	17
Evaluating School Readiness in South Carolina.....	19
Conclusions.....	20
The South Carolina Challenge.....	21
Appendix A: Selected Assessments.....	23
Appendix B: School Readiness Assessments in Other States.....	25
Appendix C: Psychometric References by Selected Assessment.....	26
Appendix D: References.....	28

## **Defining, Understanding, Assessing, and Evaluating School Readiness in South Carolina**

January 2013

### **Introduction**

According to recent estimates, one in seven children is not prepared for kindergarten entry in South Carolina (South Carolina First Steps, 2006). Children who enter kindergarten behind their peers often struggle in kindergarten and later grades. In an extensive review of 17 meta-analyses, which included 3,607 studies, John Hattie (2009) explored the impact of prior achievement on academic success. The results demonstrate that children's prior achievement, even in preschool or early childhood education settings, is significantly related to their achievement in early elementary school and beyond.

To better understand and assess the school readiness of young children in South Carolina, South Carolina First Steps to School Readiness (hereafter referred to as First Steps) and the South Carolina Early Childhood Advisory Council (hereafter referred to as ECAC) contracted with the University of South Carolina and Clemson University to systematically explore: 1) the landscape of early childhood education professional development, and 2) current practices to define and encourage school readiness. Within this project, Clemson University's faculty and staff focused on understanding professional development and training needs within early childhood education. The University of South Carolina's (USC) faculty and staff concentrated on understanding: stakeholders' perceptions of school readiness; how other states address school readiness issues; and potential methods to measure school readiness.

School readiness is best understood by examining environmental factors in children's lives, while also assessing specific skills, abilities, and dispositions at school entry. Policy makers, researchers, evaluators, and practitioners use data related to these sources to identify factors that may be modified or enhanced prior to school entry and to plan effective instruction. Data related to environmental influences are often collected through a variety of entities and organizations. These data are catalogued into a central data repository, so future analyses can provide evidence to guide policy decisions.

In the 1970s, South Carolina began formally assessing the school readiness of students in kindergarten and first grade. From 1979 until 2001, the Cognitive Skills Assessment Battery (CSAB) was administered to first graders across the state. The CSAB was an untimed

assessment used to measure skill levels in several key areas linked to school readiness. In 2001, the South Carolina Readiness Assessment (SCRA) replaced the CSAB. The SCRA was a performance assessment for kindergarten and first grade students that included 14 indicators in three critical areas: 1) English/language arts, 2) mathematics, and 3) personal and social development. Teachers rated student progress at least twice per year through the SCRA. Both assessments provided schools, school districts, and state policy makers with information about the percentage of students deemed “ready” or “not ready” for school (SC Department of Education, 2002; SC Department of Education, 2003). Recently, the SCRA was discontinued; therefore, a state-level school readiness assessment is not required at this time.

In 2006, a workgroup commissioned by First Steps explored the development of a School Readiness Index. The proposed index concept reflected the multiple child, school, and community influences that are often associated with children’s school readiness. While this work provided important information for the state about factors that influence school readiness, an index was not established to inform school readiness efforts or monitor progress of children.

The current work, which began in November of 2011, builds on previous work whenever possible. We used a collaborative consultation process to seek information from multiple stakeholders at the state and community levels. This included work in two geographic areas of South Carolina, Greenville County and Barnwell County (e.g., meetings, discussions, focus groups), and surveys of district-level early childhood coordinators across the state. In addition, we collected information from key personnel in several other states about their school readiness practices. We also performed substantial literature reviews to gather information about research-informed strategies related to school readiness. Four predominant themes emerged from this process, and these themes provide the organizational structure for this report and its recommendations. The four themes are:

- 1) defining school readiness,
- 2) understanding influences on school readiness,
- 3) assessing child-level school readiness, and
- 4) evaluating South Carolina school readiness.

In each section, recommendations and key strategies are highlighted.

## Methods

At the onset of the project, USC faculty and staff conducted an extensive literature review to understand common definitions of school readiness and factors that influence school readiness. Information was gathered from journals and other reputable publications, as well as, previous work conducted by First Steps and community stakeholders.

To further expand the knowledge base, we researched relevant school readiness assessments used across the country. In this process, we interviewed school readiness experts in other states, including California, Delaware, Florida, Maryland, Minnesota, North Carolina, and Washington, to learn about assessments they use to measure school readiness. Several of these states received Race to the Top-Early Learning Challenge (RTT-ELC) funds and are in the process of selecting or refining methods to assess school readiness at kindergarten entry.

Next, in collaboration with First Steps and the South Carolina Department of Education, we developed and implemented a survey for early childhood coordinators in each district within South Carolina. We used this survey to identify common assessment practices for each grade level from pre-kindergarten through second grade. We also requested information about the process of administering the assessments and the overall purpose of the assessments. Many districts assess children in pre-kindergarten through Grade 3 and there are some commonly used assessments; however, there are differences in the purposes and administration of these assessments.

Information garnered from the early childhood coordinator survey, as well as from other states, was used to explore high-quality assessments that could be recommended for statewide use. We concentrated on assessments that are used often in South Carolina or other states: 1) AIMSweb, 2) BRIGANCE Early Childhood, 3) Developmental Indicators for the Assessment of Learning, 4) Early Development Instrument, 5) Measures of Academic Progress, and 6) Teaching Strategies GOLD.

Throughout the process, University of South Carolina project personnel included multiple stakeholders in early childhood education from across the state. We collaborated with individuals from Clemson University, South Carolina First Steps, Greenville First Steps, Greenville United Way, Institute for Child Success, Barnwell First Steps, South Carolina Office of Research and Statistics, South Carolina Department of Education, South Carolina Early

Childhood Advisory Council, University of North Carolina at Charlotte, and other school district and community representatives. Over the past year, these stakeholders attended meetings and presentations with the project personnel and participated in the process exploring South Carolina school readiness practices. We also conducted focus groups with community leaders in Greenville and Barnwell Counties during the summer of 2012 to gather their feedback about community perspectives of school readiness, facilitators and barriers to school readiness, and current practices related to school readiness. In addition, we engaged in school visits and observations at Greenville and Barnwell elementary schools.

### **Defining School Readiness**

Currently, South Carolina does not have a standard definition of school readiness to guide the efforts of early childhood leaders in communities, school districts, and counties across the state; however, some organizations or initiatives in South Carolina have developed definitions or mission statements to guide their work. For example, leaders of the Greenville Readiness Initiative have defined school readiness as:

“the state of early development that enables an individual child to engage in and fully benefit from kindergarten learning experiences, which provide the foundation for sustained school success. To achieve school readiness, three elements provide a necessary interplay in the positive trajectory of supporting and nurturing a child’s development—Ready Families, Ready Early Care and Education, and Ready Communities.”

Similarly, personnel in the Virginia Department of Education have also defined school readiness in relation to a systems model, acknowledging the relationship between the children and their families, schools, and communities. Another common framework involves using domains or indicators to measure school readiness. For example, the definition from the personnel in the Minnesota Department of Education noted:

“‘School readiness’ is defined as the skills, knowledge, behaviors and accomplishments that children know and can do as they enter kindergarten in the following areas of child development: social and emotional development; approaches to learning; language and literacy development; creativity and the arts; cognition and general knowledge; and physical well-being and motor development.”

This definition outlines school readiness in terms of the domains used to measure it. Many others, such as the Maryland State Department of Education and the Frank Porter Graham Child Development Center at the University of North Carolina at Chapel Hill, frame the definition according to the developmental domains they measure.

### Recommendation 1

**Develop a measurable definition of school readiness that includes specific domains of development to be used to guide early childhood assessment and instruction.**

Developing a definition of school readiness is a challenging task for stakeholders in South Carolina because there are differing perspectives about the concept. Nevertheless, without a clear and concise statewide definition, individuals who are involved in initiatives, programs, and services often develop their own definitions, which may or may not be aligned with research, recommended practices, and statewide efforts to implement effective early childhood education services. Hence, confusion and divergent understandings related to the definition of school readiness often undermine efforts to enhance school readiness.

### Strategy 1.1

**Convene a Task Force of key stakeholders to inform the school readiness definition. Stakeholders should include well-informed representatives from a variety of early childhood agencies and organizations.**

### **Identifying Domains of School Readiness**

The domains of school readiness typically identified within the field of early childhood (e.g., pre-kindergarten programs, Head Start programs, early intervention services, childcare programs), often include as many as 5 to 10 developmental areas. Although some states have additional domains, the most widely recognized domains include: physical development, social-emotional development, language and literacy, mathematical thinking, and cognitive development. For example, Maryland's State Department of Education measures personal and social development, language and literacy, mathematical thinking, scientific thinking, social studies, arts, and physical development. Many states and early childhood education organizations focus on five or more domains of child development; however, research that validates additional

domains beyond mathematical thinking, pre-literacy/literacy, and social-emotional development is limited.

#### Strategy 1.2

Identify key domains related to school readiness and later school success. Limit initial focus to those domains most associated with school readiness by researchers and practitioners.

Using a focused number of critical domains has been a strategy used by other national initiatives such as the Common Core State Standards Initiative. This type of concentration may allow for the most effective use of curricular assessments and professional development resources related to essential domains for school readiness and achievement. Focusing on key domains is not meant to diminish the importance of other domains, but to promote stakeholders' efforts on manageable and meaningful goals and expectations.

Domains cited through literature and focus groups with key stakeholders as most significantly related to school readiness and later school achievement are: 1) literacy development, 2) mathematical thinking, 3) social-emotional development, and 4) health and physical development. La Paro and Pianta (2000) conducted a review of 70 published studies, and they determined that academic and cognitive outcomes, such as language development and related skills, literacy, numeracy, and perceptual-motor skills, were stronger predictors of future school success ( $r = 0.49$ ) than social or behavioral measures ( $r = 0.27$ ). Another review by Duncan et al. (2007) using six longitudinal data sets linked mathematical skills most highly with future school success ( $r = 0.33$ ). In focus groups, community leaders frequently cited social-emotional and health domains of school readiness as highly important. They believed that children need to be in good health and have established social-emotional skills as the foundation to begin to learn other important skills.

#### Strategy 1.3

Disseminate definition of school readiness widely and promote shared understanding and use of the definition.

Once developed, it is important that the definition of school readiness be widely disseminated across the state to ensure common interpretation of the definition and encourage clear communication across disciplines and service sectors (e.g., childcare services, 4-year-old pre-kindergartens, Head Start programs, faith-based preschools). Moreover, development of effective policies and practices related to defining and assessing school readiness among young children with subsequent feasible evaluation is sorely needed.

### **Understanding Influences on School Readiness**

Many factors shape children's school readiness and later school success. The presence or absence of these influences during children's early years can greatly affect their school readiness. While these factors do not guarantee or preclude school readiness, they have been linked to academic achievement; therefore, it is important to define and discuss these elements within the context of school readiness.

#### **Environmental Influences on School Readiness**

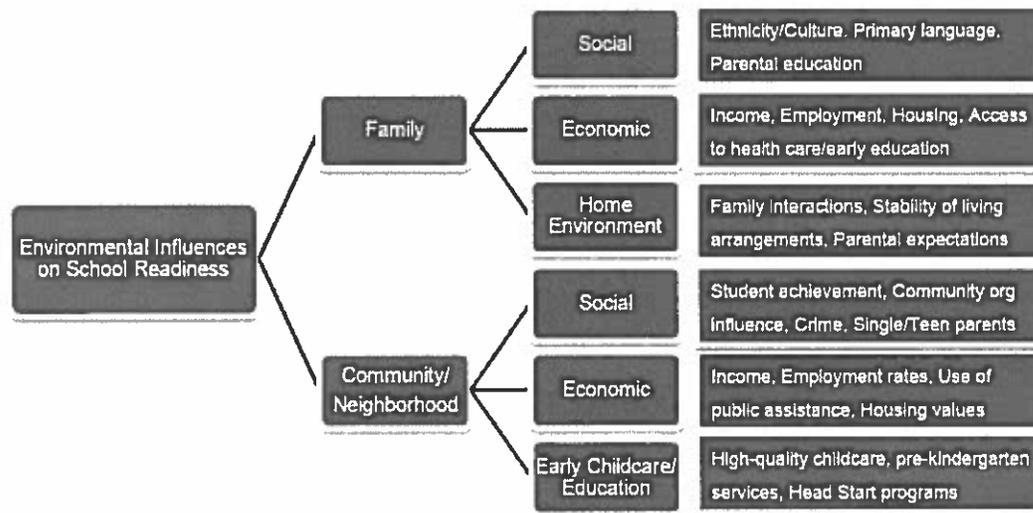
Environmental influences are the circumstances in children's lives that may affect their readiness for school both positively and negatively (e.g., income, health services, schools, childcare services). Through a literature review, work with the ECAC Data Leaders Consortium, and discussion with school readiness leaders, we broadly identified the most influential environmental factors as: 1) the family, and 2) the community or neighborhood.

Within the family domain, several additional aspects that influence school readiness are: 1) social elements such as family's ethnicity or culture, primary language, and parental education level; 2) economic factors including income, employment, housing, and access and use of health care and early childhood education; and 3) home environments such as family interactions, stability of living arrangements, and parental expectations for and involvement in the children's development and education (Duncan et al., 2007; Hattie, 2009; La Paro & Pianta, 2000; Linder, 2011).

Within the community and neighborhood realm, the three organizing aspects that influence school readiness are: 1) social factors such as student achievement early in their education, presence and influence of religious and other community organizations, presence of single or teen parents, and property and violent crime rates; 2) economic elements including income, use

of public assistance, employment rates, and housing values; and 3) access and use of high-quality childcare and early education.

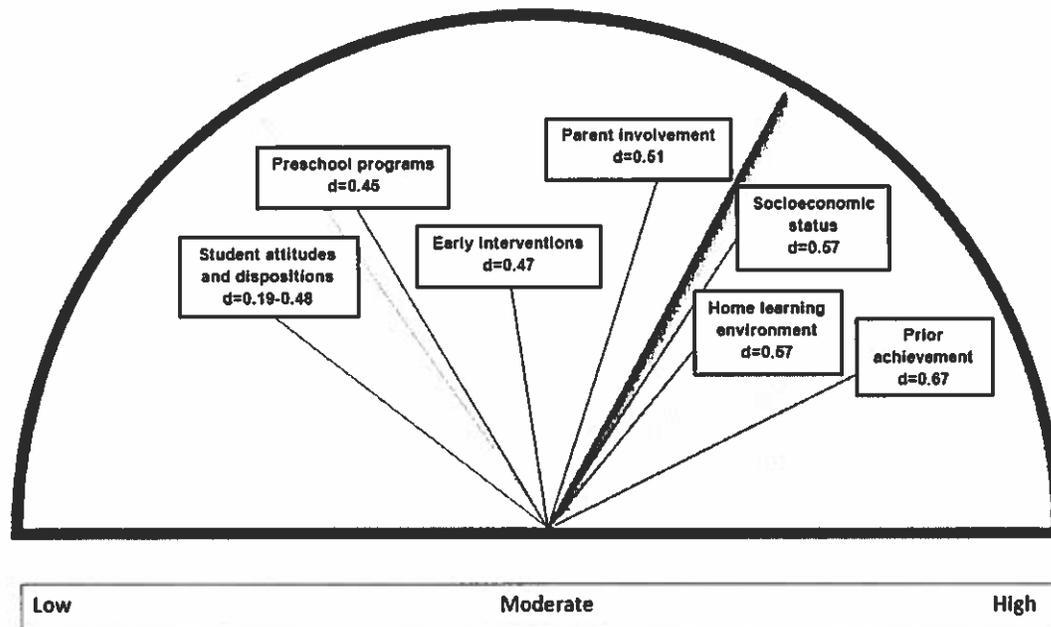
Figure 1. Environmental Influences on School Readiness



According to John Hattie, author of *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement* (2009), and a review of other well-known meta-analyses, the most powerful influences on school readiness are socioeconomic status, home learning environment, and parental involvement (for other reviews see Duncan et al., 2007; La Paro & Pianta, 2000; Linder, 2011). Prior achievement and attendance in high-quality preschool programs are also closely linked with student learning outcomes in kindergarten. Individual child factors, such as gender, ethnicity, and social-emotional dispositions, can influence their capacity for school readiness, but the associations are not as strong as prior achievement and high-quality preschool services (Duncan et al., 2007; Hattie, 2009; La Paro & Pianta, 2000; Linder, 2011).

These findings were formatted into the barometer image shown in Figure 2. The barometer is a visual representation of how strongly the factors are related to school readiness and is based on Hattie's reviews of meta-analyses (2009) that relate most to school readiness and early school success. The individual influences are shown by the relative magnitude of influence (i.e., effect sizes), and are categorized into low ( $d = 0 - 0.3$ ), moderate ( $d = 0.4 - 0.6$ ), and high ( $d = 0.7 - 1.0$ ) effects categories. As noted earlier, children's prior achievement, which may be affected by high-quality early childhood services and supports, has the strongest relationship to school readiness.

Figure 2. Barometer of Factors that Influence School Readiness



\* Barometer concept adapted from Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. New York: Routledge.

The focus groups conducted with school readiness leaders reaffirmed the findings from our literature review. When asked about the factors they believe facilitate school readiness, community leaders most frequently cited parental involvement and the importance of a positive home learning environment. Other factors related to the home environment, such as feeling safe, having basic needs met, and maintaining access to healthcare, were also mentioned. A third prominent influence noted was availability and access to high-quality childcare.

### Measuring Environmental Influences on School Readiness

In addition to exploring child-level assessments, we also investigated methods to assess environmental influences on school readiness. Currently, some sources of state- and county-level school readiness data are available through the South Carolina Office of Research and Statistics (ORS) and other agencies. Most notably, ORS provides data for the Annie E. Casey Foundation's annual report through the Kids Count Data Center, by state, county, and congressional district. Data provided through this resource are extensive and the information includes demographic characteristics as well as other measures such as education, economic well-being, family and community, health and safety and risky behaviors (Annie E. Casey

Foundation, 2012). This is one of the largest and most extensive repositories of educational, social, medical, and child well-being data. Nevertheless, the use of data available through ORS requires developing interagency agreements, sharing non-identifiable information, and negotiating costs associated with obtaining and analyzing data.

Additionally, several programs and studies have been established recently that may serve as models for measuring and assessing school readiness at the community level. The Greenville Readiness Initiative, which includes partners from the United Way of Greenville County, Greenville County First Steps, and the Institute for Child Success (ICS), developed the Readiness Roadmap. This program outlines objectives, strategies, and targets for developing Ready Families, Ready Early Care and Education, and Ready Communities. The goals in this initiative are designed to support parents in their role as their children's teachers, to have the highest quality early care and education system in the Southeast, and to include many high-needs communities in supporting school readiness. Each goal has a set of outcomes that allow for progress toward these goals to be tracked. The University of North Carolina at Charlotte is also working with the ICS and stakeholders in Greenville County on community-level measures of school readiness that can be used to better understand school readiness in Greenville; those measures may be especially relevant to other communities and counties in South Carolina.

The Neighborhood Quality of Life Study, conducted by research faculty at the University of North Carolina at Charlotte, is another current regional study that measures 20 variables related to the health and well-being of citizens in 173 areas of Charlotte. These variables measure the social, criminal, physical, and economic conditions of each area. Examples of variables are: average kindergarten scores, percent of children achieving at or above grade level, percent of births to adolescents, youth opportunity index, appearance index, and juvenile crime rate. The researchers implementing the study captured a comprehensive picture of Charlotte's well-being, and its methods could be applied to measuring community or environmental influences on school readiness in South Carolina.

Another contemporary program based on community-level data, the Promise Neighborhood Initiative, modeled after the Harlem Children's Zone, aims to improve the health, social, community, and educational support for children in communities with extremely limited resources and significant barriers to education attainment. Resources are available through the Promise Neighborhood Research Consortium to gauge neighborhood well-being and

functioning. The "Neighborhood Checkup" involves conducting surveys of residents and organizations to better understand strengths and areas of improvement within designated areas.

### Recommendation 2

Explore availability of and common format for community level data to be used by stakeholders in planning, developing, enhancing, and evaluating school readiness efforts.

### **Assessing School Readiness**

Assessing school readiness can occur at different points in children's lives. Some screenings and assessments are designed for use in the earliest years of life; whereas, others specifically measure knowledge, skills, and abilities of preschool and kindergarten children. Other assessments were created primarily for identifying potential developmental delays, and others are used to plan and deliver instruction. The purposes and timeframes of screenings and assessments are important to obtain an accurate measure of school readiness for young children across time. Generally, young children are the most difficult population to assess because researchers encounter measurement problems related to reliability and validity. In addition, because children are served in multiple sectors of childcare and early childhood education, (e.g., childcare services, 4-year-old pre-kindergartens, Head Start programs, faith-based preschools) assessment practices vary widely and are often very limited or nonexistent. Nevertheless, authentic assessments have been developed and can be used with younger children for different purposes (Bagnato, Neisworth, & Pretti-Frontczak, 2010).

#### **Purposes of Assessment**

Assessing children's knowledge, skills, and abilities is critical because it informs instruction and establishes a framework for intentional teaching (cf. Epstein, 2007) with regard to essential child dispositions and skills. In addition, assessments can be used to better understand influences of prior experiences and educational services in an effort to promote effective strategies sooner rather than later (e.g., preschool screening and assessment, kindergarten screening and assessment). While assessments are often used for multiple purposes, it is important to highlight the four major functions of assessments to ensure that they are used in an effective and appropriate manner. These four functions are: 1) screening, 2) program planning, 3) progress monitoring, and 4) program evaluation (cf. Bagnato et al., 2010).

- Screening tools may be used to identify children who need further evaluation or to determine the proportion of children within a given population who meet well-specified developmental or health benchmarks (e.g., school readiness, presence of a developmental delay, dental problems).
- Program planning assessments are based on systematic gathering of information to better arrange and implement effective educational services; these assessments are especially important for many young children who live in poverty or for those who have developmental delays.
- Progress monitoring is related to children's acquisition and fluent use of newly acquired skills and dispositions in common real world contexts; teachers should monitor children's progress toward team developed objectives, benchmarks, goals, or standards at several strategic points throughout the year (e.g., fall, mid-year, spring) and across years (e.g., Pre-K->kindergarten->1<sup>st</sup> grade).
- Program evaluation measures provide teachers and administrators with information to assess programmatic goals or identify the need to implement additional teaching strategies and other services to continually improve their early childhood education programs for children and their families.

As stakeholders in South Carolina consider various measures to assess school readiness, the purposes of the assessments must be clearly established to select suitable measures and gather the appropriate information for evidence-based decisions.

### **Child-Level School Readiness Assessments**

High-quality child-level school readiness assessments generally include the following characteristics: 1) aligned to school readiness domains (valid), 2) reliable when re-administered to children, 3) age appropriate for the children assessed, and 4) feasible for practitioners to implement and analyze. Based on the results from the early childhood coordinators survey, discussions with other states, and literature reviews, we explored several standardized child-level school readiness measures that meet these characteristics: 1) AIMSweb, 2) BRIGANCE Early Childhood assessments, 3) Developmental Indicators for the Assessment of Learning, 4) Early Development Instrument, 5) Measures of Academic Progress for Primary Grades, and 6) Teaching Strategies GOLD. For each, we interviewed the distributors and reviewed the assessments' existing psychometric information. Basic information about each is delineated below.

AIMSweb can be used for screening, progress monitoring, and program evaluation in kindergarten through eighth grade. This assessment includes a battery of short paper-pencil or oral measures for reading, language arts, and math that are administered to the students and scored by the teacher. The instructor then enters the scores into an online database that generates reports about student needs. There is an additional behavior monitoring system that can be used separately. AIMSweb reports that its assessments are aligned with the Common Core Standards. AIMSweb has been adopted and used extensively in Greenville County Schools to both identify and serve kindergarten-age children who need small group instruction in literacy skills. It is also used as their progress monitoring measure to inform small group instruction.

The BRIGANCE Early Childhood Complete Assessment and BRIGANCE Early Childhood Developmental Inventory are used to assess 1) language development, 2) literacy, 3) math and science, 4) social and emotional development, 5) physical health and development, and 6) approaches to learning in children from birth to 5 and birth to 7, respectively. The BRIGANCE measures are administered individually in a direct assessment format by teachers to children individually as an initial assessment and for progress monitoring.

The Developmental Indicators for the Assessment of Learning (DIAL) is a screener used to assess motor skills, concepts, language, self-help, and social development of 3- to 6-year-olds. Teachers, or other familiar adults, complete the DIAL with children individually in a direct assessment format. The DIAL is useful for providing information about children's developmental level compared to other children in the same age range. Since the DIAL is designed as a screener, it should be used to identify children in need of further assessment or preschool services. Presently, the DIAL is the most common measure used by school district personnel in South Carolina in 4-year-old pre-kindergarten programs.

The Early Development Instrument (EDI) is a population-based screener used to measure five broad domains in 4- to 5-year-olds: 1) physical health and well-being, 2) social competence, 3) emotional maturity, 4) language and cognitive development, and 5) communication skills and general knowledge. The EDI is a checklist of skills and abilities related to school success, which can be administered using paper or online versions. Teachers complete this information by rating all children in their classroom individually. The EDI is designed to provide information

about strengths and areas for improvement for groups of young children (e.g., school level, neighborhood level, county level). Although it is beginning to be used in California and other locales and states, to our knowledge, the EDI is not being used in South Carolina at this time.

Measures of Academic Progress for Primary Grades (MAP) is a computer-adaptive assessment that is usually administered at least two times each year to assess and measure children's progress. There are three components to MAP including the 1) Skills Checklist Tests, 2) Survey with Goals Tests, and 3) Early Literacy/Numeracy Tests. Collectively, these subtests assess kindergartener through second graders' skills in mathematics, reading, language usage, and science. MAP is commonly used by South Carolina school districts in Grade 1 and 2. MAP is linked with standards in numerous states, including South Carolina's PASS and HSAP.

Teaching Strategies GOLD is an online, observational system that has characteristics similar to Pearson's Work Sampling System. This instrument can be used for progress monitoring from birth to kindergarten. It should be noted that GOLD is planning to expand through third grade to allow for longitudinal analysis. GOLD offers the capacity to measure 10 domains including: 1) social-emotional, 2) physical development, 3) language, 4) cognitive, 5) literacy, 6) mathematics, 7) science and technology, 8) social studies, 9) arts, and 10) English language acquisition. GOLD reports alignment with the Common Core Standards Initiative and can be linked with state standards (e.g., Delaware, New Jersey). It has been adopted by several states as a statewide assessment and is beginning to be used by several Head Start Programs in parts of South Carolina and the nation. Further information about each of these assessments is explained in Table 1 in Appendix A.

### **School Readiness in Other States**

We contacted early childhood personnel in several states across the country, including California, Delaware, Florida, Maryland, and Minnesota to learn about the various assessments that are currently being used or considered to measure school readiness. All of the states have identified a definition to guide their assessment practices and have mandated statewide school readiness measures for all kindergarteners. Of this group, Minnesota was the exception to this pattern because they assessed school readiness by taking a random sample of 10 percent of students within the state. Four of the states developed a new assessment or adapted a current assessment to fit their needs: Maryland and Minnesota adapted Pearson's Work Sampling System to align with their current standards; Florida's Department of Education created the

Florida Kindergarten Readiness Screener (FLKRS) from the Early Childhood Observation System (ECHOS) and the Florida Assessment for Instruction in Reading (FAIR); and Delaware adopted the existing Teaching Strategies GOLD assessment system. All of these assessments measure between five and seven domains including physical development, the arts, social-emotional development, mathematical thinking, and language and literacy. Table 2 in Appendix B shows further details of how school readiness is measured in these states.

### **Early Childhood Assessments Used in South Carolina**

To better understand how school readiness and early school achievement are currently assessed in South Carolina, we developed and administered a survey in collaboration with Pam Wills and Penny Danielson at the South Carolina Department of Education and Dan Wuori with First Steps. This survey was completed by early childhood coordinators or their designees within school districts. We received surveys from approximately 75% of school districts in South Carolina.

The survey results demonstrate that there are some common assessments used in pre-kindergarten (DIAL) and early elementary grades (MAP). The survey also indicated that no single measure is used consistently across the state. Even when the same measure is used in many districts, it may be administered differently, used for different purposes, and the information is retained in local districts.

The most commonly used assessment in 4-year-old pre-kindergartens across South Carolina is the DIAL. Approximately 89% of responding school districts in the state use this assessment in some fashion in pre-kindergarten classes. About half of the responding school districts reported administering this assessment once per year and the remaining half reported performing the DIAL twice per year, usually at the point of entry in pre-kindergarten (fall) and at the end of the academic year (spring).

In kindergarten through second grade, MAP is the most commonly used assessment to determine student achievement and progress. Approximately 40% of districts use MAP in kindergarten, 60% use MAP by first grade, and 68% use MAP in second grade. Other assessments used in the early elementary grades are the Dominic Reading & Writing Assessment Portfolio, the Developmental Reading Assessment, and district-developed

assessments, which are employed to assess pre-literacy and literacy and other areas such as pre-numeracy and numeracy.

### Recommendation 3

Select a standardized assessment(s) to measure school readiness at kindergarten entry that meets the following characteristics: 1) aligned to school readiness domains (valid), 2) reliable, 3) age appropriate, and 4) feasible to implement and analyze.

#### Strategy 3.1

Carefully review and pilot test one or more standardized assessments to determine feasibility of implementation and usefulness of results for selected purposes.

Assessments are designed to be administered, reported, analyzed, and used for specific purposes. Deviations in the administration and use of an assessment can compromise and severely limit the validity and reliability of the assessment process. Because of these issues, the assessment administration process must follow a uniform and precise process, so the results are effective for prospective planning, backward mapping, intervention, comparisons, or other policy purposes. We recommend the creation and dissemination of effective professional development programs that address the purposes and practices of assessments. The trainings must include practitioners, administrators, and parents across the state of South Carolina. Questions, concerns, and difficulties must be addressed to ensure that early childhood assessment results can be interpreted and used effectively to make meaningful evidence-informed decisions about early childhood education and children's school readiness.

#### Strategy 3.2

Provide professional development to practitioners, administrators, and other early childhood stakeholders related to the purposes and appropriate administration and interpretation of selected assessments to promote the effective use of assessment results.

### Evaluating School Readiness in South Carolina

The purpose of evaluating school readiness in South Carolina should not be to merely label children as “ready” or “not ready” or to identify particular schools and districts by their levels of readiness. Rather, the evaluation of school readiness across time should allow for more effective statewide evidence-informed decisions about early childhood services. In addition, evaluation should be based on data-identified local and state needs to encourage focused school readiness efforts and promote children’s early elementary school success.

Understanding and assessing the background knowledge and skills of children when they enter pre-kindergarten and kindergarten is critical for planning appropriate and effective instruction to ensure they make progress during the early elementary years. Personnel in schools and school districts can use overall school readiness information to target specific curricular and professional development areas to be addressed with their overall kindergarten populations.

More importantly, strengths and areas of concerns can be used to inform communities and early childhood educators’ efforts among the birth to 5-year-old preschool populations. The goal is to reduce or eliminate “starting gate inequities” that often linger well into kindergarten and much beyond if not addressed early and adequately. These well-known “inequities” have the potential to reduce both academic and career successes of many South Carolinians. In addition, exploring school readiness assessment results in connection with later state-mandated achievement results (PASS) has the potential to identify influences of environmental and child-level factors on academic achievement so they can be addressed whenever feasible.

#### Recommendation 4

**Establish an on-going mechanism to evaluate school readiness in South Carolina to inform early childhood decision-making and resource planning.**

To better understand, evaluate, and disseminate information about school readiness, an entity, with limited incentives or repercussions attached to results, is needed to fully explore and report on state, county, and community level findings. The entity, potentially a Center of Excellence for School Readiness, could work to provide on-going and contemporary information about research and recommended practices to stakeholders who are responsible for the early childhood education services in our communities including First Steps, the South Carolina Department of Education, the Center for Child Care Career Development, teacher preparation

programs at South Carolina colleges and universities, and other organizations and entities that are stakeholders in early childhood education as needed.

As a school readiness definition is developed, domains are established, community-level data are gathered and organized, child-level assessments are identified and administered, and professional development is implemented, this entity could carefully analyze the information, provide overall recommendations to essential stakeholders to improve policies and practices, and provide detailed descriptions to state- and county-level stakeholders related to school readiness in South Carolina.

### **Conclusions**

School readiness has moved to the forefront of early childhood education conversations and services across the nation. Nevertheless, easy answers and “magic bullets” about how to proceed do not exist and continued work is greatly needed both locally and statewide. Based on school readiness work since November 2011 (e.g., review of literature, school district survey, discussions with essential stakeholders), we believe that our recommendations provide a reasonable and effective approach to promote continued progress toward improved school readiness in South Carolina. Defining, understanding, assessing, evaluating, and providing targeted and responsive professional development are necessary steps in promoting effective early education services to young South Carolinians and their families.

Each of the four areas described within the system, 1) defining, 2) understanding, 3) assessing, and 4) evaluating school readiness, are essential elements and operate best together in a feedback system that informs and continually enhances evidence-informed decision-making regarding school readiness efforts. Personnel and stakeholders in many other states and communities have defined school readiness; however, without defining well-targeted and critical domains and then promoting a common understanding of the adopted definition with accompanying appropriate assessments to measure progress toward that definition, early childhood stakeholders’ efforts may not be effectively used to inform day-to-day policies and practices.

Other groups have adopted school readiness assessments without a clear and concise definition or identifiable domains, which may cause the assessment to become the de facto definition. In addition, assessments that are not understood well or effectively analyzed to

promote attention toward strengths and areas of concern may become mechanical measures performed but not well used. Finally, evaluators' efforts are only as good as information in which they base their findings; therefore, without a clear and concise definition, well-targeted domains, community-level data, assessment results, and other information about children and families, future evaluation efforts cannot provide meaningful information and conclusions on which to base evidence-informed policies and practices decisions.

At this point, we are not recommending a school readiness index. We believe the systems-based approach set forth in this report offers the most effective framework to guide South Carolina in its efforts to better prepare children for kindergarten and later school success. The systems approach that we have recommended integrates the lessons learned, experiences, and best practices to better understand and improve young children's school readiness. We believe implementing this type of approach promotes clear focus on the school readiness of South Carolina children and provides a framework for stakeholders in early childhood education to employ effective strategies, policies, and practices. Having a shared understanding of school readiness promotes more productive collaboration among all community stakeholders including families. Selecting standardized assessments aligned with the definition and domains of school readiness allows stakeholders to determine areas of strengths and concerns in populations of children. This encourages more effective, targeted services prior to school entry as well as appropriate educational strategies and practices to be used in Pre-K-12 settings. Finally, evaluation of school readiness promotes the use of data from multiple sources to enhance our understanding of children's needs across the state of South Carolina. The evaluation includes sharing data in an easy to interpret format to assist state- and county-level groups in planning and implementing strategies and services.

### **The South Carolina Challenge**

As mentioned earlier, school readiness in early childhood education is in the forefront of contemporary educational issues in the United States. Nevertheless, merely expanding early childhood services without thoughtful development of a comprehensive system to assess and evaluate young children's school readiness is probably not the best solution. Convergent evidence across several decades indicates that early childhood education services in kindergarten and before have meaningful positive effects on young children but only when those services are of *high-quality and sustained over time* (i.e., alignment of pre-kindergarten and kindergarten and early elementary educational services and goals; cf. Barnett, 2013). The type of comprehensive systems model that focuses on language and literacy, mathematical thinking,

and social emotional development that we recommend will support a renewed focus on a continuous improvement model of early childhood education services for young children and their families in South Carolina.

Appendix A: Selected Assessments

Table 1. Selected Assessments

Assessment	Age/Grade	Purposes	Format	Psychometric Information	Measures
AIMSweb	K-8	Screening, progress monitoring, program evaluation	Teacher rating of individual student skills completed up to three times per year	Yes	<ol style="list-style-type: none"> <li>1. Reading</li> <li>2. Language arts</li> <li>3. Math</li> <li>4. Behavior</li> </ol>
BRIGANCE Early Childhood Complete Assessment/ Early Childhood Developmental Inventory	0-5 year/ 0-7 year olds	Screening and progress monitoring	Teacher-administered assessment of individual students	Yes	<ol style="list-style-type: none"> <li>1. Language development</li> <li>2. Literacy</li> <li>3. Math and science</li> <li>4. Social-emotional development</li> <li>5. Physical health and development</li> <li>6. Approaches to learning</li> </ol>
Developmental Indicators for the Assessments of Learning (DIAL)	3-6 years olds	Screening	Teacher-administered assessment of individual students	Yes	<ol style="list-style-type: none"> <li>1. Motor</li> <li>2. Language</li> <li>3. Self-help</li> <li>4. Social development</li> </ol>
Early Development Instrument (EDI)	4-5 year olds	Population based screening	Teacher rating of individual student skills	Yes	<ol style="list-style-type: none"> <li>1. Physical health and well-being</li> <li>2. Social competence</li> <li>3. Emotional maturity</li> <li>4. Language and cognitive development</li> <li>5. Communication skills and general knowledge</li> </ol>
Measures of Academic Progress for Primary Grades (MAP)	K-2	Screening and progress monitoring	Computer-adaptive assessment to be completed by children up to three times per year	Yes	<ol style="list-style-type: none"> <li>1. Mathematics</li> <li>2. Reading</li> <li>3. Language usage</li> <li>4. Science</li> </ol>

Teaching Strategies GOLD	0-K, planned expansion to Grade 3	Progress monitoring	Teacher rating of individual student skills with capability to catalog children's performance (work sampling)	Yes	<ol style="list-style-type: none"> <li>1. Social-emotional</li> <li>2. Physical</li> <li>3. Language</li> <li>4. Cognitive</li> <li>5. Literacy</li> <li>6. Mathematics</li> <li>7. Science and technology</li> <li>8. Social studies</li> <li>9. Art</li> <li>10. English language acquisition</li> </ol>
-----------------------------	--	------------------------	--	-----	--

\*References for detailed psychometric information are available at the end of this report.

## Appendix B: School Readiness Assessments in Other States

Table 2. School Readiness Assessments Used in other States

State	Definition	Legislation	Assessment	Measures	Domains
Delaware	Yes	Mandated, all children	Delaware Early Learner Survey (DE-ELS)	Teaching Strategies GOLD	<ol style="list-style-type: none"> <li>1. Cognitive</li> <li>2. English language acquisition</li> <li>3. Language</li> <li>4. Literacy</li> <li>5. Math</li> <li>6. Physical development</li> <li>7. Social-emotional</li> </ol>
Florida	Yes	Mandated, all children	Florida Kindergarten Readiness Screener (FLKRS)	Developed by the Florida Department of Education, based on the Early Childhood Observation System (ECHOS) and the Florida Assessment for Instruction in Reading (FAIR)	<ol style="list-style-type: none"> <li>1. Language and literacy</li> <li>2. Mathematics</li> <li>3. Social and personal skills</li> <li>4. Science</li> <li>5. Social studies</li> <li>6. Physical development</li> <li>7. Creative arts</li> </ol>
Maryland	Yes	Mandated, all children	Maryland Model for School Readiness (MMSR)	Developed by the Maryland State Department of Education, based on Pearson's Work Sampling System	<ol style="list-style-type: none"> <li>1. Personal and social development</li> <li>2. Language and literacy</li> <li>3. Mathematical thinking</li> <li>4. Scientific thinking</li> <li>5. Social studies</li> <li>6. Art</li> <li>7. Physical development</li> </ol>
Minnesota	Yes	Mandated, 10% random sample	Minnesota Work Sampling System	Developed by the Minnesota State Department of Education, based on Pearson's Work Sampling System	<ol style="list-style-type: none"> <li>1. Physical development</li> <li>2. Art</li> <li>3. Personal and social development</li> <li>4. Mathematical thinking</li> <li>5. Language and literacy</li> </ol>

## Appendix C: Psychometric References by Selected Assessment

### AIMSweb

National Center on Intensive Intervention, American Institutes for Research. (n.d.). *Academic Progress Monitoring GOM*. Retrieved from <http://www.intensiveintervention.org/chart/progress-monitoring>  
 Pearson, Inc. (2012). *AIMSweb: Technical Manual*. Bloomington, MN: Pearson, Inc.

### Brigance Early Childhood Development System/Early Childhood Screen 3-6 Years

Brigance Early Childhood Research, Curriculum Associates LLC. (n.d.). *BRIGANCE® Early Childhood Screens: Standardization and Validation Research Highlights*. Retrieved from <http://www.casamples.com/downloads/Brig-EC-research.pdf>

Halle, T., Zaslow, M., Wessel, J., Moodie, S., & Darling-Churchill, K. (2011). *Understanding and Choosing Assessments and Developmental Screeners for Young Children: Profiles of Selected Measures*. Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

### Developmental Indicators for the Assessments of Learning

Halle, T., Zaslow, M., Wessel, J., Moodie, S., & Darling-Churchill, K. (2011). *Understanding and Choosing Assessments and Developmental Screeners for Young Children: Profiles of Selected Measures*. Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

### Early Development Instrument

Janus, M., Brinkman, S., Duku, E., Hertzman, C., Santos, R., Sayers, M., & Schroeder, J. (2007). *The Early Development Instrument: A population-based measure for communities, A handbook on development, properties, and use*. Hamilton, ON: Offord Centre for Child Studies.

**Measures of Academic Progress for Primary Grades**

Wang, S., McCall, M., Jiao, H., & Harris, G. (April, 2012). *Construct validity and measurement invariance of computerized adaptive testing: Application to Measures of Academic Progress (MAP) using confirmatory factor analysis*. Paper presented at the annual meeting of the American Educational Research Association (AERA), Vancouver, British Columbia, Canada.

**Teaching Strategies GOLD**

Lambert, R., Kim, D., Taylor, H., & McGee, J. (2010). *Technical manual for the Teaching Strategies GOLD™ Assessment System*. Center for Educational Measurement and Evaluation, University of North Carolina at Charlotte. Retrieved from <https://education.uncc.edu/ceme/sites/education.uncc.edu.ceme/files/media/pdfs/Technical%20Manual%20for%20Gold%20System.pdf>

## Appendix D: References

- Annie E. Casey Foundation. (2012). *Kids Count Data Center*. Retrieved from <http://datacenter.kidscount.org/>
- Bagnato, S. J., Neisworth, J. T., & Pretti-Frontczak, K. (2010). *LINKing authentic assessment & early childhood intervention: Best measures for best practices* (2<sup>nd</sup> Ed.). Baltimore: Brookes Publishing.
- Barnett, S. W. (2013). *Getting the facts right on Pre-K and the President's Pre-K proposal*. New Brunswick, NJ: Policy Report from the National Institute for Early Education Research.
- Buysse, V., & Wesley, P. W. (2006). *Evidence-based practice in the early childhood field*. Washington, DC: Zero to Three Press.
- Duncan, G. J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P., Pagani, L. S., Feinstein, L., Engel, M., Brooks-Gunn, J., Sexton, H., Duckworth, K., & Japel, C. (2007). School readiness and later achievement. *Developmental Psychology*, 43(6), 1428-1446.
- Epstein, A. S. (2007). *The intentional teacher: Choosing the best strategies for young children's learning*. Washington, DC: National Association for the Education of Young Children.
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. New York: Routledge.
- La Paro, K. M., & Pianta, R. C. (2000). Predicting children's competence in the early school years: A meta-analytic review. *Review of Educational Research*, 70(4), 443-484.
- Linder, S. M., Ramey, M. D., & Zambak, V. (2009). *Predictors of success for school readiness and later school achievement: A selective review of the literature*. Unpublished manuscript, Clemson University, Clemson, South Carolina.
- Marshall, K., Brown, W. H., Conroy, M. A., & Knopf, H. (2011). Early intervention and prevention of disability: Preschoolers. In J. M. Kauffman & D. P. Hallahan (Eds.), *Handbook of special education* (pp. 703-715). New York: Routledge.
- South Carolina Department of Education. (2002, January 22). *South Carolina first-grade readiness scores set new record with sixth straight year of gains*. Retrieved from <http://www.ed.sc.gov/agency/news/?nid=144>
- South Carolina Department of Education. (2003, December 3). *New assessment provides more detailed results on students' readiness for school*. Retrieved from <http://www.ed.sc.gov/agency/news/?nid=379>

South Carolina First Steps. (2006). *Welcome to First Steps*. Retrieved from <http://www.scfirststeps.org/>



# Good Start Grow Smart

South Carolina Early Learning Standards  
for 3, 4, & 5 Year-Old Children

# Good Start Grow Smart

## Good Start, Grow Smart Task Force South Carolina Early Learning Standards

It is with pleasure that we announce the completion of the Good Start, Grow Smart Early Learning Standards for pre-school children and the people who teach and care for them. South Carolina is committed to quality early childhood education whether it is in child care, Head Start, or public school programs. We believe these programs provide the foundation for successful education, employment, and life experiences for the youngest citizens of South Carolina. We have endorsed the work of the Good Start, Grow Smart Collaborative Partners as a strategy to bring together a variety of programs serving young children and their families to create a blended system of services that are of high quality. The multi-agency collaboration endorses the new South Carolina Good Start, Grow Smart Early Learning Standards.

The South Carolina Early Learning Standards have been developed from current research in the critical areas of early learning and development. They apply to all settings in which children receive care and education. The Good Start, Grow Smart Collaborative writing teams, comprised of representatives from the SC Department of Education Office of Early Childhood Education, SC Department of Social Services, South Carolina Head Start Collaboration Office, Center for Child Care Career Development, Advocates for Better Care, First Steps to School Readiness, Catawba Indian Nation, SC Voices for Children, SC ETV, and teachers from both public and private child care centers as well as faith-based organizations wrote these standards. The group reviewed early childhood research, early learning standards from 19 states, South Carolina Academic Standards, and Head Start Performance Standards. The work was guided by state and national research in the field and supported by content experts from Clemson University, Furman University and the University of South Carolina. These Early Learning Standards are intended to align with South Carolina K-12 Academic Standards and



# Good Start Grow Smart

the Head Start Child Outcomes. The standards, indicators and snapshots will guide teachers as they provide early learning opportunities that support children's success in school.

We hope you will use the standards in your early childhood education and care programs. We recognize that publishing the standards is an important step in our state's effort to ensure that all children in the state have early childhood experiences that prepare them for the future. We believe that using these standards will contribute to the quality of care and education children receive.



# Good Start Grow Smart



## The purpose of the South Carolina Early Learning Standards:

To support the readiness of young children through nurturing early care and education environments and developmentally appropriate practices through the development of voluntary guidelines as required by the Good Start, Grow Smart Initiative;

To educate and provide guidance for families, educators/caregivers, administrators, and policymakers on developmental expectations for children in the preschool years;

To inform the development of program standards across early learning environments.

## The rationale for the purpose:

To strengthen linkages between current federal, state, public and private early childhood efforts to support school readiness of young children through nurturing early care and education environments and developmentally appropriate practices.



# Good Start Grow Smart

## Guiding Principles

- All children are learners.
- All children are capable and competent.
- Children are individuals who develop at various rates.
- Children learn through play and the active exploration of their environment.
- Every child is unique and is accepted for his/her differences in development, culture, home environment, and learning style.
- Expectations for children must be guided by knowledge of child growth and development.
- Parents are children's most important caregivers and educators.
- It takes a partnership among families, early care and education providers, schools, health care providers, and other community resources to promote children's development and school success.
- Quality early learning experiences are essential to prepare a child for success in school and life.



# Good Start Grow Smart

## How To Use The South Carolina Early Learning Standards

The South Carolina Early Learning Standards are based on what we know about children, including what they should know and be able to do along with a continuum of development. The Standards are grouped around five areas of children’s development including:

- Approaches To Learning
- Social and Emotional Development
- Mathematics
- Language and Literacy
- Physical Development and Health

**Early childhood professionals can use these standards in a number of ways:**

**1. Identifying the developmental goals early childhood professionals should help children attain by age five**  
It is important to remember that not all children will attain all of the standards by age five. The standards provide a map from which early childhood professionals can ascertain the developmental “road” children will travel on their way to kindergarten. The standards should be used only as a guide and not as an absolute for all children.

### **2. Improving classroom environment and integrating the curriculum**

Each of these domains is addressed every day in early childhood programs through the curriculum and the materials that are chosen. The standards are not a curriculum in and of themselves; rather they can be used to guide decisions about curriculum, materials and classroom environment. When early childhood professionals consider children’s development addressed in the standards, the result is an integrated curriculum that meets the developmental needs of all children in the classroom.



# Good Start Grow Smart

## Frequently Asked Questions

### **What are the Early Learning Standards?**

Early learning standards specify developmental expectations for preschool children. They are supported by practice and scientific research. They include performance based standards and examples called “snapshots”. Snapshots were written to give teachers practical ways to see what is meant in the standard. (Children who meet the developmental expectations outlined in the Early Learning Standards should be prepared to master the South Carolina’s Academic Standards).

### **Why are Early Learning Standards necessary?**

Early Learning Standards provide a shared framework for understanding and communicating expectations for young children’s development. They are a guide for parents, caregivers, teachers, directors, administrators and policy makers, all of whom share responsibility for the well being of young children. These standards are meant to weave together Head Start, public schools and private child care into a fabric that will reach every preschooler in South Carolina.

### **Why does South Carolina need its own Early Learning Standards?**

These standards reflect the shared values and commitments of the citizens of South Carolina to prepare young children for success in school. They reflect attention to all the domains of a child’s early learning and development and recognize that these domains are interrelated and interdependent.

### **How were the Early Learning Standards developed?**

In this initial development process, professionals from across the state contributed to content area discussions that resulted in these standards. The developmental domains, expectations, and standards reflect a survey of the scientific literature and practice based evidence on child development. National and regional guidelines were also consulted, including those of the National Association for the Education of Young Children (NAEYC), and Head Start Child Outcomes.

### **Who wrote the Early Learning Standards and what resources were used?**

The development of the standards and snapshots within each domain were drafted by the Good Start Grow Smart Collaborative Partnership under the direction of the Office of Early Childhood Education at the SC Department of Education.



# Frequently Asked Questions

The partnership included:

- Representatives from the SC Department of Social Services - Child Care Services
- Representatives from the SC Center for Child Care Career Development
- Representatives from the SC Office of First Steps to School Readiness
- ABC Level B center teachers
- School district early childhood and special education resource teachers
- Head Start program managers and directors
- Representatives of the Elementary School Principals' Association
- Educators from the University of South Carolina, Clemson University, Furman University and SC State University
- Kindergarten teachers
- Personnel from the SC Office of Early Childhood Education
- Catawba Indian Nation - Early Care and Education
- Voices for South Carolina's Children
- Representatives from private child care
- Faith-based representatives

The process used to develop the early learning standards reflected collaboration, shared values and the development of challenging and meaningful standards that reflect best practices and new knowledge gleaned from research and evidence. Next, focus groups of experts and teachers assisted in the refinement of the standards content and reviewed their conceptual alignment.

## How would a school district or other early care and education program use the Early Learning Standards?

These standards can be used as guides for developing and adopting curriculum content, including instructional methods and materials, assessment practices, and for planning professional development opportunities.



# Frequently Asked Questions

## What are the expected outcomes of the Early Learning Standards?

The Early Learning Standards are voluntary and applicable across all early learning environments, including Head Start, child care, tribal, faith based and public and private preschool programs.

## Are school districts or other formal early learning environments, such as Title One 4 K classes, First Steps classes, and HeadStart, required to adopt the Early Learning Standards?

Yes. The Early Learning Standards have included the SC Academic 4K and 5K standards, in mathematics and Language Arts, which are required for Title 1, Head Start and public school programs.

## Are child care programs and church preschool programs required to adopt the Early Learning Standards?

No. The Early Learning Standards are voluntary for child care programs and church preschool programs. We encourage all programs in South Carolina to adopt and implement these standards.

## How do the standards relate to the assessment of the development of young children?

The SC Early Learning Standards provide the appropriate expectations for young children in all five domains. This sets the stage for appropriate curriculum development and assessment. The South Carolina Department of Education recommends the use of Work Sampling and the Child Observation Record as appropriate 4K assessment tools. The Peabody Picture Vocabulary Test (PPVT) is used for children served in Even Start programs. In Head Start programs the Classroom Assessment Scoring System (CLASS) is used. The SC Department of Social Services has adopted the ABC Level B Standards and the Early Childhood Environment Rating Scale (ECERS-R) as appropriate tools to assess program quality.

## Appropriate assessment development takes into account the following:

Young children learn in a variety of ways and develop at their own rate.

Young children learn best through hands-on experiences as well as listening. They represent their knowledge by actions rather than by telling.

Young children's learning is rapid and on-going; point-in-time assessments do not give a complete picture of their learning.

Young children's achievements are the result of a complex mix of their ability to learn and their past learning opportunities.

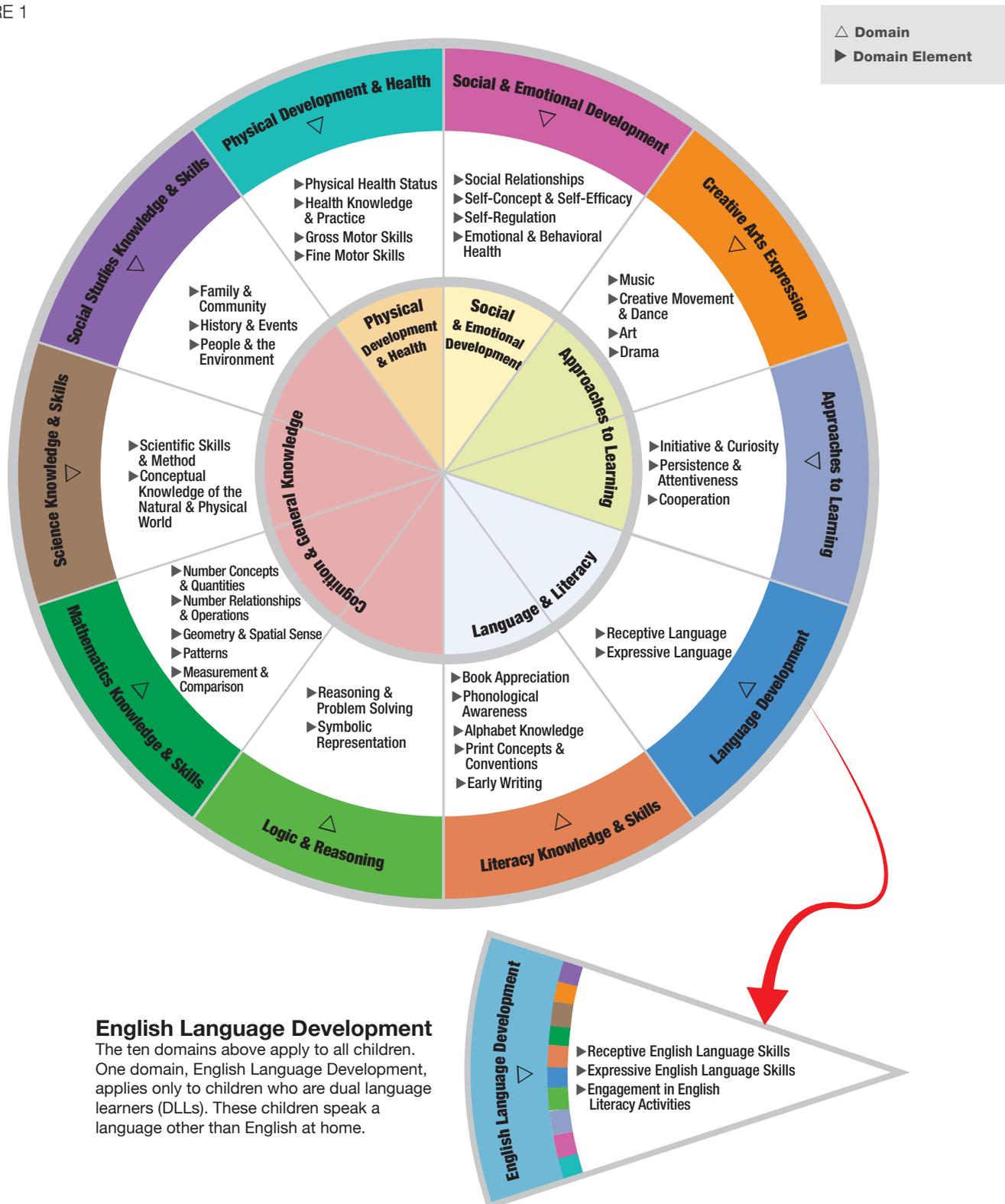


# The Head Start Child Development and Early Learning Framework

## Promoting Positive Outcomes in Early Childhood Programs Serving Children 3-5 Years Old

The *Framework* represents the foundation of the Head Start Approach to School Readiness. It aligns with and builds from the five essential domains of school readiness identified by the National Education Goals Panel (see inner circle) and lays out essential areas of learning and development. The *Framework* can be used to guide curriculum, implementation, and assessment to plan teaching and learning experiences that align to school readiness goals and track children's progress across developmental domains. The domains  $\triangle$  and domain elements  $\blacktriangleright$  apply to all 3 to 5 year olds in Head Start and other early childhood programs, including dual language learners and children with disabilities.

FIGURE 1



# School Readiness: Moving Toward a Shared Definition, Standardized Assessment, and Unifying Language

March 2014



INSTITUTE *for* CHILD SUCCESS

Early childhood education in South Carolina includes a diverse collection of families, early care and education programs, and schools where children have the opportunity to begin a lifelong love of learning. The quality of early care, development, and learning impacts both individual child success and the state's workforce as a whole. High quality early education is beneficial for all children, but research shows that it is especially beneficial for children at high risk for academic failure.<sup>1</sup> South Carolina invests in services to improve the quality of early childhood education with the short-term goal of increasing school readiness and the longer-term goals of enabling later academic achievement and creating a competitive workforce.<sup>2</sup>

Families, child care centers and homes, Head Start programs, pre-kindergartens, and early intervention programs each offer children opportunities to become curious about their world. While approximately 80% of children ages birth through four are at home with a family caregiver<sup>3</sup>, children may attend early care programs out of the home as young as six weeks old for forty or more hours per week.<sup>4</sup> Whether our state intentionally creates rich early care and learning opportunities depends largely on a shared understanding of what matters in early childhood education, why it matters, and what factors leaders should consider in making early care and learning policy decisions.

Because educational policy decisions can often be highly politicized, it is essential that policymakers, educational leaders, and community members have independent research-based information upon which to ground their decisions. This brief helps prepare decision-makers to understand the early care and learning environment, how other states are addressing early care and learning, and it lays out several key considerations in developing a statewide kindergarten entry assessment.

## (fragmented early care and learning)

Early learning experiences impact later academic success. Academic achievement in prior grades is one of the best individual predictors of academic success.<sup>5</sup> Mastering a range of cognitive, social, emotional, language and literacy skills also makes learning at later ages more efficient. This, in turn, makes learning easier and more likely to continue.<sup>6</sup>

## In This Paper:

- p1. Fragmented Early Care and Learning
- p2. Defining and Measuring
- p3. Entry Assessments
- p5. National Kindergarten Assessment
- p6. Domains
- p7. Direct vs. Teacher Observational
- p8. Professional Development  
Random Sampling vs.  
Administrating to All
- p9. State-Created vs. Proprietary
- p10. Reporting Data
- p11. Conclusion

(by)

Gwynne B. Goodlett, J.D., M.P.A.

Leigh Kale D'Amico, Ed.D

(with assistance from)

Katy Sides, M.P.A.

Before they enter school, many young children are exposed to a variety of environments. For example, a child may be at home with a parent for a few years, in a child care center when the parent is at work, or in pre-kindergarten before entering five-year-old kindergarten. Typically, the personnel working in early care and learning environments do not communicate with each other on an ongoing basis. In particular, vulnerable children tend to shift among family, center-based, and publicly funded settings over time.<sup>7</sup> In many instances across the state, each setting provides children with different, and sometime conflicting, early learning skills. If each of these environments were aligned on how to help children achieve the specific skills needed for academic and lifelong success, then countless resources spent on teaching the most basic early literacy and numeracy skills—or worse yet, undoing poor habits—could be used to prepare children for future success.

Part of the reason early care and learning settings are fragmented is because child care centers, Head Start programs, pre-kindergartens, and early childhood intervention programs each have their own funding streams, mandates, and standards by which they are measured. Within a single state such as South Carolina, as many as thirty federal funding streams may support programs that impact young children and their families.<sup>8</sup> With the exception of Head Start and Early Head Start, home visiting programs supported by the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program, virtually all program and early learning content standards are designed and implemented by states.<sup>9</sup>

There are also numerous state agencies, private nonprofits, and faith-based organizations that fund or operate early learning programs in South Carolina. If a funder requires it, each program may have

“The level of child development necessary to ensure early school success is measured in the following domains: physical health and motor skills; emotional and social competence; language and literacy development; and mathematical thinking and cognitive skills.”

its own data collection and reporting requirements. Within the current early care and learning landscape, coordinated accountability measures, shared definitions, or procedures for maintaining reliable, valid data across early childhood programs are few and far between, and often non-existent.

Compounding this complexity is the fact that families, and in particular parents at home with children, have

very limited guidance on how to prepare their children for success in school. When South Carolina has a clear, shared understanding of what it means to be ready for kindergarten, we can consistently communicate that understanding in every early care and learning environment for children.

### (defining and measuring school readiness)

A threshold step in unifying South Carolina’s diverse early care and learning system is to begin to speak a common language. A statewide definition of school readiness that early care and learning stakeholders agree upon is essential. Although there has been significant work across the nation, many states grapple with how to define school readiness. There is no common, nationally agreed upon definition of kindergarten readiness.<sup>10</sup>

Despite the work that still remains to be done, important groundwork has begun in South Carolina on this initial step. Legislation introduced in the 2013-2014 Session of the General Assembly defines school readiness as, “the level of child development necessary to ensure early school success as measured in the following domains: physical health and motor skills; emotional and social competence; language and literacy development; and mathematical thinking and cognitive skills.”<sup>11</sup>

“When South Carolina measures school readiness statewide and uses that data to continually improve early care and learning experiences for young children, we will systematically get children ready for school and ensure that they succeed once they get there.”

The bill also requires the state to adopt a description of school readiness that includes, among other things, specific characteristics of a child ready for school, requirements for schools, educators, and caregivers, and characteristics of the optimal learning environment. The bill also establishes benchmarks to be used by the First Steps Board, local First Step partnership boards, and agencies that administer programs to benefit preschool children.

To begin to put this conceptual definition and common language into action, several states are working on a specific type of school readiness measure, the kindergarten entry assessment. Kindergarten entry assessments are used to look backward—as a tool to improve programs to promote school readiness and to look forward—to ensure that children continue to grow and learn once they enter school.<sup>12</sup> When South Carolina measures school readiness statewide and uses that data to continually improve early care and learning experiences for young children, we will systematically get children ready for school and ensure that they succeed once they get there.

### (kindergarten entry assessments)

A kindergarten entry assessment is an important tool in helping to better understand and address achievement gaps earlier in children’s development.<sup>13</sup> Across the state, most school districts assess students at some point in kindergarten, first grade, or second grade.<sup>14</sup> Why, then, does South Carolina need a statewide kindergarten entry assessment? Simply, kindergarten is the first point in which virtually all children in South Carolina are located in a single setting. Since public school serves the vast majority of students in the state, kindergarten is the first opportunity to obtain a comprehensive statewide snapshot of students’ skills, thinking, and developmental status.

Measuring school readiness at the beginning of kindergarten also provides valuable information about the experiences children had prior to entering school—be they experiences in the home, in child care, or in pre-kindergarten. Also depending on the type of assessment instrument chosen, measuring school readiness at the beginning of children’s entry into the K-12 system can serve as a baseline for kindergarten instruction and for measuring future progress.<sup>15</sup> Finally, a uniform statewide kindergarten entry assessment can help provide information about young children who move among schools or from one district to another.<sup>16</sup>

South Carolinians have long understood the importance of a statewide school readiness assessment. Over three decades ago, South Carolina was one of the first states in the nation to develop a statewide school readiness assessment. In 1979 the Basic Skills Assessment Program required statewide testing and reporting for children in public schools. Part of this program was a readiness assessment administered at the beginning of first grade called the Cognitive Skills Assessment Battery (CSAB), which was administered between 1979 and 2001.<sup>17</sup> The results were used to guide teacher instruction and meet children’s individual learning needs.<sup>18</sup>

In 2001, the state replaced the CSAB with a new assessment tool, the South Carolina Readiness Assessment (SCRA). Unlike the CSAB, the SCRA was not a test given at a point in time, but instead was a year-long assessment during the kindergarten and first grade years of school.<sup>19</sup> The SCRA involved teacher observation and sampling of student work to measure an individual child’s performance. The SCRA measured three domains: English/language arts,

math, and personal and social development. It was administered for the last time in the 2008 school year as a statewide requirement.<sup>20</sup> Since that time, school districts across the state have used a variety of assessments at various points in the elementary years. Currently, there is no common, statewide measure and what data is collected is retained at the district level.

The reasons for developing a statewide kindergarten entry assessment tool are many. An ideal kindergarten entry assessment tool would provide this information on two different levels—the individual level and the aggregate level. It is important to keep both functions in mind while developing the assessment tool.

At the individual level, information about students' strengths and weaknesses can enhance learning in kindergarten. An assessment that provides information on an individual level can also be valuable for teachers and parents. For teachers, the results can guide work with students to develop and learn during the coming school year. For parents, the results can provide key information to engage parents in an active role to help their children learn at home.<sup>21</sup>

**“Statewide kindergarten entry assessments alone do not provide a complete picture of how to continually improve early care and learning opportunities for young children.”**

At the aggregate level, a statewide kindergarten entry assessment can determine the extent to which children are ready for school and identify populations that need additional intervention.<sup>22</sup> This information can be used to determine overarching needs for specific populations.

This type of information can also be used to design professional training for early childhood program providers and elementary teachers about the unique needs of specific groups. Looking at kindergarten entry assessments over time can also help communities determine what policies and practices are impacting school readiness. Kindergarten entry assessment data can assist in understanding patterns, and in a broader sense, whether specific early childhood community interventions are successful.

Ongoing training, quality assurance mechanisms, and continual evaluation are essential to implement and sustain a statewide kindergarten entry assessment. Without these assurances, there is no way to ensure kindergarten entry assessments are implemented properly and that data are used consistently, accurately, and appropriately.<sup>23</sup> Lessons learned from the South Carolina Readiness Assessment highlight the importance of supporting and monitoring kindergarten teachers as they administer the assessment. Using the data to improve instruction through coaches, online platforms, and higher education teacher training is of the utmost importance.<sup>24</sup> Periodic refresher training, oversight, spot-checking, and ongoing reliability studies are also key components of successful kindergarten entry assessment programs.<sup>25</sup>

The importance of ongoing evaluation and feedback loop for any kindergarten entry assessment cannot be overstated. The National Association for the Education of Young Children (NAEYC) and the National Association of Early Childhood Specialists in State Departments of Education (NAECS/SDE) specifically address the importance of evaluation. The Associations' position paper emphasizes that a goal of evaluation is to determine intended as well as unintended results.<sup>26</sup> Ongoing evaluation ensures that the assessment is being administered properly, that the assessment is providing accurate data, and that the data are being used properly to inform services, especially instruction. Evaluation is a crucial step in ensuring usability and continually improving the information obtained from a kindergarten entry assessment.

Despite the important information that a statewide kindergarten entry assessment can provide, it is crucial to understand the limits of that information. There is national consensus in early education that assessments should not be used to determine whether children should be held back from kindergarten.<sup>27</sup> Furthermore, kindergarten entry assessments should also not be used as the sole indicator of early childhood program performance. The reason is simple—the myriad of factors that influence a child's academic success are nearly impossible to quantify and untangle. Factors may include traits intrinsic to the child, such as a natural curiosity or persistence. Academic success may also be influenced by family conditions such as significant economic hardship, limited parental education, and the presence of toxic stress in the home.<sup>28</sup> Using a kindergarten entry assessment as the sole high stakes tool to determine which early childhood care and learning programs are effective would do more harm than good.

A statewide kindergarten entry assessment is a necessary but not sufficient piece of information that can be used in combination with other data to explore which early childhood programs, kindergarten teachers, or curricula are effective.<sup>29</sup> However, statewide kindergarten entry assessments alone do not provide a complete picture of how to continually improve early care and learning opportunities for children.

### **(national kindergarten entry assessment movement)**

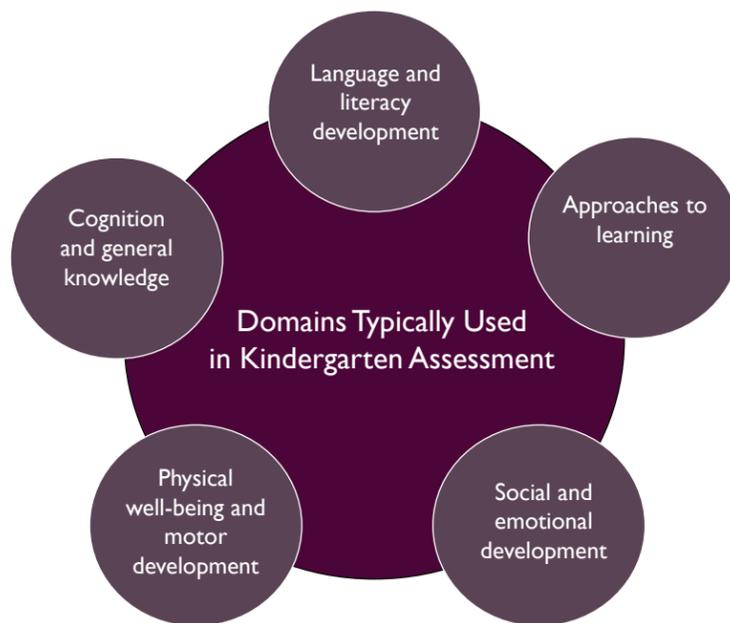
Nationally, there continues to be significant progress in developing and improving statewide kindergarten entry assessments. As of 2010, when the National Conference of State Legislatures published a state survey, 25 states had a kindergarten entry assessment system.<sup>30</sup> An additional four states were in the process of developing or implementing a kindergarten entry assessment system.<sup>31</sup> In 2012, just two years later, combined information from the National Conference of State Legislatures and the Race to the Top—Early Learning Challenge<sup>32</sup> funding competition indicated that 42 states had developed or were in the process of developing a kindergarten entry assessment.<sup>33</sup> In short, the development of kindergarten entry assessments is a dynamic and rapidly evolving field.

Several states have joined forces **“Developing and continuously using a statewide kindergarten entry assessment tool will significantly impact and focus the state's attention on what matters for children.”** to work on kindergarten entry assessments in formal and informal consortiums. South Carolina, eight other states and the District of Columbia, are a part of a US Department of Education grant that is exploring a kindergarten through third grade assessment system.<sup>34</sup> This North Carolina-led consortium is designed to develop kindergarten entry through third grade assessment recommendations, informed by the practices and needs of each state and also by national researchers who are part of the consortium. Meanwhile, participants continue to determine the appropriate direction for their state. While other states are receiving funding for their participation, South Carolina is not. South Carolina's involvement in this consortium is an important first step in learning from other states, however significant work across time will be required to actually implement an assessment system.

Because most states across the nation have either developed, procured, or are in the process of developing statewide kindergarten entry assessments, there is a wealth of information available about other states' experiences and plans.<sup>35</sup> Readiness assessments have varied across the nation regarding the number of children in the state who are assessed, the areas of child development that are assessed, and how the information from the assessments is used.<sup>36</sup>

## (domains)

In 2010 there was no consensus among states on what areas of child development a kindergarten assessment should measure. Of the 20 states that required a particular statewide instrument, 11 states assessed between five and nine domains of kindergarten readiness. The remaining nine states only evaluated literacy readiness.<sup>37</sup>



By January 2012, however, consensus around five key domains emerged among many states.<sup>38</sup> Thirty-five of 37 states that applied for Race to the Top—Early Learning Challenge proposed how they would revise or develop a statewide kindergarten entry assessment that covered five domains. The five domains include: 1) language and literacy development; 2) cognition and general knowledge, including early mathematics and early scientific development; 3) approaches to learning; 4) physical well-being and motor development, including adaptive skills; and 5) social and emotional development.

The South Carolina Readiness Assessment instrument measured over 40 indicators in three domains: English/language arts, math, and personal and social development.<sup>39</sup>

Legislation introduced in the 2013-2014 Session of the General Assembly outlines five kindergarten readiness domains: 1) Physical health and motor skills; 2) Emotional and social competence; 3) Language and literacy development; 4) Mathematical thinking and cognitive skills; and 5) Approaches to learning.<sup>40</sup>

Adding more domains to a kindergarten entry assessment requires a tradeoff. The more domains that are measured, the more expensive and time consuming the assessment becomes to administer. Additional domains also place a burden upon teachers to complete the assessment and students to take the assessment. When the state previously used South Carolina Readiness Assessment instrument, there were over 40 indicators and the assessment was given three times per year. A lesson from the state's experience with the SCRA suggests focusing on fewer indicators and reducing the burden on teachers to administer the test. An additional concern about more detailed assessment is the burden on information systems in analyzing and interpreting the data produced. At least one state has articulated these concerns as important considerations in choosing its kindergarten entry assessment.<sup>41</sup>

Regardless of whether three, four or five domains are measured, any kindergarten entry assessment must be linked to the standards being taught in kindergarten. Every state that applied for the Race to the Top—Early Learning Challenge aligned the state's early learning standards and kindergarten entry assessment.<sup>42</sup> South Carolina's Good Start, Grow Smart Early Learning Standards were developed by a multi-organizational taskforce led by the Office of Early Childhood Education at the South Carolina Department of Education. These

voluntary standards for preschool children include five domains of development:

- Approaches to Learning
- Social and Emotional Development
- Mathematics
- Language and Literacy
- Physical Development and Health

An important step in developing a South Carolina kindergarten entry assessment is to take state early learning standards into account.

The National Association for the Education of Young Children (NAEYC) and the National Association of Early Childhood Specialists in State Departments of Education (NAECS/SDE) have also underscored the need for a systematic approach to link assessments with curriculum and instruction.<sup>43</sup> Aligning assessment instruments with early learning standards helps to reinforce the concept that the skills children need to be ready to enter school should be closely aligned with skills being taught in school.

## (direct assessments vs. teacher observational assessments)

Another consideration in creating a statewide kindergarten entry assessment is whether the assessment will be administered directly to children, or measured by teacher observation of students' work or performance over time.<sup>44</sup> Both direct and observation assessments have been used in South Carolina. The Cognitive Skills Assessment Battery (CSAB) was a direct assessment given at a point in time and the South Carolina Readiness Assessment (SCRA) was a series of teacher observations of student work during the kindergarten year of school.

Nationally, there has been a dramatic movement towards observational assessments. Almost all of the 37 states submitting applications for the Race to the Top—Early Learning Challenge proposed using an observational or “authentic” assessment instrument administered by kindergarten teachers during the first two months of school.<sup>45</sup>

There are several disadvantages of direct assessments.

- Direct assessments often require schools to purchase testing kits and tools
- Some direct assessments for young children, if given one-on-one to the child, may also require specialized knowledge to administer
- Often these assessments are adaptive and require the person administering the test to ask different questions depending on the answers a child gives
- A single point-in-time test cannot comprehensively capture all of the cumulative experiences in the home, in programs, and in the community that a young child has experienced<sup>46</sup>
- At times, direct assessment of child performance require some young children to use objects less familiar to them, such as using a pencil and paper or computer

Observational assessments, on the other hand, can provide more complete information about a child because the child is in a familiar setting with familiar people. However, observational or “authentic” assessments can be expensive to administer in both the time it takes to observe a child and also in the time it takes to train teachers to give the assessment instrument consistently. Observational assessments may also be biased depending on the person conducting the assessment and may not be standardized if completed in different contexts for different children.<sup>47</sup> Ultimately, the quality of data from observational kindergarten

entry assessments depends on teachers' ability to administer assessments and record the results appropriately, accurately, and consistently across multiple children and school-related circumstances.<sup>48</sup>

Both types of assessments may have costly licensing, reporting, and analysis fees. Often these fees are associated with the expenses of the materials necessary to administer the assessment, conducting ongoing research about the assessment, and updating reporting and analysis features.

With finite financial and human resources, it is important to balance the expense of assessment with the quality of information provided. States that are confronting this decision consider the desired use of the data as well as the feasibility and costs of implementing these major types of assessments. Pilot testing of differing assessments can lead to better decision making related to the type of kindergarten entry assessment to select. In addition, an understanding of assessments currently used in the early grades may identify commonly administered direct or observational assessments across the state.

### (professional development)

Most kindergarten entry assessments require significant professional development for teachers who administer the assessment. Professional development is needed to ensure that those administering the test understand the purpose and guidelines of conducting the assessment. If appropriate professional development is not provided, assessment results are compromised and cannot be used to effectively make local or state-level decisions. Picture-based, paper-pencil, and computer-adapted direct assessments generally require the least professional development because most of the assessment content is given directly to the child.



Some direct assessments, particularly those designed for young children, require some questioning or direction-giving by the administrator. Observational assessments typically require significantly more professional development as observers gain an understanding of attributes that they are observing and methods of scoring those attributes. While this professional development may be time-consuming, it is necessary to promote a better overall understanding of the child's skills and abilities and potentially lead to more focus on areas in future classroom interactions and instruction.

### (random sampling vs. administering to all kindergarteners)

Nationally, the trend is to assess all entering kindergarteners. In 2010, of the 25 states with kindergarten entry assessments, 21 assessed every entering kindergartener and three included a large percentage of kindergarteners.<sup>49</sup> Two states that did not require assessments enacted legislation for the assessments to become mandatory in the future.<sup>50</sup> Minnesota is the only state in the nation that has reported using a representative sample of students.<sup>51</sup>

Using a random sample of students makes the assessment significantly less expensive to

administer. Furthermore, sampling reduces the potential for misuse of the data produced.<sup>52</sup> However, administering a kindergarten entry assessment to a random sample of children

**“If decision makers want to use a kindergarten entry assessment to inform individualized teaching at home and in the school, then the assessment should be administered to all students.”**

limits the ability to use the kindergarten entry assessment to inform instruction on an individual basis.<sup>53</sup> This significantly limits the usefulness of a kindergarten entry assessment for both teachers and parents. Nevada's Early Childhood Advisory Council found that if a kindergarten entry assessment adds value for educators and school districts, then the assessment is more likely to be successful.<sup>54</sup> Also, not

administering a kindergarten assessment to every child means that data from the test may not be useful to evaluators who later want to examine the impact of not being ready for school on other poor educational outcomes later in life.

While there are several considerations in determining whether to administer a kindergarten entry assessment to all children or a random sample, if decision makers want to use a kindergarten entry assessment to inform individualized teaching at home and in the school, then the assessment should be administered to all students.

### (state-created vs. proprietary assessments)

Several high-quality nationally-recognized kindergarten entry assessments have been designed by companies that specialize in assessment instruments. Many have particular strengths and are appropriate for children with differing cultural and socioeconomic backgrounds. Some assessments measure development in a particular domain such as literacy skills. Others assess multiple areas of child development.<sup>55</sup>

Some of the more widely recognized assessments include Developmental Indicators for the Assessment of Learning (DIAL-3), Dynamic Indicators of Basic Early Literacy Skills (DIBELS), Early Development Instrument (EDI), Teaching Strategies Gold, Work Sampling System (WSS), and Measures of Academic Progress (MAP). Almost all of these instruments are used in school districts in South Carolina.

Many proprietary assessments have a research base that supports how the assessment should be used. For example, the EDI was specifically designed to provide information at the neighborhood level to specifically plan community-based interventions and prevention strategies.<sup>56</sup> Much of the research is from studies in Australia where the EDI has been implemented nationwide since 2009.

Several states have created their own assessment tools.<sup>57</sup> State-created assessment instruments can be tailored to better reflect state-specific learning standards and can be less costly than proprietary assessment materials. However, state-created instruments should also meet reliability and validity standards. Reliability is the degree to which an assessment provides the same result when different people administer the assessment to the same child. Validity is the degree to which an assessment measures what the assessment is intended to measure.<sup>58</sup> Ensuring that state-created assessments meet these standards permits results to be analyzed for trends over time. However, reliability and validity testing is often time and labor intensive.<sup>59</sup> Minimizing the importance of reliability and validity standards can result in data that may not predict kindergarten readiness and may not truly reflect a child's development in various areas.

Whether South Carolina chooses to develop its own assessment or use a proprietary

kindergarten entry assessment, or a combination of both, it is crucial to understand costs, flexibility, validity, and reliability of either a state-created or proprietary assessment.

### (reporting data)

As mentioned above, assessments can provide valuable information about children’s educational trajectories. This type of information may be particularly helpful in looking at educational outcomes over time for groups of children by race, ethnicity, or socioeconomic status. However, kindergarten entry assessment data are most useful when the data are reported to the state level and connected with other data about similarly situated children.

Many states have a state longitudinal educational data system, or SLEDS. Several states have recognized the need to integrate kindergarten entry assessment data into the state’s longitudinal data system.<sup>60</sup> A state longitudinal education data system can link data from pre-kindergarten through postsecondary and into the workforce, to help decision makers to answer a broad range of program and policy questions and target improvement strategies.<sup>61</sup>

While housing the data in the state longitudinal educational data system is critical for longitudinal analysis and the inclusion of multiple factors in analyses, counties and local decision-makers need access to these data as well. Data dashboards that allow decision makers to look at multiple data points related to their program, school, or community are gaining popularity for their ease of use and provision of clear data points.

South Carolina is fortunate to have the significant expertise of the Budget and Control Board’s Office of Research and Statistics Data Warehouse. Much of the data needed for a state longitudinal educational data system is already collected and reported at the state level. Nevertheless, efforts to improve access to these data are an important component of an effective kindergarten entry assessment system.

### Next Steps

- **CONVENE** a stakeholders group to finalize a kindergarten readiness description. A statewide definition and description of kindergarten readiness will provide a common framework for understanding and promoting kindergarten readiness across the spectrum of early care and learning environments. Including families, early education programs, and schools will also help align a statewide kindergarten readiness definition and description with South Carolina early learning standards and K-12 learning standards.
- **IDENTIFY** kindergarten entry assessments that are aligned with the state’s definition of school readiness and provide data necessary to understand children’s progress in key domains. This will allow for resource planning and promote longitudinal analysis of progress at the state and community levels.
- **PILOT TEST** multiple kindergarten entry assessments and gain feedback from local assessment experts, instructional leaders including teachers, and county and state-level early childhood decision makers. Input from teachers who will be administering the test, will be key to sustaining and ensuring the success of any assessment that is adopted.
- Most important, a pilot process allows decision makers to **EVALUATE** the professional development needs related to the assessments, feasibility of the assessments within school settings, effective reporting processes, and the appropriate data to guide resource planning and analysis of progress.

### (conclusion)

This is an encouraging time to improve early care and learning in South Carolina. State and national attention has never been greater and data driven decision making is becoming more commonplace. The General Assembly’s recent expansion of the Child Development Education Pilot Program (CDEPP) and current attention being given to the importance of early literacy skills make this an auspicious time to examine ways to improve children’s kindergarten readiness and systems that support school services.

A common understanding of the concept of kindergarten readiness will afford more children the opportunity to enter school prepared to succeed. Convening a group of knowledgeable education and early childhood development leaders to guide a readiness definition is important. This group of stakeholders could include representatives from various early care and learning programs, family representatives, kindergarten and elementary school teachers, administrators, and researchers from across the state. Input from public and private practitioners, researchers, and community leaders will ensure that a description of school readiness and kindergarten assessment produces information that is useful for families, teachers, and early childhood programs to strengthen their work with young children.



A kindergarten entry assessment allows for continual quality improvement in the educational system. From South Carolina’s past history, we know that what gets measured gets done. The early Cognitive Skills Assessment Battery administered at the beginning of first grade showed the power of a statewide readiness measurement tool. In 1980, 36.3% of entering first graders scored “not ready.” Ten years later, the “not ready” rate had declined to 25.6% and a decade later the “not ready” rate declined to 13.6%.<sup>62</sup> This consistent and dramatic reduction over time is clear evidence that developing and continuously using a statewide kindergarten entry assessment tool will significantly impact and focus the state’s attention on what matters for children.

South Carolina was on the forefront to understand children’s skills and abilities at school entry in the late 1970s. The state maintained a focus on capturing information about children in their earliest years of school until 2008. Across that time, children’s experiences prior to school entry have become more diverse with larger numbers of children attending some type of early childhood education program or receiving early intervention.

South Carolina programs, resources, and strategies related to early care and education have grown, providing numerous opportunities for families and young children. However, lack of common understanding of kindergarten readiness and no method for assessing strengths and areas for improvement have left South Carolina and her early childhood programs without a common metric for measuring progress. A common school readiness definition and a kindergarten entry assessment have the potential to allow South Carolina to focus on data-based quality improvement across the next several years for its youngest citizens and to encourage higher levels of academic success in their early academic years and beyond.

Please visit [www.instituteforchildsuccess.org/research](http://www.instituteforchildsuccess.org/research) to download full listing of endnotes.

# i(cs)

INSTITUTE *for* CHILD SUCCESS

105 Edinburgh Court Greenville, SC 29607  
1201 Main Street, Suite 1980 Columbia, SC 29201  
w: [instituteforchildsuccess.org](http://instituteforchildsuccess.org) | p: 864.382.3329

FUELED BY



**Children's  
Hospital**  
Greenville Health System



United Way  
of Greenville County

The Institute for Child Success is a non-profit, non-partisan research and policy organization that fosters public and private partnerships to align and improve resources for the success of young children in South Carolina. A partnership of the Children's Hospital of the Greenville Health System and the United Way of Greenville County, ICS supports service providers, policy makers, and advocates focused on early childhood development, healthcare, and education to build a sustainable system that ensures the success of all children, pre-natal through age five.

# School Readiness Assessment

Kelly L. Maxwell and  
Richard M. Clifford

S

chool readiness assessment is a hot topic these days, in large part because of increased accountability pressures in both the public schools and early care and education settings. What exactly is meant by the phrase *school readiness assessment* and what should early care and education teachers and administrators know about it? This Research in Review article uses a question-and-answer format to address several issues about school readiness.

## What is school readiness?

School readiness is more than just about children. School readiness, in the broadest sense, involves children, families, early environments, schools, and communities (NASBE 1991). Children are not innately *ready* or *not ready* for school. Their skills and development are strongly influenced by their families and through their interactions with other people and environments before coming to school. With 81 percent of U.S. children in nonparental care arrangements the year before kindergarten (West, Denton, & Germino-Hausken 2000), child care centers and family child care homes are important early environments that affect children's development and learning.

Schools are also an important piece of the readiness puzzle because different schools have different expectations about readiness. The same child, with the same strengths and needs, can be considered ready in one school and not ready in another school. It is the school's responsibility to educate all children who are old enough to legally attend school, regardless of their skills (see "Characteristics of Ready Schools").

**Kelly L. Maxwell**, Ph.D., is a scientist at the Frank Porter Graham (FPG) Child Development Institute and codirector of the National Prekindergarten Center, University of North Carolina at Chapel Hill. She has directed several large-scale studies of young children, including a recent statewide study of readiness for school in North Carolina.

**Richard M. Clifford**, Ph.D., is a senior scientist at the FPG Child Development Institute and codirector of both the National Center for Early Development and Learning and the National Prekindergarten Center, University of North Carolina at Chapel Hill. He is a past president of NAEYC and is well known for his work in assessment of learning environments as well as research on the impact of programs on children's development.

Research in Review is a regular series of articles appearing in *Young Children*. This article was edited by past journal research editor **Diane M. Horn**, Ph.D., professor and director of the University of Rhode Island Child Development Centers, Department of Human Development and Family Studies, in Kingston.

This is an expanded version of an article on pp. 42–49 of the January 2004 issue of *Young Children*.



Illustrations ©  
Sylvie Wickstrom

## Characteristics of Ready Schools

The National Education Goals Panel identifies 10 keys to schools being ready for children. Ready schools should

1. Smooth the transition between home and school.
2. Strive for continuity between early care and education programs and elementary schools.
3. Help children learn and make sense of their world.
4. Make a commitment to every child's success.
5. Show they are committed to every teacher's success.
6. Introduce and expand strategies that have been shown to improve achievement.
7. Function as learning organizations that change their practices if they do not help children.
8. Serve children in communities.
9. Take responsibility for results.
10. Maintain strong leadership.

Source: Shore 1998.

Finally, communities are important because readiness for school success is a community responsibility, not just the responsibility of parents and preschool teachers. Communities, for example, should provide high-quality health care and support services for families of young children and work to ensure that all families with young children have access to high-quality care and education.

Most school readiness assessments focus on one part of the puzzle—the child. The National Education Goals Panel (NEGP 1997) identifies five domains of children's development and learning that are important to school success: physical well-being and motor development, social and emotional development, approaches toward learning, language development, and cognition and general knowledge (Kagan, Moore, & Bredekamp 1995; see NEGP 1997 for a family-friendly description of

school readiness). The NEGP work on school readiness has been important in broadening people's understanding of readiness beyond the ABCs and 123s and highlighting the interconnections among the five domains.

### What can we learn from school readiness assessment?

*School readiness assessment* typically refers to assessment of young children around school entry—right before kindergarten, at kindergarten entry, or very early in the kindergarten year. The tools described as school readiness assessments vary in their purposes and designs. Thus, people using the phrase “school readiness assessment” may be referring to very different kinds of assessment.

The NEGP report *Principles and Recommendations for Early Childhood Assessments* (Shepard, Kagan, & Wurtz 1998) identifies and describes five major purposes for assessing young children. School readiness assessments typically fall under one of these purposes. It is important to understand the different purposes of assessment because assessment tools are typically developed for a single purpose and cannot easily be used for some other purpose. Each of the five purposes described in the *Principles and Recommen-*

**It is a school's responsibility to educate all children who are old enough to legally attend school, regardless of their skills.**



© Marilyn Nolt

## ASSESSMENT

Assessments report are highlighted on the following pages.

**1. Improve learning.** Teachers of young children assess children's skills to help teachers adapt their teaching. The information is gathered on all children because the teacher needs to know the strengths and needs of each child in the class, not just some. Assessments are often informal, such as teacher observations or children's work samples, but may also include more formal assessments. The content of assessments for this purpose should be closely tied to the classroom curriculum.

These assessments can help kindergarten teachers improve classroom instruction by indicating children's strengths and weaknesses. Well-prepared teachers assess children's skills throughout the day, for example, by taking a picture of a child's block structure or writing a note at the end of the day about two children's social interaction. Focusing on school readiness assessment for the purpose of improving learning can support good teaching practices. These assessments also help families to better understand the developmental status of their children.



© Marilyn Nolt



© Elisabeth Nichols

### A Note

Although most school readiness assessments focus only on children's skills, a few states, like North Carolina, also include schools in their official definitions and assessments of school readiness (North Carolina Ready for School Goal Team 2000; Maxwell et al. 2001).

**2. Identify children with special needs.** This type of assessment generally uses a two-step process. First, all children are screened. If the screening suggests that a child's development is atypical, then the second step is implemented—the child is referred for a more thorough assessment to determine specific needs and eligibility for special education or related services. More thorough assessments must meet high standards of technical adequacy because they will be used to help make important decisions about children.

Many early care and education programs and public schools routinely conduct screenings of young children when they enter the program. Screening tools should cover general developmental milestones in multiple areas, rather than be tied specifically to a curriculum.

The reason is that screening serves to determine whether a child's development is within the range of what is expected for children that age, not whether the child is learning particular concepts covered in a curriculum. Screening tools can tell parents, teachers, and specialists whether a child's development is within the range of expectations or whether the child should be referred for a more in-depth evaluation. Screenings, however, cannot positively identify children with special needs.

**3. Evaluate programs.** Assessments of young children's skills are often included in evaluations to determine the effectiveness of early childhood programs. Assessments chosen for this purpose should reflect program goals and be appropriate for the

## ASSESSMENT

children attending the program. Generally, child assessments for the purpose of program evaluation need only include a sample of children rather than all. Program effectiveness can be determined by showing that a representative group of children from the program has improved; the program does not have to demonstrate success for each and every child. Gathering evaluation data on a sample of children rather than all children minimizes the likelihood of information being used inappropriately to make decisions about individual children or judgments about individual teachers. School readiness assessments for program evaluation provide important indicators of an early childhood program's effectiveness in preparing children for school. They provide useful feedback to help administrators continuously improve program quality. If teachers complete these assessments, there must be safeguards to ensure that the data are not biased because the teachers are invested in the results (that is, want children in their class or program to do well). Assessments for the purpose of measuring program success typically cannot provide teachers with information to help improve children's learning. Such assessments often sample only some, not all, children, and the tools used often are not designed for the purpose of improving instruction.

**Multiple conversations will most likely be needed to enable a community to reach consensus about school readiness.**

#### 4. Monitor trends over time.

Communities or states may choose to conduct school readiness assessments to provide a snapshot of children as they enter kindergarten. Were this snapshot taken

of a group of kindergartners every few years, then policy makers could monitor readiness trends (for example, determine whether over time children come to school with more skills). This type of school readiness assessment is broader than that done for program evaluation purposes. It does not focus on a single program but instead allows the public and policy makers to determine whether the many early childhood investments collectively are positively affecting school readiness.

As with program evaluation, child assessments for determining a ready school generally should be conducted on only a sample of children. Such assessments can provide a general picture of the characteristics of a group of children as they enter kindergarten but cannot relate information about individual children's skills.

Program assessments rarely provide detail about any individual program's effectiveness. (See Love, Aber, & Brooks-Gunn 1994 for a discussion of community school readiness assessments and Scott-Little, Kagan, & Clifford 2003 for a discussion of state school readiness assessments.)

**5. Use for high-stakes accountability.** Assessments become high stakes if used to make decisions about individual children or teachers. Assessment tools for this purpose must meet rigorous standards of technical accuracy because they will be used to make important decisions about individuals. Because few assessment tools for young children meet high standards, the NEGP report (Shepard, Kagan, & Wurtz 1998) recommends that no child assessments be conducted for high-stakes accountability purposes until third grade.



© Marilyn Nolt

## ASSESSMENT

Assessments of all children, for any purpose, may be used for high-stakes accountability. Once data are gathered and available, it may be tempting to use them to make decisions about individual children and teachers. For example, readiness assessments may be used to deny or discourage entry into kindergarten even when children are legally entitled to the service. Similarly, such assessments may be used to punish teachers whose average classroom assessment scores are low, even though the assessment tool did not meet high standards of technical adequacy. The potential risk for harm must be considered *before* any assessment data are collected. Safeguards should always be in place to minimize risks.

Bill Geiger



lower skills in all five areas of development tested (physical well-being and motor development, social and emotional development, approaches toward learning, language development, and cognitive development and general knowledge) as they entered school.

**Ethnicity.** Using data from the same national study of children entering kindergarten, Lee and Burkam (2002) found that African American, Hispanic, and other children (including biracial and Native American) had lower math and reading skills at the beginning of kindergarten than did White or Asian children. African American and Hispanic children in families from lower socioeconomic status had the lowest math and reading skills.

### What characteristics of children are related to school readiness?

As stated earlier, individual children vary widely in their skills. However, research has shown that there are some general group differences in children's school readiness skills. The most recent and comprehensive national data about children's skills when they enter kindergarten come from the Early Childhood Longitudinal Study, Kindergarten Cohort (ECLS-K)—a study of a nationally representative group of approximately 22,000 kindergartners conducted by the U.S. Department of Education (Zill & West 2001). Relevant findings from this study are highlighted below.

**Family background characteristics.** The ECLS-K study demonstrates that children with particular risk factors—living in a family that receives food stamps or temporary assistance; living in a single parent home; having a mother with less than a high school education; and having parents whose primary language is not English—had lower skills when they entered school (Zill & West 2001). Specifically, children with at least one of the four risk factors had lower skills in reading, math, and general knowledge, and were more likely to be in poorer health upon entering kindergarten compared to children with no risk factors. The effect of risk factors was cumulative: children with more risk factors had

**Gender.** Zill and West (2001) found that girls in the ECLS-K study had slightly higher reading skills than boys, were about the same as boys in math and general knowledge, had better prosocial skills than boys, and were less likely to engage in problem behaviors than boys at the beginning of kindergarten.

These research findings suggest that some groups of children tend to start school less prepared to succeed than others. It is important to remember that these are *group* differences. Not all children within the at-risk groups had poor skills when they entered school (Zill & West 2001). Some children within each at-risk group had strong skills. Understanding group differences may help early childhood and kindergarten teachers plan appropriate learning opportunities needed for children at risk. Teachers must not make assumptions, however, of individual children's skills based on their membership in one or more of the groups discussed.

### What are the limitations of school readiness assessments?

There are several important limitations of school readiness assessments. First, each assessment tool is designed for a *particular purpose* and cannot automatically or easily be used for another purpose. This means that the purpose of the assessment must be clear

before an appropriate assessment tool can be selected. It also means that multiple assessment tools or approaches are needed to address multiple purposes.

Second, each school readiness assessment tool is

**The purpose of the assessment must be clear before an appropriate assessment tool can be selected. Multiple assessment tools or approaches are needed to address multiple purposes.**

designed with an explicit or implicit definition of school readiness. Assessment users must articulate their own definition of school readiness before they can select an appropriate measure that matches their definition. If this is not done, then the assessment instrument(s) will by default define school readiness—for better or for worse. For instance, if school

readiness is defined as covering all five domains described by NEGP, then the school readiness assessment needs to measure all five domains. If the assessment measures only early literacy, then users are automatically equating readiness with literacy skills.

Third, assessments are only as good as the people conducting them. Any assessment requires careful training before use. If assessments are not done well, then the data collected may not provide the information sought. This, in turn, could lead to worse—not better—decisions being made about young children and programs.

### How should I choose a school readiness assessment?

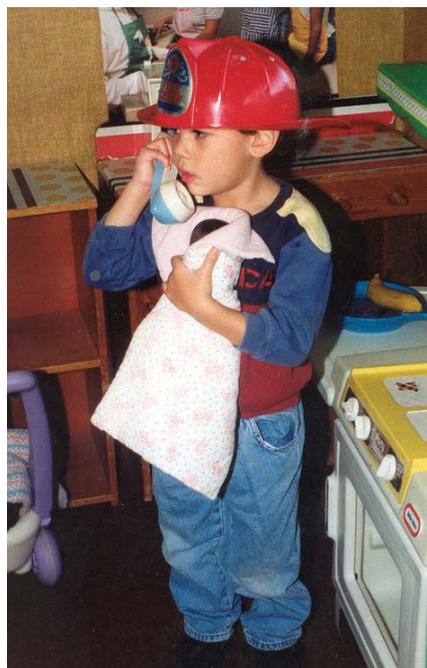
A team of people, rather than one individual, generally works together to plan a school readiness assessment. Ideally, this team includes administrators, teachers, families, and experts in the assessment of young children's skills. The following key questions can help guide the team's planning.

- What is your definition of school readiness? Are you interested in all five domains of development—

physical well-being and motor development, social and emotional development, approaches toward learning, language development, and cognitive development and general knowledge? If so, do you already collect information on some domains (for example, health), or are you looking for assessment tools that cover all five domains? If the purpose of the assessment is to improve learning, does the content of the assessment match the curriculum content?

- What is your purpose or purposes? You will need to select an assessment tool or tools to match each of your purposes.
- What are the characteristics of the children to be assessed? How old are they? Do they speak languages besides English? What are their races or ethnicities? Do some have disabilities? In what part of the country do they live? The assessment tools selected should be designed to be used with children similar to the ones you will be assessing. Furthermore, the assessment tool should include documented evidence of the characteristics of children on which the assessment was tested.
- What are the technical properties of the assessment? Is there evidence for adequate validity (the tool really measures what it claims to measure)? Is there evidence for adequate reliability (i.e., the tool produces similar results for a child, across a short time frame or across the different individuals administering the assessment)? Different purposes require different standards of technical properties (Shepard, Kagan, & Wurtz 1998).

Assessment tools for the purposes of program evaluation and monitoring trends must meet high standards for technical properties. The *Standards for Educational and Psychological Testing* (AERA, APA, & NCME Joint Committee 1999) may be a useful resource for evaluating the technical adequacy of assessments.



© Elisabeth Nichols

### What are appropriate tools for conducting school readiness assessments? Who should gather school readiness assessment data?

There is no one best approach to or tool for assessing school readiness. Different purposes require different approaches. Even within a particular purpose, there is still variability in the assess-

## Type of Assessment

	Naturalistic	Standardized, norm-referenced
<b>Advantages</b>	<ul style="list-style-type: none"> <li>• Does not disrupt a child's ongoing routine</li> <li>• A child has multiple chances to demonstrate skill</li> <li>• If done over time, it may more accurately reflect a child's skills</li> </ul>	<ul style="list-style-type: none"> <li>• Allows comparisons of same-age children</li> <li>• Better agreement across multiple teachers or observers</li> <li>• Less chance for observer/teacher bias to affect assessment results</li> </ul>
<b>Disadvantages</b>	<ul style="list-style-type: none"> <li>• Does not typically allow comparisons of same-age children</li> <li>• Hard to achieve agreement across multiple teachers or observers because each may have different understandings of the assessment items</li> <li>• Observer/teacher bias may affect assessment results if individuals know that the results will be used to make decisions about them or their programs</li> <li>• May not be as accurate for determining group comparisons or program effects</li> <li>• Typically requires more of the teacher's time</li> </ul>	<ul style="list-style-type: none"> <li>• May not reflect skills for individual children accurately because it is usually conducted outside the natural environment</li> <li>• A child is given only one opportunity to demonstrate skill</li> <li>• A child's performance may be less accurate if the person administering the assessment is unfamiliar to the child</li> <li>• Typically provides less information of use in guiding instruction for individual children</li> <li>• Available measures may not accurately reflect the skills of children from diverse backgrounds and of children who do not speak English</li> </ul>

ments chosen. For example, a review of state prekindergarten evaluation reports identified 42 different assessment tools used in 13 state evaluations (Gilliam & Zigler 2001). For a review of commercially available school readiness assessments, see *Assessing Kindergarten Children: A Compendium of Assessment Instruments* (Niemeyer & Scott-Little 2001).

Generally, there are two different kinds of school readiness assessments: naturalistic assessments (sometimes referred to as informal or authentic) and standardized, norm-referenced assessments (sometimes referred to as formal). Naturalistic assessments include observations, work samples, and teacher checklists. Although both types of assessment are sometimes used for various purposes, the naturalistic type is most often used for the purpose of improving learning.

Standardized, norm-referenced assessments follow a standard set of administration rules so that each child theoretically experiences the assessment similarly (for example, each person administering the test gives the same instructions). Norm-referenced assessments permit a child's performance to be compared to those

of other children his age. This type of assessment is used frequently for identifying children with special needs, for evaluating programs, and in high-stakes accountability. The table above highlights key advantages and disadvantages of each type of assessment.

With regard to gathering assessment information and from whom, generally it is best to tap multiple sources—teachers, families, and the child himself (Shepard, Kagan, & Wurtz 1998). In North Carolina's statewide school readiness assessment, for instance, teachers provided information about children's social skills and problem behaviors, families contributed knowledge about children's health and their approaches toward learning, and one-on-one assessments conducted with children added to the learning about children's communication skills and general knowledge (Maxwell et al. 2001). Gathering information from multiple sources is useful in understanding children's skills across various settings. Families, for example, have a perspective on their children's skills from experiences at home that may differ from how teachers see children in a group, classroom setting.

**Families, for example, have a perspective on their children's skills** from experiences at home that may differ from how teachers see children in a group, classroom setting.



Photos by Casey Sills

school entry does not generally benefit children. (See Marshall 2003 and Stipek 2002 for research summaries on the effects of delayed kindergarten entry.)

If a child is deemed not ready for school, preschool teachers and administrators can talk to the family and kindergarten teacher about the particular needs of the child and work together to develop strategies for improving the child's skills. If concerned that the child's skills are far behind those of her peers, the team may refer the child for screening to determine whether she has a disability. Recognizing that school readiness concerns more than just the child, the team can also identify strategies all can use to support the child's success. The preschool teacher and administrator, for example, can discuss

**Research suggests that delaying school entry does not generally benefit children.**

strategies for ensuring that the child receives high-quality, individualized, and developmentally appropriate instruction that addresses all five domains of development.

If the team believes that the child is considered not ready because of inappropriate expectations from school staff, then a larger effort is likely needed to bring about change. The next section of this article discusses these larger efforts to develop consensus on school readiness.

### **What should happen to children who are not ready for school?**

The NEGP concept of a ready school suggests that it is a school's responsibility to educate all children who walk through its door, regardless of whether children are ready or not ready. The idea of schools' readiness for children is also evident in state policies regarding school entry. Most states use age, not skill level, as the criterion for determining when a child is eligible—and legally entitled—to attend public school (Saluja, Scott-Little, & Clifford 2000). Thus a child's readiness should not be a factor in determining eligibility for kindergarten. However, practice does not always follow this philosophy. Some families, school administrators, and teachers may want to delay school entry based on children's readiness. But research suggests that delaying

### **What if preschool and kindergarten programs differ in their expectations of readiness? How can they work together to set appropriate expectations?**

Even with the work of the NEGP and multiple years of research and discussion, a common definition of school readiness remains elusive (Meisels 1999). Parents,

## ASSESSMENT

preschool teachers, and kindergarten teachers—even within the same community—may differ in their expectations of school readiness (Graue 1993; NEGP 1993). Discussions about people's views of school readiness are needed to develop a community-wide set of expectations regarding school readiness.

Communities, schools, or preschool programs can sponsor school readiness forums in which families, teachers, administrators, and community leaders discuss school readiness. Individual preschool programs can host meetings to discuss school readiness among preschool teachers and parents from their program along with kindergarten teachers in their neighborhood schools. Multiple conversations most likely will be needed to enable the group to reach a consensus about school readiness.

Joint professional development and kindergarten transition activities can be helpful in minimizing differences in expectations between preschool and kindergarten programs (Firlik 2003). Public schools and early care and education programs in the school district could cosponsor staff training for preschool and kindergarten teachers. Such experiences may help teachers from different systems develop more views in common on readiness. Preschool teachers visiting kindergarten classrooms gain a better understanding of the kindergarten experiences their students will encounter. And when kindergarten teachers visit preschool classrooms, they appreciate and understand the preschool experiences their students have had.

### What can I do to support appropriate practices regarding school readiness assessments?

Although the many challenges in ensuring that school readiness assessments are done appropriately require the efforts of many, every individual can make a difference. Here are some ways an individual can work to support the appropriate use of school readiness assessments.



## When kindergarten teachers visit preschool classrooms, they appreciate and understand the preschool experiences their students have had.

- **Be informed.** Reading about school readiness and participating in other professional development activities will help you develop expertise in this area.
- **Get involved.** Apply your expertise to the discussion of school readiness at the local, state, or national level. You can speak out to help ensure that school readiness assessment efforts benefit, not harm, young children. Start with your own program, making sure that you are using the appropriate instruments and procedures for your particular purpose of interest and that the program's assessment results are used to help children.
- **Build partnerships.** People have different perspectives about school readiness and school readiness assessments, which can lead to some heated discussions. Strengthening relationships with preschool teachers, administrators, families, and public school staff makes it easier to work together toward a common understanding of this controversial topic. If you work in an early care and education setting, reach out to kindergarten teachers to discuss your views of school readiness and assessment. If you are a kindergarten teacher, work with preschool teachers on school readiness issues.

### References

- AERA, APA, & NCME (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education) Joint Committee on Standards for Educational and Psychological Testing. 1999. *Standards for educational and psychological testing*. Washington, DC: AERA.
- Firlik, R. 2003. Early years summit: Preschool-kindergarten collaboration makes a difference. *Young Children* 58 (1): 73–78.



## ASSESSMENT

- Gilliam, W., & E. Zigler. 2001. A critical meta-analysis of all evaluations of state-funded preschool from 1977 to 1998: Implications for policy, service delivery and program evaluation. *Early Childhood Research Quarterly* 15: 551–73.
- Graue, M.E. 1993. *Ready for what? Constructing meanings of readiness for kindergarten*. Albany: State University of New York Press.
- Kagan, S.L., E. Moore, & S. Bredekamp, eds. 1995. *Reconsidering children's early development and learning: Toward common views and vocabulary*. Washington, DC: National Education Goals Panel. Online: [www.negp.gov/Reports/child-ea.htm](http://www.negp.gov/Reports/child-ea.htm)
- Lee, V.E., & D. Burkam. 2002. *Inequality at the starting gate: Social background differences in achievement as children begin school*. Washington, DC: Economic Policy Institute.
- Love, J.M., J.L. Aber, & J. Brooks-Gunn. 1994. *Strategies for assessing community progress toward achieving the first national educational goal*. Princeton, NJ: Mathematica Policy Research.
- Marshall, H. 2003. Research in Review. Opportunity deferred or opportunity taken? An updated look at delaying kindergarten entry. *Young Children* 58 (5): 84–93.
- Maxwell, K.L., D.M. Bryant, S.M. Ridley, & L. Keyes-Elstein. 2001. *North Carolina's kindergartners and schools: Summary report*. Chapel Hill: University of North Carolina, Frank Porter Graham Child Development Center. Online: [www.fpg.unc.edu/~SchoolReadiness/technical2000.pdf](http://www.fpg.unc.edu/~SchoolReadiness/technical2000.pdf).
- Meisels, S. 1999. Assessing readiness. In *The transition to kindergarten*, eds. R.C. Pianta & M.J. Cox, 39–66. Baltimore, MD: Brookes.
- NASBE (National Association of State Boards of Education). 1991. *Caring communities: Supporting young children and families*. Alexandria, VA: Author. Executive summary online: [www.nasbe.org/educational\\_issues/reports/sum\\_caring\\_com.pdf](http://www.nasbe.org/educational_issues/reports/sum_caring_com.pdf).
- NEGP (National Education Goals Panel). 1993. *The national education goals report. Volume one: The national report*. Washington, DC: U.S. Government Printing Office.
- NEGP (National Education Goals Panel). 1997. *Getting a good start in school*. Washington, DC: U.S. Government Printing Office. Online: [www.negp.gov/reports/good-sta.htm](http://www.negp.gov/reports/good-sta.htm).
- Niemeyer, J., & C. Scott-Little. 2001. *Assessing kindergarten children: A compendium of assessment instruments*. Tallahassee, FL: SERVE. Online: [www.serve.org/publications/rdakcc.pdf](http://www.serve.org/publications/rdakcc.pdf).
- North Carolina Ready for School Goal Team. 2000. *School readiness in North Carolina: Strategies for defining, measuring, and promoting success for all children*. Greensboro, NC: SERVE. Online: [www.fpg.unc.edu/~SchoolReadiness/SRFullReport.pdf](http://www.fpg.unc.edu/~SchoolReadiness/SRFullReport.pdf).
- Saluja, G., C. Scott-Little, & R.M. Clifford. 2000. Readiness for school: A survey of state policies and definitions. *Early Childhood Research and Practice* 2 (2). Online: <http://ecrp.uiuc.edu/v2n2/saluja.html>.
- Scott-Little, C., S.L. Kagan, & R.M. Clifford. 2003. *Assessing the state of state assessments: Perspectives on assessing young children*. Greensboro, NC: SERVE.
- Shepard, L., S.L. Kagan, & E. Wurtz. 1998. *Principles and recommendations for early childhood assessments*. Washington, DC: National Education Goals Panel. Online: [www.negp.gov/reports/prinrec.pdf](http://www.negp.gov/reports/prinrec.pdf).
- Shore, R. 1998. *Ready schools*. Washington, DC: National Education Goals Panel. Online: [www.negp.gov/reports/readysch.pdf](http://www.negp.gov/reports/readysch.pdf).
- Stipek, D. 2002. At what age should children enter kindergarten? A question for policy makers and parents. *Society for Research in Child Development Social Policy Report* 16 (2): 3–16. Online: <http://www.srpd.org/sprv16n2.pdf>.
- West, J., K. Denton, & E. Germino-Hausken. 2000. *America's kindergartners: Findings from the Early Childhood Longitudinal Study, Kindergarten Class of 1998–99, fall 1998*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Zill, N., & J. West. 2001. *Entering kindergarten: A portrait of American children when they begin school. Findings from the condition of education 2000*. NCES #2001-035. Washington, DC: U.S. Department of Education, National Center for Education Statistics. Online: <http://nces.ed.gov/pubs2001/2001035.pdf>.

---

Copyright © 2004 by the National Association for the Education of Young Children. See Permissions and Reprints online at [www.naeyc.org/resources/journal](http://www.naeyc.org/resources/journal).

---

**Early Childhood Center  
School Plan Overview 2014-2015**

**Purpose: To Prepare a Learning Environment that nurtures the whole child while building a partnership with families and the community**

**Performance Goals for 2013-2014  
Student Achievement Goals for 2014-2015**

*Data Source-Dial 3*

Measure: % students Scoring at or above the 50 <sup>th</sup> percentile in <b>4K</b>	Dial 3 Baseline	2012-13	2013/-14	2014-15
Concepts	68%	79%	82%--82%	85%*
Language	71%	73%	77%--80%	84%*
Motor	79%	86%	87%--91%	93%*

*Data Source-Dominie (HRSW)*

Measure: % students Scoring average or above in <b>5K</b>	Dominie Baseline	2012/13	2013/14	2014-15
	80%	86%	87%--90%	90%*

**Implemented Strategies to meet Student Achievement Goals:**

**Curriculum:**

- a) *Provide high quality Professional Development that supports our goal: **To increase student learning by gaining a deeper understanding of self-regulation/executive function and how to support and accelerate language development.***
- b) *Continue to participate in TransformSC as we seek to prepare our environment for the whole child with the goal of preparing them for learning at ever higher levels.*
- c) *Increase parent and community understanding of 21<sup>st</sup> Century Skills*
- d) *Increase through scholarly professional study our understanding of:*
  - *How to support self-regulation that leads to higher executive functioning and the role of 21<sup>st</sup> Century Skills in the lives of our students.*
  - *Oral language development and how to maximize opportunities for growth in our students through the use of Oral Language Development manual and other resources.*
  - *The reciprocity of oral language, writing, and reading.*

**Continuing Strategies:**

- *Provide preschool to all enrolled students*
- *Offer school choice for 5K students between the Montessori Method and Creative Curriculum.*
- *Continue to offer a balanced literacy approach and follow Year at a Glance and Unit Plans that are aligned to with standards to ensure that all students have access to the same learning opportunities in ELA, Math, Science, Science, Social Studies, Movement, and Music.*
- *Refine and provide interventions through RTI process in classroom and with interventionists*
- *Provide a Behavior Interventionist that supports students' growth in behaviors that enhance and encourage academic and social/emotional growth.*
- *Mentoring Program for students need extra support*
- *Enhance our outdoor learning opportunities, now to include recycling*

**Assessments:**

- a) *Dial 3-developmental assessment in 3 areas: Language, Concepts, Motor Skills (3K-4K)*
- b) *Fountas and Pinnell-formative literacy assessment to scaffold learning (5K)*
- c) *Dominie Hearing and Recording Sounds in Words-phonemic awareness*
- d) *OLAI2-measure of oral language*
- e) *Circle Language and Literacy Assessment for 4K and 5K*

Lexington 4 Early Childhood Center  
Annual School Summary Report to Parents 2013-14  
Goals for 2014-2015

Purpose

**To prepare a learning environment that nurtures the whole child while building a partnership with families and the community.**

**The ECC: A TransformSC School**

The ECC was chosen as an innovative pilot site for TransformSC, an initiative of New Carolina, focusing on early childhood readiness for first grade. This organization of business leaders is partnering with educators in selected schools across South Carolina who are striving to ensure that students transition successfully from preschool, elementary, middle, and high school to graduate and be college, career and citizenship ready. The faculty and staff of the ECC are proud to represent the district in this initiative.

PALS

Promoting: Achievement, Learning, and Success

- Offered once per month as a way to build community with families and school, grow learning of curriculum and parenting, and provide quality time for families to spend with their children. At each session parents are given a book to add to their home library.
- Community Outreach and PALS was offered at various times during the school year.

Montessori Curriculum

- 24 teachers are trained or are currently being trained in the Montessori Method.
- Montessori is a hands-on approach to individualized learning in a prepared environment where the teacher facilitates and scaffolds individual needs.
- Students in 5K have the choice to stay with their Montessori teacher for 3 three years, thus providing continuity in learning and the opportunity to forge strong relationships.\_

Creative Curriculum

5K students are given the option to be in a kindergarten class utilizing the Creative Curriculum method. Students work together in small and large groups and in centers.

Literacy Coach

Students and teachers interact with literacy coach in all areas relating to English Language Arts. This coach shares and models 'best practices' with teachers and students. Both curriculum choices have a strong focus on literacy.

School Improvement Council

This group helps determine the strengths and weaknesses for the ECC and develops strategies to meet new challenges. As an important link to the community, this committee strives to connect families with community services through a Community Outreach Fair, speakers that offer parenting tips, and opportunities for children and parents to learn together.

Professional Learning Communities

Faculty and Staff at the ECC meet in study groups and collaborative planning groups in our quest to increase our knowledge of how young children learn. We take a scholarly approach to our learning in order to increase student achievement. Our focus this school year has been increasing our knowledge of oral language development.

**School Priorities for 2014-2015**

- Continue to strengthen Home-School communication through additional Parent Survey, newsletters, school website, phone calls, and use of the internet, and PALS.
- Continue to grow our mentoring program for our students needing extra support.
- Continue to enhance our outdoor opportunities (gardens, trees, composting, and exercise).
- Increase through scholarly professional study our understanding of oral language development and how to maximize opportunities for growth in our students.
- Continue to participate in TransformSC as we seek to prepare our environment for the whole child with the goal of preparing them for learning at ever higher levels.

School Improvement Council

Emily Allen, Katherine Bessinger, Allison Brisco, Donna Brown, Crystal Dinkins, Sandy Drawdy, Bradley Frick, Taylor Jeffcoat, Gina Peterson, Olivia Speares, Holly Miller, Lillian Atkins

# EARLY CHILDHOOD ASSESSMENT

## WHY, WHAT, AND HOW

Committee on Developmental Outcomes and  
Assessments for Young Children

Catherine E. Snow and Susan B. Van Hemel, *Editors*

Board on Children, Youth, and Families

Board on Testing and Assessment

Division of Behavioral and Social Sciences and Education

NATIONAL RESEARCH COUNCIL  
*OF THE NATIONAL ACADEMIES*

THE NATIONAL ACADEMIES PRESS  
Washington, D.C.  
**[www.nap.edu](http://www.nap.edu)**

## SOCIAL AND EMOTIONAL DEVELOPMENT

### Defining the Domain

Research on young children's social and emotional development has focused on three broad issues: (1) social competence, which reflects the degree of effectiveness the child has in social interactions with others (Fabes, Gaertner, and Popp, 2006); (2) self-regulation, which involves the modulating thought, affect, and behavior by means of deliberate as well as automated responses (Rothbart, Posner, and Kieras, 2006); and (3) maladjustment, consisting of clusters of symptoms that emerge over time, in more than one context, in more than one relationship, and that may impede the child's ability to adapt and function in the family and the peer group (Campbell, 2006). Although there is general agreement on these three dimensions, different researchers parse the field somewhat differently, with the result that the various measures that have been developed reflect different emphases in defining the domain.

### Importance in Practice and Policy

Although there is a lack of agreement as to how this domain should be subdivided, there is substantial agreement on the importance of the social and emotional development of young children to those working directly with them before and after the transition to formal schooling. In addition, a number of state consensus documents defining what young children should know and be able to do include a strong focus on their social and emotional skills, reflecting a recognition of the importance of this domain among policy makers as well.

Many states have addressed social and emotional development in their early learning guidelines. In reviews of state early learning guidelines, Scott-Little and colleagues conclude that guidelines for preschool-age children focus more on language and cognition than on physical and social and emotional development, whereas guidelines for infants and toddlers are more balanced across domains, with the guidelines for infants focusing especially on social and emotional development (Scott-Little,

Kagan, and Frelow, 2006). California's "Preschool Learning Foundations in Social and Emotional Development for Ages 3 and 4" (<http://www.cde.ca.gov/re/pn/fd/documents/preschoollf.pdf>) is an excellent example of the development of a consensus document regarding expectations for children's social and emotional skills in the preschool years. Relying heavily on the research on young children's social and emotional development, the document "describes benchmarks for the behavior of 3- and 4-year-olds in central domains of social and emotional development. . . . In focusing on social and emotional foundations of school readiness, a central assumption—well supported by developmental and educational research—is that school readiness consists of social-emotional competencies as well as other cognitive competencies and approaches to learning required for school success" (p. 1). The standards for social and emotional development in California's early learning standards identify the dimensions of self (self-awareness and self-regulation, social and emotional understanding, empathy and caring, and initiative in learning), social interaction (including interactions with familiar adults, interaction with peers, group participation, and cooperation and responsibility) and relationships (attachments to parents, close relationships with teachers and caregivers, and friendships). The perspective that social and emotional development and early learning are closely linked is reflected in the inclusion of "Initiative in Learning" as a component of social and emotional development, involving the child's interest in activities in the classroom, enjoyment of learning and exploring, and confidence in his or her ability to make new discoveries.

### **Importance for Later Development**

The social and emotional demands of formal schooling on young children differ from those of early childhood settings, and children's skills in this area at school entry are predictors of how well they make the adjustment to the new setting and progress academically (see Bierman and Erath, 2006; Campbell, 2006; Ladd, Herald, and Kochel, 2006; Mashburn and Pianta, 2006; Raver, 2002; Thompson and Raikes, 2007; Vandell, Nenide, and Van Winkle, 2006). Early childhood care and educational

settings usually involve a choice of activities for portions of the day, many activities involve small rather than large groups, and children tend to have access to adult caregivers and teachers not only for guidance on activities but also when they are upset or experiencing difficulty with peers. Studies of kindergarten classrooms indicate a shift toward large group activities, which are structured, directed by teachers, and involve less choice. Lower adult-child ratios and more structured activities result in more limited access to adults. Not only do children need to learn to navigate interactions in larger groups and in tasks with more structure, but they also need to form new relationships with peers and teachers.

The domains of socioemotional development and executive function—the cognitive processes used in response to novel stimuli—are of central importance in early childhood, although a final decision about exactly which subskills in this area are most important to measure and most predictive would be somewhat speculative at this point. Nonetheless, providing a full picture of a young child's development or of the impact of a care and educational setting requires attending at least to the measurement of social competence, attention regulation, and behavior problems. Studies in these areas illustrate evidence of linkages between early social and emotional development and behavioral adjustment to school as well as academic performance.

*Social competence:* A series of studies by Ladd and colleagues provides evidence for how different facets of social engagement in the kindergarten classroom combine to predict participation in the classroom and achievement. In one, the researchers concluded that findings were consistent with the hypothesis that “children's classroom participation, particularly the ability to behave in a cooperative/independent manner in the kindergarten milieu, is a powerful precursor of early achievement” (Ladd, Birch, and Buhs, 1999).

The connection between a child's socioemotional characteristics and teacher-child relationships is well established. Teachers report more conflicts with children who exhibit antisocial behaviors, such as interpersonal aggression or tantrums (e.g., Birch and Ladd, 1998; Hamre and Pianta, 2001; Howes, Phillipsen, and Peisner-Feinberg, 2000; Ladd and Burgess, 2001; Ladd, Birch, and

Buhs, 1999; Pianta and Steinberg, 1992; Silver et al., 2005). Closeness, conflict, and dependence have been identified as three features of teacher-child relationships that are important to children's development (Mashburn and Pianta, 2006).

While relationships with teachers as well as peers during the transition to formal schooling appear to be central to positive engagement in school and thereby achievement, positive teacher and peer relations in turn appear to rest at least in part on children's knowledge of emotions and their ability to regulate the expression of their own emotions (Bierman et al., under review; Denham, 2006; Vandell, Nenide, and Van Winkle, 2006).

*Self-regulation:* Recent research on self-regulation acknowledges that some aspects of it involve emotion (e.g., modulation in the expression of negative emotions) and behavior (e.g., inhibition of aggressive impulses), and other aspects focus more on attentional and cognitive skills (e.g., the ability to maintain a set of instructions actively in working memory over time and despite distractions, taking the perspective of another, switching attention as task demands change) (Diamond et al., 2007; McClelland et al., 2007; Raver, 2002, 2004).

Socioemotional development is of importance during the early childhood period because it relates to children's capacities to form relationships, both trusting relationships with adults and friendships with peers, and these relationships in turn seem to be related to the speed of learning in early care and educational settings. These markers of positive relations with peers and teachers have implications for children's engagement and participation in the classroom. Children learn to regulate the expression of emotion in a variety of ways, including turning to others with whom they have secure relationships for comfort and support, using external cues, and, increasingly with age, managing their own states of arousal (Thompson and Lagattuta, 2006).

*Behavior problems:* Serious behavior problems are apparent early in some children. Research summarized by Raver (2002) indicates that children with early and serious problems of aggression who are rejected by peers are at elevated risk in terms of poor academic achievement, grade retention, dropping out of school, and eventually delinquency. Raver notes that children who are disruptive tend to get less instruction and positive feedback from

teachers, to spend less time on task, to engage less with peers in learning tasks, and to show lower levels of school engagement overall, as reflected in part by lower attendance.

With respect to evidence relating to early social and emotional competencies, two notes of caution are needed. First, social and emotional competencies are worthy developmental goals in their own right, independent of their relationship to academic outcomes. Second, research in this area is not all in accord with the perspective that early social and emotional development predicts more positive academic achievement.

We note that, in a recent study, Duncan and colleagues (2007) carried out coordinated analyses of six major data sets looking at early predictors of later academic achievement. They found that early measures of achievement were strong predictors of later academic achievement, that measures of attention were moderately strong predictors of later achievement, but that measures of early social and emotional development, gleaned from parent and teacher reports, showed no or almost no predictive relationship to later achievement. The findings of this important study clearly differ from those of the reviews and findings summarized earlier. However, as the authors of this article themselves note, “our analysis is focused on behavior during the years just before and at the point of school entry. If some types of socioemotional skills are well established before the preschool years, and unchanging during these years, then we will not be able to detect their effects” (p. 1442). A further issue with this set of analyses is that the extensive set of control variables in the analyses includes many of the documented predictors of early social and emotional development, such as maternal education, family structure, family income, and, in some of the data sets, also parenting and home environment as well as participation in early care and education. This extensive set of controls may have diminished the capacity to detect relationships between early social and emotional development and later achievement. Finally, there was differential attrition in a number of the data sets included in the analyses, with greater attrition among families at greater risk. Selective attrition also works against detecting patterns of relationship between social and emotional development and academic achievement.

In summary, a number of recent reviews summarize evidence

confirming the relation of early social and emotional competencies, self-regulation, and absence of serious behavior problems to early participation in learning activities and to academic achievement. While it is important to note that social and emotional development predicts later academic outcomes, at the same time we insist that children's social and emotional well-being and competencies are worthy developmental goals in their own right, independent of their relationship to academic outcomes.

### **Evidence of Malleability**

According to a review by Raver (2002), there is substantial evidence from experimental evaluations that it is possible to improve young children's social and emotional development at the point of school entry or earlier, helping them to develop and stay on a positive course in their relationships with teachers and peers and to engage positively in learning activities. While the evidence summarized points to program effects across all the levels of intensity and the setting of the interventions considered (in the classroom, with parents, or both), findings are stronger when interventions engage parents as well as teachers and are more intensive. More recent reviews contribute to understanding the complexity of this domain (Bierman and Erath, 2006; Fabes, Gaertner, and Popp, 2006).

Several recent developments in intervention research on young children's social and emotional development are noteworthy. First, very recent work has focused explicitly on interventions targeting children's self-regulation skills. In recent work by Diamond and colleagues (Diamond et al., 2007), the Tools of the Mind curriculum, which embeds direct instruction in strengthening executive function in play activities and social interactions, was experimentally evaluated in prekindergarten programs in low-income neighborhoods. This intervention takes a Vygotskian approach—that is, it encourages extended dramatic play, teaches children to use self-regulatory private speech, and provides external stimuli to support inhibition. Results showed significant improvements in direct assessments of children's executive function. By the end of the school year, children in classrooms

implementing Tools of the Mind did not need help staying on task or redirecting inappropriate behavior. This study provides important evidence that aspects of self-regulation are malleable.

### Measurement Issues

An ongoing challenge in the research on social and emotional development of young children is to forge agreement about specific constructs, measures, and the mapping of constructs to measures (Fabes, Gaertner, and Popp, 2006; Raver, 2002). The internal complexity of the domain is reflected in the fact that different measures parse it differently. The lack of agreement impedes the capacity to look across studies at accumulating patterns of findings (Zaslow et al., 2006).

Another challenge is that some see measures of social and emotional development as reflecting in part the early childhood environment and the teacher-child relationship, rather than as pure measures of the child. For example, a teacher who requires 3-year-olds in an early childhood classroom to sit still for long periods to do seat work is likely to assess many children as inattentive or disruptive (Thompson and Raikes, 2007). Her rating of a child as having behavior problems may actually be a reflection of her inappropriate expectations, rather than a child's enduring behavior problem.

Another measurement challenge is the heavy reliance in this domain on teacher and parent reports. In development are direct assessments of children's behavioral self-regulation (Emotion Matters II Direct assessments developed by Raver and modeled after work by Kochanska and colleagues); of the executive function aspects of self-regulation (the Head to Toe Task described by McClelland and colleagues, 2007); and of the Dots Task from the Directional Stroop Battery and the Flanker Task described by Diamond and colleagues (2007). Further work with these measures may generate important evidence about their reliability and validity, as well as their sensitivity to intervention approaches and their relation to teacher and parent reports and direct observations.

## Testing All Children

Much developmental research has assumed universality of many measures tapping socioemotional processes in child development (Phinney and Landin, 1998). More recently, investigators have begun to challenge this assumption by testing whether measures show a similar or different factor structure and different patterns of predictive validity across groups of children who vary by race, ethnicity, and culture (Knight and Hill, 1998; Mendez, Fantuzzo, and Cicchetti, 2002; Phinney and Landin, 1998; Raver, Gershoff, and Aber, 2007). Measures and constructs should be reviewed carefully for the presence or absence of consistent psychometric properties across groups of black, Hispanic, and European American children. More often than not, measurement equivalence for Asian and Pacific Islander children, American Indian children, and biracial children has been all but ignored (see Chapter 8 for more on assessing special populations).

## Available Measures

Existing measures of socioemotional development address two large groups of constructs: socioemotional functioning and self-regulation. Socioemotional functioning, in turn, can be divided into measures of positive functioning (prosocial behavior, relations with peers, attachment to caregiver, acceptance of authority) and problematic functioning (aggression, resisting authority, loneliness, depression). Self-regulation measures typically tap such domains as delayed gratification, sustained attention, behavioral persistence, and problem-solving skills—measures that may overlap with those classified under “approaches to learning” by some researchers.

A relatively well-articulated inventory of measures that can be used to capture constructs in the socioemotional domain now exists, although approximately half of those measures are newly developed and thus are not yet endowed with high levels of certainty about the full spectrum of psychometric properties. That said, the field has developed enough experience using these measures in experimental and nonexperimental research with low-income preschool-age children that solid estimates of their

reliability, predictive validity, and distributional properties exist, as does information about the costs of collecting these assessments and their relative costs and benefits. Appendix Table 5-2 lists many of these measures.

## APPROACHES TO LEARNING

### Defining the Domain

The developmental domain of approaches to learning includes such constructs as showing initiative and curiosity, engagement and persistence, and reasoning and problem-solving skills (U.S. Department of Health and Human Services, Administration for Children and Families, 2003b). These skills are viewed separable from both socioemotional adjustment and overall cognitive skills (Fantuzzo et al., 2007), although it will be clear from the preceding section that the distinction from socioemotional skills is sometimes hard to draw. Approaches to learning are defined as “distinct, observable behaviors that indicate ways children become engaged in classroom interactions and learning activities,” according to a recent review (Fantuzzo et al., 2007). Such behaviors are viewed as an essential component of school readiness (National Education Goals Panel, 1997; U.S. Department of Health and Human Services, Administration for Children and Families, 2003b), although they are less understood or researched than other components (Fantuzzo et al., 2007).

### Evidence of Consensus

There is general consensus that children need to be able to engage in classroom activities in order to learn in a classroom setting. The National Education Goals Panel (1997) underscored the importance of such learning behaviors. Subsequently, Head Start included indicators regarding approaches to learning in its Child Outcomes Framework (U.S. Department of Health and Human Services, Administration for Children and Families, 2003a). And 16 states have included indicators in this area in their early learning guidelines. Furthermore, elementary school teachers in the early grades believe that these behaviors are important (Foulks

and Morrow, 1989; Lewit and Baker, 1995), claiming that many children, especially from low-income homes, enter kindergarten lacking them (Rimm-Kaufman, Pianta, and Cox, 2000).

### **Evidence of Continuity and Associations with Important Outcomes**

Aspects of infant behavior, such as giving attention and the ability to sustain attention, appear to show continuity over time and relate to educational outcomes. Learning behaviors, such as persistence and attention in the classroom, have been shown to be related to specific academic skills in early childhood, such as early mathematics and literacy skills, across a number of studies (Fantuzzo, Perry, and McDermott, 2004; Green and Francis, 1988; McDermott, 1984; McWayne, Fantuzzo, and McDermott, 2004), even when measures of emotional adjustment were also considered. Approaches to learning as rated by the kindergarten teacher at entry to school predicted growth in mathematics from kindergarten to third grade in a national sample, the Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K) (DiPerna, Lei, and Reid, 2007).

Several studies have found significant associations between young children's learning-related behavior and their academic performance. Normandeau and Guay (1998) reported that first graders' "cognitive self-control" (the ability to plan, evaluate, and regulate problem-solving activities; attend to tasks; persist; resist distraction) was associated with their academic achievement, net of their intellectual skills assessed in kindergarten. Howse et al. (2003) found that teachers' ratings of kindergarteners' (but not second graders') motivation (e.g., "is a self-starter," "likes to do challenging work") predicted concurrent reading achievement, with receptive vocabulary (but not previous reading achievement) held constant.

In a longitudinal study of children from kindergarten through second grade by McClelland, Morrison, and Holmes (2000), teachers' ratings of kindergarten children's work-related skills (compliance with work instructions, memory for instructions, completion of games and activities) were significantly associated

with children's academic performance in kindergarten, with IQ controlled. Work-related skills in kindergarten also predicted academic performance at the end of second grade, with kindergarten academic scores controlled. In a more recent study, McClelland, Acock, and Morrison (2006) found that learning-related behavior in kindergarten predicted reading and mathematics scores in sixth grade and growth in reading and mathematics between kindergarten and second grade, but not between second and sixth grades. They controlled for IQ, age, ethnicity, and maternal education. The measure they used was very broad, including social interaction and participation in play activities as well as task behavior (such as working independently and organizing work products). In one of the few other longitudinal studies, Green and Francis (1988) found that learning style (e.g., settles down well at an activity that needs concentration, willing to try on his or her own, copes with something new without getting nervous or upset) in 5- and 6-year-olds predicted reading scores 4 years later, when the children were 9 and 10 years old. The study did not, however, hold constant previous reading scores.

### **Evidence from Interventions and Malleability**

A number of observational studies have examined the extent to which approaches to learning in the fall predicted emotion regulation and peer play (Fantuzzo et al., 2005), mathematics and literacy skills at the end of the Head Start year (Fantuzzo, Perry, and McDermott, 2004; Fantuzzo et al., 2007), and gains in mathematical skills during the first 4 years of elementary school (DiPerna, Lei, and Reid, 2007).

Efforts to promote children's approaches to learning are inherent in many of the components of center-based education. Specific tests of their effectiveness, however, have been few. As noted above, a recently published experimental study (Diamond et al., 2007) showed effects for the Vygotskian play-based preschool curriculum called Tools of the Mind (Bodrova and Leong, 2001) on aspects of children's executive functioning related both to socioemotional development and to approaches to learning, such as maintaining attention and controlling behavior.

### Testing All Children

Many of the studies that have specifically focused on approaches to learning during early childhood appear to have been conducted in Head Start classrooms, which serve low-income children, including many black children and English language learners.

### Available Measures

Appendix Table 5-3 lists many measures of approaches to learning. The most widely used measures are questionnaires completed by the teacher. The Preschool Learning Behavior Scale (McDermott et al., 2000) asks the teacher about observable learning behaviors of children ages 3- to 5½-year-olds in the classroom context. The Teacher Rating Scale, an adaptation of the Social Skills Rating Scale for the ECLS-K study, includes a scale measuring approaches to learning for 5-year-olds, including items asking about engagement in learning, organization, creativity, and adaptability. These measures show good internal consistency and some content-specific validity, in that they predict academic outcomes even when other teacher ratings of emotional adjustment are also considered. Other measures include observations of behaviors during testing conditions appropriate for children as young as 3 months through entry to kindergarten and specific tasks measuring attention or inhibitory control (see the section on cognitive skills), as well as measures of motivation.

## LANGUAGE AND LITERACY

### Defining the Domain

Development of language and emergent literacy has long been targeted for research, with the result that many assessment procedures have been developed not only for use in research, but also for clinical and educational purposes. The increasing emphasis on school readiness as a target of early childhood programs has motivated the development of formative assessments for various domains of emergent literacy. The domain of language and lit-



# Good Start Grow Smart

South Carolina Early Learning Standards  
for 3, 4, & 5 Year-Old Children

# Approaches To Learning

## Introduction To Approaches To Learning

The way a child approaches learning will influence both his/her attitude toward learning and success in all educational endeavors. This domain recognizes that children approach learning in different ways, emphasizes the development of a positive attitude and desire to acquire new skills and knowledge. It is inclusive of the child's curiosity about the world and openness to different experiences, tasks, and challenges. Because of these affective factors, it is the domain which contains the most individual variation.

The preschool years are also a time of considerable growth in cognitive skills. As children's attention spans lengthen throughout this period, they begin to build the skills of initiating, engaging in, and completing self-chosen tasks. Children also make considerable progress in the skills of remembering and applying prior learning to new situations, reasoning, problem-solving, and predicting possible results of their actions.

Early childhood theorists and practitioners agree that factors beyond the classroom greatly affect the child's ability to learn. If the child is fearful, angry, hungry, anxious, sad, depressed, in poor health, lonely, or feeling incompetent, learning will not occur -- at least not to the level of his/her potential. It is the teacher's responsibility to work with parents to ensure the nurture of their child and to prepare a developmentally appropriate environment where children can use their imaginations, make choices, and direct much of their own learning. Where this kind of support and challenge is available, all children, regardless of innate abilities or the presence of disabilities, can learn and be successful.



# Approaches To Learning

## Approaches to Learning – Children with different needs and abilities

Many kinds of learning take place in natural settings—classroom, home, community. Children watch and imitate—model their behavior from others. ALL young children are eager to learn and will try to do things they see their friends doing.

To facilitate learning in children with different abilities, teachers can provide detail feedback and descriptive praise to the child: “Tommy, you are climbing the ladder by yourself, carefully holding each rung and using one hand and one foot at a time.” This type of praise serves multiple purposes:

- Tommy is encouraged to appreciate his own skills.
- Other children see Tommy and try to model him and friends recognize his skill.
- Using words, “carefully, one hand and one foot,” tell other children with different needs what they can try.

If children do not actively participate in imitation, i.e., fitting cups together, working a puzzle, creating a birthday card, making an animal with clay, and saying, “The bright colored birds must be a male,” specific demonstration, practice, repetition, and training must be considered by the teacher for a child who may not know how to imitate. Consider:

- demonstrating the skill
- encouraging the child to “help” you
- physically guiding the child, if necessary



# Approaches To Learning

- allowing much practice time
- reinforcing the child's efforts

Play is the foundation for learning. Teachers plan a curriculum that uses play as the medium for learning. Play for ALL children is generally inclusive in three (3) areas of learning:

1. About themselves – self-image, competent, independent, and good feelings about themselves as a learner.
2. About the world around them – communication, social skills, observation, initiative, choice, and task completion. They respond to parents and community.
3. About problem-solving – observation, investigation, prediction, changes, compromise, and solve problems socially.

A good environment for children with different needs and abilities reflects the teacher's knowledge of inclusion for all children. Assistive technology supports, materials (various sizes, weights, textures, colors), accessible puzzles, chairs, toilet, handles, space, and playground may be needed to enhance the learning environment.

Competence in self-care is a major goal in approaches to learning. The more proficient a child is in caring for his personal needs, the less support he will need to be successful in an inclusive setting. Self-care skills are learned behaviors and can be integrated with all areas of the curriculum—name, color, texture, perceptual motor, language.

Some different abilities are multiple and affect several areas of development. Teachers and parents must be diligent in observing for signs of other needs. The teacher's role is to provide current information and resources and be available to consult with the team who is working in the best interests of the child. The child care professional is not an expert in diagnosing, but can be very effective in helping parents secure referrals and treatments.

Positive reinforcement, interesting and appropriate materials, and knowledgeable teacher support are the basis for developing genuine interest and positive reactions from each child with different needs and abilities.



# Approaches To Learning

## SOUTH CAROLINA KINDERGARTEN ACADEMIC STANDARDS - APPROACHES TO LEARNING

- AL 1.** Children engage in play as a means to develop their individual approaches to learning.
- AL 2.** Children show curiosity, eagerness and satisfaction as a learner.
- AL 3.** Children demonstrate initiative, engagement, and persistence in learning.
- AL 4.** Children demonstrate an increasing ability to envision a goal and to accomplish it.
- AL 5.** Children extend their learning through the use of memory, reasoning, and problem-solving skills.



# Social and Emotional Development

## Introduction to Social and Emotional Development

Social and Emotional development occurs throughout virtually every aspect of a child's day. As they play, young children learn about and develop an appreciation for their own abilities and accomplishments. They also learn how to interact positively with other people, form and value friendships, and express both positive and negative feelings appropriately. Children's self-confidence and trust in the world around them expand as they experience dependable, consistent routines, practices, and expectations in the classroom. As they begin to develop a sense of belonging to the "classroom community," they show more responsibility for following classroom rules and for caring for learning materials. The child's placement in such a "ready classroom" is one of the best predictors of his/her readiness for future academic learning in the primary years.

For some children, prekindergarten or kindergarten may be the child's first experience in a social setting outside the family. Because young children have learned behaviors, language, and values through their family's lifestyle and modeling, they will bring these practices to school. Teachers must show respect for the child's family and culture while helping him/her to learn those skills and attitudes which have been demonstrated to underlie school success. In classrooms where the teacher greets each child warmly upon arrival, soothes the child whose mother left home without hugging him/her, quietly provides a pencil for the child who "forgot", and values every child as part of a "community of learners," the attainment of social and emotional standards will be higher than in more academically focused classrooms or in those classrooms where there is little organization or positive expectation for the child's success. Either extreme is detrimental to children's understanding and future growth, and prevents the strong social and emotional development which forms the foundation of all other learning and experiences in life.



# Social and Emotional Development

## Social/Emotional Development – Children with different needs and abilities

It is critically important for children who may be identified by the amount and intensity of their reaction when compared to children of the same age, to learning how to act, interact, and react within the world around them. Teachers who work with children who may be seen as having a social/emotional disorder can help them appreciate their own uniqueness by having a positive acceptance of every child.

Social/emotional concerns:

- appear over a period of time
- occur often
- are intense
- exhibit behaviors inappropriate to the setting

To increase understanding about the interdependence of the world around us:

- call each child by their name or teach the child's name via sign language
- encourage telling about, drawing, or painting themselves and their family
- ask the child to tell you about their favorite toy or draw it
- get children outdoors to touch and experience nature/neighborhood
- provide a variety of tools and media for children to make themselves, family, favorite toy, their house, an animal, etc.

Children demonstrate a variety of social-emotional behaviors that may include:

- extreme anxiety on separation from parent
- uncontrolled crying, throwing objects, hitting, OR very passive—avoid eye contact
- range of emotional outbursts—expressive, uncontrolled, withdrawn
- difficulty making friends with peers
- become dependent on one caregiver
- lack of experience may appear as a developmental delay
- remain in one area of the classroom or reject toys
- react strongly to routines

Teachers should provide an inclusive environment, which focuses on daily life realities of teaching children with different needs and different abilities. The teacher plans the curriculum to include the individual differences represented by all children in her class and society in general.



# Social and Emotional Development

## SOUTH CAROLINA KINDERGARTEN ACADEMIC STANDARDS - SOCIAL AND EMOTIONAL DEVELOPMENT

**Social and Emotional Development Goal:** Children use play as a vehicle to build relationships and to develop an appreciation for their own abilities and accomplishments. They learn how to interact positively with other people, form and value friendships, and express both positive and negative feelings appropriately.

**SE1.** Children will demonstrate a positive sense of self.

**SE2.** Children will demonstrate self control, respect and responsibility.

**SE3.** Children express feelings and show concern for others.

**SE4.** Children will form healthy social relationships.



## Delaying Gratification

More than 40 years ago, Walter Mischel, PhD, a psychologist now at Columbia University, explored self-control in children with a simple but effective test. His experiments using the “marshmallow test,” as it came to be known, laid the groundwork for the modern study of self-control.

Mischel and his colleagues presented a preschooler with a plate of treats such as marshmallows. The child was then told that the researcher had to leave the room for a few minutes, but not before giving the child a simple choice: If the child waited until the researcher returned, she could have two marshmallows. If the child simply couldn’t wait, she could ring a bell and the researcher would come back immediately, but she would only be allowed one marshmallow.

In children, as well as adults, willpower can be thought of as a basic ability to delay gratification. Preschoolers with good self-control sacrifice the immediate pleasure of a chewy marshmallow in order to indulge in two marshmallows at some later point. Ex-smokers forfeit the enjoyment of a cigarette in order to experience good health and avoid an increased risk of lung cancer in the future. Shoppers resist splurging at the mall so they can save for a comfortable retirement. And so on.

The marshmallow experiments eventually led Mischel and his colleagues to develop a framework to explain the human ability to delay gratification. He proposed what he calls a “hot-and-cool” system to explain why willpower succeeds or fails.

The cool system is cognitive in nature. It’s essentially a thinking system, incorporating knowledge about sensations, feelings, actions and goals — reminding yourself, for instance, why you shouldn’t eat the marshmallow. While the cool system is reflective, the hot system is impulsive and emotional. The hot system is responsible for quick, reflexive responses to certain triggers — such as popping the marshmallow into your mouth without considering the long-term implications. If this framework were a cartoon, the cool system would be the angel on your shoulder and the hot system, the devil.

When willpower fails, exposure to a “hot” stimulus essentially overrides the cool system, leading to impulsive actions. Some people, it seems, may be more or

---

*When willpower fails, exposure to a “hot” stimulus essentially overrides the cool system, leading to impulsive actions.*

---





*When presented with tempting stimuli, individuals with low self-control showed brain patterns that differed from those with high self-control.*

### FURTHER READING

Casey, B. J., et al. (2011). Behavioral and neural correlates of delay of gratification 40 years later. *Proceedings of the National Academy of Sciences*, 108(36), 14998–15003.

Metcalf, J., & Mischel, W. (1999). A hot/cool system analysis of delay of gratification: Dynamics of willpower. *Psychological Review*, 106(1), 3–19.

Mischel, W., et al. (1989). Delay of gratification in children. *Science*, 244(4907), 933–938.

Mischel, W., & Ayduk, O. (2004). Willpower in a cognitive-affective processing system: The dynamics of delay of gratification. In R. F. Baumeister & K. D. Vohs (Eds.), *Handbook of Self-Regulation: Research, Theory, and Applications*. New York, NY: Guilford Press.

Nordgren, L., & Chou, E. (2011). The push and pull of temptation: The bidirectional influence of temptation on self-control. *Psychological Science*, 22(11), 1386–1390.

less susceptible to hot triggers. And that susceptibility to emotional responses may influence their behavior throughout life, as Mischel discovered when he revisited his marshmallow-test subjects as adolescents. He found that teenagers who had waited longer for the marshmallows as preschoolers were more likely to score higher on the SAT, and their parents were more likely to rate them as having a greater ability to plan, handle stress, respond to reason, exhibit self-control in frustrating situations and concentrate without becoming distracted.

As it turns out, the marshmallow study didn't end there. Recently, B.J. Casey, PhD, of Weill Cornell Medical College, along with Mischel, Yuichi Shoda, PhD, of the University of Washington, and other colleagues tracked down 59 subjects, now in their 40s, who had participated in the marshmallow experiments as children. The researchers tested the subjects' willpower strength with a laboratory task known to demonstrate self-control in adults.

Amazingly, the subjects' willpower differences had largely held up over four decades. In general, children who were less successful at resisting the marshmallow all those years ago performed more poorly on the self-control task as adults. An individual's sensitivity to so-called hot stimuli, it seems, may persist throughout his or her lifetime.

Additionally, Casey and colleagues examined brain activity in some subjects using functional magnetic resonance imaging. When presented with tempting stimuli, individuals with low self-control showed brain patterns that differed from those with high self-control. The researchers found that the prefrontal cortex (a region that controls executive functions, such as making choices) was more active in subjects with higher self-control. And the ventral striatum (a region thought to process desires and rewards) showed boosted activity in those with lower self-control.

Research has yet to fully explain why some people are more sensitive to emotional triggers and temptations, and whether these patterns might be corrected. However, the recent findings offer an intriguing neurobiological basis for the push and pull of temptation.

# Profile of the South Carolina Graduate



## World Class Knowledge

- Rigorous standards in language arts and math for career and college readiness
- Multiple languages, science, technology, engineering, mathematics (STEM), arts and social sciences

## World Class Skills

- Creativity and innovation
- Critical thinking and problem solving
- Collaboration and teamwork
- Communication, information, media and technology
- Knowing how to learn

## Life and Career Characteristics

- Integrity
- Self-direction
- Global perspective
- Perseverance
- Work ethic
- Interpersonal skills



March 2005

# Preschool Policy Brief

National Institute for  
Early Education Research

Contact Us:  
120 Albany Street  
Suite 500  
New Brunswick, NJ 08901

Tel 732 932-4350  
Fax 732 932-4360

[www.nieer.org](http://www.nieer.org)

## Promoting Children's Social and Emotional Development Through Preschool Education

by Judi Boyd, W. Steven Barnett, Elena Bodrova,  
Deborah J. Leong, and Deanna Gomby

Children need a combination of intellectual skills, motivational qualities, and socioemotional skills to succeed in school.<sup>1</sup> They must be able to understand the feelings of others, control their own feelings and behaviors, and get along with their peers and teachers. Children need to be able to cooperate, follow directions, demonstrate self-control, and “pay attention.” Unfortunately, many students preschool experiences do not fully support their social and emotional development. This policy brief describes the importance of social and emotional development for children in their earliest years and as they grow older and describes the characteristics of those preschool education programs that best support these aspects of development.



### What We Know:

- Kindergarten teachers say that about 20 percent of children entering kindergarten do not yet have the necessary social and emotional skills to be “ready” for school. Of very low-income children, as many as 30 percent may not have the necessary skills.
- Social and emotional development is important both in its own right and because aspects of it facilitate cognitive development.
- When children are young, the adults around them (parents, other adult caregivers, preschool teachers) are the most important influences on their social and emotional development.
- High-quality preschool education can support early development in ways that yield long-term social and emotional benefits. A significant part of the long-term economic pay-off to public investments in high-quality preschool programs can come from their social outcomes, including the prevention of crime and delinquency.

### Policy Recommendations:

- Establish as a key goal of preschool education programs enhancing social and emotional development, without de-emphasizing cognitive development. Both domains are important, and neither should be sacrificed for the other.
- Include in learning standards the outcomes that preschool programs are expected to achieve for social and emotional development.
- Expand access to high-quality preschool education so that more children can benefit from experiences that will improved their social and emotional development.
- Ensure that preschool education programs are high-quality because only high-quality programs adequately support children's social and emotional development.
- Provide administrators and teachers with technical assistance and training to help them implement effective curricula and teaching practices supporting social and emotional development.

Knowing the ABCs is not enough. To be prepared for school, children also must be excited and curious about learning and confident that they can succeed (motivational qualities). They must be able to understand the feelings of others, control their own feelings and behaviors, and get along with their peers and teachers (socioemotional skills). Indeed, kindergarten teachers rate these motivational and socioemotional skills as more important to school success than being able to hold a pencil or read.<sup>2</sup> They want children to be ready for learning—to be able to cooperate, follow directions, demonstrate self-control, and “pay attention.”

Unfortunately, kindergarten teachers report that many of their students are not socially or emotionally prepared for the challenges of the new environment.<sup>3</sup> Kindergarten teachers rate about 20 percent of all entering kindergarteners and 30 percent of very low-income entering kindergarteners as having poor social development.<sup>4</sup> They enter kindergarten unable to learn because they cannot pay attention, remember information on purpose, or function socially in a school environment.<sup>5</sup> The result is growing numbers of children who are hard to manage in the classroom.<sup>6,7</sup> These children cannot get along with each other, follow directions, or delay gratification. They show belligerence and aggression in the classroom and on the playground. The problems begin before kindergarten: In some studies as many as 32 percent of preschoolers in Head Start programs have behavioral problems.<sup>8</sup>

*The core features of emotional development include the ability to identify and understand one’s own feelings, to accurately read and comprehend emotional states in others, to manage strong emotions and their expression in a constructive manner, to regulate one’s own behavior, to develop empathy for others and to establish and sustain relationships.*

—National Scientific Council on the Developing Child (2005)

These missing social and emotional skills mean that teachers spend too much of their time trying to rein in unmanageable children and too little time teaching.<sup>9</sup> Early childhood teachers report that they are extremely concerned about growing classroom management problems,<sup>10,11</sup> and that they are ill-equipped to handle them.<sup>12</sup> Kindergarten teachers report that more than half of their students come to school unprepared for learning academic subjects.<sup>13</sup> If these problems are not addressed, the result can be growing aggression, behavioral problems and, for some, delinquency and crime through the school years and into adolescence and adulthood.

## Social and Emotional Development: Definitions and Importance

Social and emotional development involves the acquisition of a set of skills. Key among them are the ability to:

- identify and understand one’s own feelings,
- accurately read and comprehend emotional states in others,
- manage strong emotions and their expression in a constructive manner,
- regulate one’s own behavior,
- develop empathy for others, and
- establish and sustain relationships.<sup>14</sup>

Each of these skills develops on its own timetable, but the skills build on one another. Very young children, for example, have to learn to understand and recognize their own feelings, but then they gradually learn to associate verbal labels to those feelings, to learn that others have feelings too, and to begin to empathize with others. As children grow older, they learn to manage their emotions—to shake off feelings of anxiety, sadness, or frustration, and to delay gratification in order to achieve a goal.<sup>15</sup> As adults, those skills help differentiate the mediocre salesman from the successful one who can read the emotional response of a prospective client. They help athletes persevere until they win their gold medals. They help spouses empathize with one another to de-escalate arguments, and they impel good citizens to shy away from injuring others because they can understand how such actions would cause pain.

One of the most important skills that children develop is **self-regulation**—the ability to manage one’s behavior so as to withstand impulses, maintain focus, and undertake tasks even if there are other more enticing alternatives available. Self-regulation underlies the ability to undertake every task, so that it has implications for not just how children get along with one another but also how they can focus and learn in the classroom. (See sidebar, p. 4.)

In short, these skills help promote a range of positive behaviors, beginning before children enter kindergarten and extending into adult life. Not surprisingly, when social and emotional development goes awry, the result can be problems in school and later life.

### Problems in Social and Emotional Development: The Beginnings of Aggression

Persistent physical aggression, high-school dropout rates, adolescent delinquency, and antisocial behavior have all been associated with early childhood conduct problems.<sup>16</sup> The preschool years are a “sensitive period” for learning to regulate development of aggression.<sup>17</sup> Children who exhibit high levels of physical aggression in elementary school are at the highest risk of engaging in violent behavior as adolescents. Researchers believe that children with difficult, disruptive behavior (poor social and emotional skills) are at risk for these later problems for at least three reasons: (1) teachers find it harder to teach them, seeing them as less socially and academically competent, and therefore provide them with less positive feedback; (2) peers reject them, which cuts off an important avenue for learning and emotional support; and (3) children faced with this rejection from peers and teachers tend to dislike school and learning, which leads to lower school attendance and poorer outcomes.<sup>18, 19</sup>

Because difficult behavior exhibits itself early—even before children begin kindergarten—the pattern of rejection and negative experiences begins early, too.<sup>20</sup> The early experience of rejection can have lasting emotional and behavioral impacts beyond elementary school, creating a downward spiral that becomes increasingly difficult to reverse.

## Social-Emotional Self-Regulation: A Key to School Readiness

One of the most important skills that children must develop is self-regulation. Self-regulation is a deep, internal mechanism that underlies the mindful, planful, and thoughtful behaviors of all children. It underlies performance in all domains, from reading to getting along well with others.

Self-regulation is the capacity to control one's impulses both to stop doing something that is unnecessary (even if one wants to continue doing it), and to start doing something that *is* needed (even if one does not want to do it). This ability to inhibit one response and to enact another on-demand is a skill used in thinking as well as social interactions. The child who does not have self-regulation at 5 years of age is the child who cannot follow the teacher's directions at age 6 or who cannot plan how to solve a problem at age 7. The child without self-regulation of emotions at age 4 will not be able to control his temper at 5 and will have negative peer interactions at age 7.

### Self-Regulation and School Readiness

Self-regulation is necessary for positive social relations with others and for successful learning. To learn anything in a school setting, a child has to ignore the child next to him who is fun to play with and make his mind concentrate on the story the teacher is reading. The abilities to pay attention and to remember things on purpose are also part of self-regulation.<sup>21</sup>

The role of self-regulation in school success—from preschool and kindergarten to middle and high school—has now been documented in a number of studies.<sup>22</sup> Levels of self-regulation actually predict school success in first grade over and above children's cognitive skills and family background.<sup>23</sup> Cognitive self-regulation is linked with students' achievement in school.<sup>24</sup> Children lacking emotional self-regulation are at higher risk for disciplinary problems and are less likely to make a successful transition from preschool to kindergarten.<sup>25</sup> Emotional self-regulation seems to play a part in child resiliency and later adjustment.<sup>26</sup> Children who did not learn self-regulation in preschool can turn into bullies with aggressive habits of interaction that are difficult to break in later years.<sup>27, 28</sup>

New studies demonstrate that there is a physiological basis for the development of self-regulation. Brain research shows that self-regulation is linked to maturation of the prefrontal cortex area of the brain, which occurs during the preschool years.<sup>29, 30</sup> Both emotional and cognitive self-regulation seem to have the same neural roots, making it possible for children to take control of both their thinking and their feelings as they grow older and their brains develop. Based on other brain research, we believe that preschoolers must practice self-regulation if they are to develop finely tuned skills. Generally, if children do not practice deliberate and purposeful behaviors, traces in the brain are not reinforced (“use it or lose it” principle). So, if preschoolers do not practice self-regulation enough, the related brain areas will not be fully developed, and the end result may be adults who still act like they are in their “terrible twos.”

### Practice Makes Perfect

Evidence indicates that self-regulation and impulse control does not emerge spontaneously, but is learned.<sup>31</sup> Most important, it can be learned not just in families, but also in preschool classrooms. In fact, in many good quality programs, children do learn self-regulation. In these high-quality preschool programs, teachers set up the preschool environment so that children begin to think ahead, to plan their activities, and to think about and use strategies to solve social problems.<sup>32</sup>

Without intervention, the troubles born out of problems in social and emotional development create high costs for society in terms of juvenile delinquency and adult crime. Close to 2.3 million juveniles were arrested in 2002,<sup>33</sup> more than 134,000 juveniles were held in residential facilities in 1999, and about 12,000 juveniles were incarcerated in adult jails or state prisons as of mid-year 2000.<sup>34</sup> At year-end 2003, 6.9 million persons (3.2 percent of all U.S. adults) were on probation, parole, or in prison or jail.<sup>35</sup>

## **How Social and Emotional Skills Develop**

Promoting social and emotional development and preventing problems caused by maladaptive development is clearly important to individuals and to society, but how do those socio-emotional skills develop? They begin with the relationships children form with the people around them, including parents, caregivers, and peers.

### **The Role of Parents**

Parents and families play an enormous role in shaping a child's social and emotional development. Early relationships with parents lay the foundation on which social competency and peer relationships are built. Parents who support positive emotional development interact with their children affectionately; show consideration for their feelings, desires and needs; express interest in their daily activities; respect their viewpoints; express pride in their accomplishments; and provide encouragement and support during times of stress.<sup>36</sup> This support greatly increases the likelihood that children will develop early emotional competence, will be better prepared to enter school, and less likely to display behavior problems at home and at school.<sup>37</sup> This is why many preschool programs include a focus on parent involvement and parenting education.

### **The Role of Teachers/Early Childhood Educators**

Most children spend many hours each week in the care of someone other than their parents. These caregivers play the same role in promoting social and emotional development as do parents when children are young. Just as parents who are warm and responsive are more likely to promote strong social and emotional skills in their children, so too are early childhood educators and teachers, which means that the classroom environment must enable teachers the time to focus on individual children. Just as it is important for a consistent attachment to form between a parent and child, so too is such an attachment important for caregiver and child. That means that staff turnover in preschool programs should be kept to a minimum.<sup>38, 39</sup>

### **The Role of Peers**

Emotionally healthy children engage in positive play behaviors, develop mutual friendships, and are more likely to find acceptance from their peers. Through their play, they learn how to work in teams and cooperate with others. Their behavior and interactions influence the way in which teachers perceive them and the way they are treated by their peers. As early as preschool, the relationships children develop with one another can have a lasting impact on academic achievement, because they can contribute to more positive feelings about school and eagerness to engage in classroom activities, which can, in turn, lead to higher levels of achievement.<sup>40</sup> Conversely, early rejection by peers has been associated with persistent academic and social difficulties in elementary school.<sup>41</sup> That is why it is important to have skilled preschool teachers who can intervene when they see children having difficulties with peers and help the children learn how to resolve conflicts, regulate emotion, and respond to the emotions of others.<sup>42</sup>

## Evidence that Preschool Influences Social and Emotional Development

Convincing evidence exists that high-quality preschool positively affects social-emotional development. Across hundreds of studies of immediate and short-term outcomes, impacts of early education on factors such as self-esteem, motivation, and social behavior are positive, and range from about .25 to .40 of a standard deviation—a meaningful impact.<sup>43</sup> Other studies demonstrate that quality preschool produces long-term benefits in terms of improved classroom behavior and social adjustment and decreased future crime and delinquency. These successful programs all deliver high-quality center-based early childhood education services, but they differ in some ways, too. Some focus on 3- and 4-year-olds only, while others serve children from birth to 5, and some offer parent education or family support services in addition to center-based early childhood education.

A small group of studies suggest that too much time in an early childhood program, particularly in a low-quality setting, may actually increase children’s aggression levels slightly, but the bulk of the positive evidence for preschool is compelling and derives from a variety of studies, beginning with demonstration programs that were implemented decades ago and continuing to present-day demonstration programs and large-scale programs, both in the United States and abroad.

### Evidence from Demonstration Projects

Some of the strongest evidence for the benefits that preschool programs can produce on children’s social and emotional development is derived from demonstration projects begun in the 1960s and 1970s.

*The High/Scope Perry Preschool Project.* The High/Scope Perry Preschool Project,<sup>44</sup> initiated more than 40 years ago, was one of the first studies to provide a clear picture of the effects of early, high-quality preschool on educational, social, academic, and economic outcomes. Three- and 4-year-olds from low-income families (n=123) were randomly assigned to either a program or no-program group. Those in the program group experienced a well-designed preschool program, which included weekly home visits that encouraged parent-child interaction.

A recently released report of outcomes through age 40 confirms the economic benefits of investing in the education of young children.<sup>45</sup> Throughout their school years, the children from the program group outperformed the control group on achievement tests, had better attitudes about school, and were more likely to graduate from high school. As adults, the preschool participants attained higher levels of education and were more likely to vote in elections, find and maintain employment, and own their own homes, than children in the control group. The program group also averaged significantly fewer criminal arrests, including fewer arrests for drug-dealing crimes, and relied less on welfare or other social services as adults. From an economic standpoint, the program benefited the general economy with a 17 to 1 return on the original investment. This includes savings in the costs of crime, special education or retention in school, and welfare, as well as increases in taxes paid by those earning higher incomes.<sup>46</sup> Much of that return on investment is attributable to decreased costs of crime—an outcome clearly linked to social and emotional development. These data provide convincing evidence that providing more funding for preschool programs today will result in substantial social and economic gains in the future.

*The Syracuse University Family Development Research Program.* This program offered education, nutrition, health and safety, and human service resources to low-income, primarily African-American families (n=108) from 1969-1975. Services included weekly home visits, high-quality child care (one-half day five

days per week for children 6 to 15 months of age, and full-day care five days per week for children 15 to 60 months of age); and weekly parent group meetings. Services began prenatally and continued until children reached elementary school age. At follow-up, when children were 13-16 years old, 6 percent of the intervention group versus 22 percent of the matched comparison group children had been processed as probation cases (juvenile delinquency) by the County Probation Department, and the cases for the youth in the comparison group were much more severe and chronic.<sup>47</sup>

*The Houston Parent Child Development Center.* Launched in 1970, the Houston Parent-Child Development Center was designed to promote social and intellectual competence in children from low-income Mexican-American families. Families received two years of services, beginning when children were one year of age. In the first year of enrollment, families received biweekly 90-minute in-home visits that focused on parent-child interaction. Fathers and siblings participated in periodic weekend sessions on issues such as decision making and family communication. In the program's second year, the mother and child came to the project center four mornings per week. While the child participated in a nursery school, the mother attended classes on child management, child development, and family communication. Five to eight years after the end of program services, teachers rated control group children as more obstinate, impulsive, disruptive, and involved in fights than program group children (study n= 132). Program group children were rated as more considerate and less hostile.<sup>48</sup> Caution is suggested by the failure to find similar long-term effects on behavior in two studies of two other PCDCs using somewhat different approaches with somewhat different populations.<sup>49</sup> In addition, the Houston PCDC's effects on behavior problems appear to be limited to earlier cohorts, perhaps because program implementation suffered difficulties in later years. These results indicate that outcomes can be expected to vary with the design and delivery of a program, suggesting that effective policies and practice should stick closely to those models found to be most effective.

*Findings Pooled Across Many Studies: The Consortium for Longitudinal Studies.*<sup>50</sup> The Consortium for Longitudinal Studies combined data from 11 studies (including the Perry Preschool Project) begun in the 1960s and 1970s to assess the long-term effects of early childhood education programs. More than 3,500 low-income, predominantly African-American children were initially enrolled in early childhood programs, and more than 1,100 were followed to young adulthood. Findings confirmed the well-established benefits of preschool attendance for cognitive development and school competence, but they also suggested that early education can affect children's future goals and aspirations. At 10 to 19 years of age, children in both program and control groups had high educational and occupational aspirations and equivalent evaluations of their own school performance, but children who had attended preschool were far more likely to express pride in a school- or work-related achievement. Four years later, at ages 14 to 23 years, those participants with higher "achievement orientation" were found to have better employment status and higher educational attainment. Preschool attendance was also significantly associated with higher occupational aspirations and expectations for post-high school participants.

## Evidence from Large-Scale, Publicly Funded Programs

These positive findings do not just apply to demonstration programs or to programs begun in the 1960s and 1970s. Similar results have emerged from federally funded programs begun in the 1980s and 1990s.

*Chicago Child-Parent Centers.* Since 1985, the Chicago Child-Parent Centers (CPC) have provided children from low-income families with preschool and kindergarten programs, continued intervention in early elementary school, and family support services. The Chicago Longitudinal Study has followed the development of more than 1,500 children who participated in CPC and has documented positive short- and long-term social and academic outcomes.<sup>51</sup>

Children who participated in CPC demonstrated greater cognitive achievement, better social adjustment, less frequent grade retention, and lower crime rates as adolescents than the control group. In addition, a cost-benefit analysis revealed a substantial return on the original investment in the form of reduced crime rates, costs to crime victims, and school remedial services, as well as participants' increased earnings capacity by age 21.<sup>52</sup> Much of these benefits are attributable to crime prevention (social outcomes). These results demonstrate the long-term benefits of providing early childhood programs that nurture and care for the emotional and academic needs of children and families.

*Early Head Start.* Evidence from another large-scale, federally-funded program, Early Head Start, also supports the benefits of high-quality early childhood services. Early Head Start is a federally-funded program that provides comprehensive educational, health, and social services to low-income families across the country. Through either center-based child development services, home visits, or a combination of the two, children ages birth to 3 receive early childhood education and parents learn how to meet their children's emotional needs and provide nurturing learning environments. Results of a rigorous randomized trial evaluation of the program<sup>53</sup> documented that children in EHS enjoyed more positive interactions with their parents and their parents showed more emotional support and less negativity toward them than did their control group counterparts. By age 3, Early Head Start children were more likely to behave in ways that maintained interaction with their parent, were more attentive to objects during play, and were reported by parents to be less aggressive. Further analyses revealed that these effects were primarily found in EHS program sites that employed a combination of center- and home-based services, suggesting that it is very important for early childhood education services to partner with parents.

## International Evidence

**Mauritius:** Evidence of the power of preschool education programs to promote social and emotional development comes from other nations as well. A sample of children, randomly selected from the local population on the island of Mauritius (located off the southeastern coast of Africa), participated in a 2-year preschool program (from ages 3 to 5). The program included three components: (1) educational activities focusing on verbal and conceptual skills, visuospatial coordination, memory, and sensation and perception; (2) nutrition (milk, juice, hot meal with fish, chicken or mutton, and salad provided each day); and (3) 2 1/2 hours of physical exercise each day. Adult-child ratios were 1:5.5.

When compared with a control group of children who had experienced usual community care (adult-child ratio of 1:30; no lunch or structured exercise periods, and a traditional curriculum), benefits were seen which were maintained into adulthood. The preschool group had better scores on measures of mental health and antisocial behavior at age 17 and lower rates of criminal behavior at age 23, compared

to the control group. These benefits were especially pronounced for children with signs of malnutrition at age 3. The authors argue that the combination of services is important, perhaps because they result in lasting changes in brain development.<sup>54</sup> This suggests a need for a high-quality preschool environment that pays attention to the needs of the whole child—social, emotional, and physical health and development.

**Jamaica:** Relatively few studies have investigated the long-term effects of preschool programs on such internalizing behaviors as anxiety and depression as opposed to aggression and other externalizing behaviors. The EPPE study discussed later in this brief is one of the few to look at such effects on a large scale for preschool education programs generally. Follow-up of a randomized trial originally conducted with 9-24 month old growth-stunted children in Jamaica provides evidence on the effects of educational stimulation on these and other outcomes when the children are 17-18 years old.<sup>55</sup>

Children (n=127) were randomly assigned to four groups: no-treatment, dietary supplementation, home visits, or both. Dietary supplementation (one kg of milk-based formula) and home visits were provided weekly for two years. The home visits were one-hour sessions working with mother and child to enhance mother-child interaction in play. Mothers were encouraged to talk with their children and to use praise and positive reinforcement rather than physical discipline, and were taught play techniques designed to foster positive child development. Mothers also were provided with toys and picture books and encouraged to play with their children between visits.

Follow-up at age 17-18 (n=103) showed significant effects of the educational intervention but not of dietary supplementation. Participants in the home visits reported less anxiety and depression and better self-esteem. Parents reported that they had fewer attention problems. In addition, there was some evidence that they were less likely to have been expelled from school (2% v. 11%,  $p = .08$ ). No significant effects were found for self-reported anti-social behavior or parental report of hyperactivity and oppositional behavior.

### **Complex Findings Including Negative Effects in Some Circumstances**

Several studies find evidence that children who spend long hours in child care exhibit somewhat higher levels of aggressive behavior in the first few years of school. This effect is small, and its practical importance is unclear. The problem may be largely avoidable by providing better education in child care, though this aspect of curricular improvement does not appear to be captured by commonly used measures of child care quality. Moreover, the broadest research indicates that even when this mild negative effect is present it is accompanied by positive effects on other aspects of social and emotional development as well as positive effects on cognitive development. There is some evidence that typical child care over the first 5 years of life can have modest negative effects on social and emotional development that persists into elementary school, in the form of behavior problems, less social competence and poorer schoolwork habits.<sup>56</sup>

*The NICHD Study of Early Child Care.*<sup>57</sup> The NICHD Study of Early Child Care followed the development of over 1,200 children from 10 sites across the country. Families were recruited for participation through hospital visits shortly after the birth of a child in 1991, and the children's social behavior was subsequently assessed at 15, 24, 36, and 54 months, as well as early in their kindergarten year. Mothers, teachers, and child care providers rated children's behavior, and researchers observed the children's interactions with peers. Results suggested that a small percentage (less than 20 percent) of the children who spent a lot of time (at least 30 hours per week) in non-maternal child care arrangements were more noncompliant and

aggressive than their peers at 54 months of age and in kindergarten. This relationship held even when the effects of quality, type, and stability of child care and maternal sensitivity were controlled for through statistical modeling. Nevertheless, additional analyses revealed that the persistent effect of duration on aggression was fairly small—smaller than the effects of children’s socioeconomic status and the maternal sensitivity of their mothers.

Some researchers have suggested that the NICHD link between aggressive behavior and long hours in child care may be easily explained and may not be problematic.<sup>58</sup> The proportion of children in the high duration of care group who show higher levels of problem behaviors does not exceed the proportion of children in the national population as a whole who display the same frequency of these behaviors, so child care is not increasing the number of aggressive children that otherwise exists in the population at-large. Instead, it is possible that the increased aggression emerges when children first spend substantial time in large-group settings. For the children in long-term care, their exposure begins earlier, so the higher aggression levels emerge earlier. When their agemates are exposed to substantial time in large-group settings, their levels of aggressive behavior will increase too, so that, in the end, preschool participants will not display more aggression than agemates.

*The Abecedarian Project.*<sup>59</sup> The Abecedarian project offers some additional evidence from a randomized trial with a sample of 104 at age 21 follow-up. The Abecedarian Preschool Project provided low-income African-American children with full-day educational child care from birth to age 5, and has demonstrated important long-term benefits for children such as higher rates of high school graduation and college attendance. However, in an early study, teachers rated 59 children from the project to be more aggressive during the first three years of primary school than control group children. Although the teachers did not dislike or find the Abecedarian children harder to manage than children from the control group, the Abecedarian children were more likely to kick, push, and hit in a variety of settings (such as lunchroom and classroom) than children from the control group. By the third year in public school, the aggression level of students who had participated in the Abecedarian program began to decline, and the level for children in the control group began to rise slightly.

There were no differences in aggressive behavior among children in the Abecedarian control group, although their exposure to child care ranged from none at all to nearly five years. Of course, the sample size is quite small making it difficult to detect small effects. The study’s author suggests that the program’s curriculum was an important factor in explaining the difference between treatment and control group aggression. In the early years of Abecedarian, the program emphasized academic growth in its curriculum activities. When early results showing elevated aggressive behavior were observed, the program’s designers changed the curriculum to reinforce prosocial alternatives, and they brought in a consultant to work with teachers on methods of behavior control. Subsequent cohorts of children enrolled in the program showed much lower rates of aggressive behavior. It is noteworthy that large positive effects on school success were found across all cohorts.

*The Effective Provision of Preschool Education Project.*<sup>60</sup> The Effective Provision of Preschool Education (EPPE) Project involved nearly 3,000 children and 141 centers from five regions in England. Children were recruited from six types of service settings, such as nursery school, playgroup, or day care. Social and behavioral development over the preschool period was analyzed by measuring change in social behavior from entry to the study (primarily 3-year-olds) to start of primary school (primarily 5-year-olds).

Classroom teachers rated the children who attended preschool centers significantly higher on measures of independence and concentration, cooperation and conformity, and peer sociability compared to children who remained home. At entry to primary grades, effect sizes (measured in standard deviations) for 1-2 years of preschool attendance ranged from .11 for cooperation and conformity to .36 for peer sociability, after controlling for child, parent, and home characteristics.

In general, children in higher quality programs benefited more. In particular, developmental gains in cooperation and conformity were stronger if children were enrolled in programs with highly qualified staff, or in programs that scored well on “language and reasoning” and “social interaction” subscales of the Early Childhood Environment Rating Scale (a measure commonly used to assess the quality of early childhood programs). Children in centers with highly qualified staff also showed reduced anti-social/worried behavior.

In general, the researchers found that the more time children spent in preschool, the more social benefits they enjoyed, although it appeared that children who were enrolled in preschool for an extended time (more than 3 years) showed some increased anti-social/worried behavior. The quality of the program made a difference, such that the problematic behavior levels were lower in high-quality programs, although those levels were still higher than for children who spent less time in care. This evidence is consistent with the findings of the NICHD and Abecedarian studies, but places this one negative result in the context of other more positive effects on social and emotional development because of the broader set of outcome measures used.

## **The Role of Preschool Quality and Curriculum**

Successful preschool programs may differ in some ways, but they all are high quality programs, with well-trained staff who focus attention on the needs of each of their students. In policy terms, this means that the programs share the following characteristics:<sup>61</sup>

- Small group sizes
- A partnership with parents
- A sound curriculum that addresses the needs of the whole child
- High adult-child ratios
- Competitive staff compensation and benefits to attract and retain good staff
- Well-prepared teachers and ongoing professional development

The following sidebar (p. 13) discusses some of these aspects of preschool program quality in greater detail. In addition to these important program elements, however, the methods of teaching and organizing student activities are highly influential in the development of social competency. Many child development experts feel that early childhood programs that employ only didactic methods of instruction may fail to enhance social and emotional skills.<sup>62</sup> This type of instruction does not always provide children with opportunities to develop problem-solving abilities and may negatively affect their development of social and emotional skills, which can have long-term consequences for learning.

## The Benefits of a Balanced Curriculum

In an attempt to highlight the value of a balanced curriculum, the High/Scope Preschool Curriculum Comparison Study<sup>63</sup> compared the effectiveness of three preschool curriculum models when used with children at risk for school failure. Children were randomly assigned to participate in programs employing (1) the High/Scope curriculum model which balances child- and teacher-directed instructional activities, (2) a direct instruction model in which it is primarily teachers who initiate activities, or (3) a traditional nursery school program in which classroom activities are the teacher's responses to the child's expressed needs and interests, and teachers encourage children to engage in free play.

The High/Scope curriculum provides children with opportunities to make choices about their activities by identifying goals and making plans to achieve them. Students are also encouraged to recall or reflect upon different experiences they have had during the day, taking time to consider ideas and concepts they have discovered and discuss what they might do to build on or extend what they have learned. The plan-do-review sequence helps children develop language and social behavioral skills and contributes to the development of higher-order thinking skills such as making predictions, solving problems, and anticipating outcomes.<sup>64</sup> This model provides autonomy and assists in the development of analytical abilities, abstract thinking, problem solving skills, self regulation, and metacognitive skills, all of which are essential for success in school.

Adults who had attended the High/Scope program as children experienced fewer social difficulties and were more likely to participate in volunteer work, vote, and stay married longer than their peers who had participated in the other programs. Other studies also suggest that a balanced curriculum can have a significant long-term impact on sociobehavioral outcomes,<sup>65</sup> including more prosocial behavior and better relationships with peers in early elementary school.<sup>66</sup> These suggest that more attention to how children are taught and the kinds of relationships children and adults have in preschool programs may be the key to avoiding even small negative effects on aggression and maximizing positive effects on social and emotional development and behavior.

The High/Scope curriculum study is just one small experiment, but the field is decidedly lacking in randomized trials investigating the effects of curriculum on social and emotional development on long-term social and emotional development. Indeed, the experimental literature has tended to focus on highly specific interventions for children identified as having serious problems rather than on a whole child approach for the general population.<sup>67</sup> The preschool education programs found to be the most effective in preventing antisocial behavior and delinquency are quality programs with balanced curricula that focus on the needs of the children,<sup>68</sup> provide opportunities for peer interactions during play and produce high levels of teacher-child closeness.<sup>69</sup>

Understanding the impact of quality preschool education is the first step, but providing programs that foster healthy emotional development requires foresight, planning and the support of politicians, communities and families.

### Quality Preschool Programs: Definitions and Evidence for Benefits

Preschool programs that maintain high standards of quality provide children, especially those at risk, with skills that will assist them in their social and academic adjustment to elementary school. High-quality preschool is organized in ways that allow children to form close, sustained relationships with teachers and encourage positive interactions with peers. Small group sizes and high adult-child ratios, competitive staff compensation and benefits, professional development, and other aspects of the program are geared toward fostering strong relationships and reducing teacher turnover. These components have been associated with positive social and emotional outcomes for children, including greater compliance, sociability, attention, self-regulation, and peer relations as well as lower rates of negative affect and behavior problems.<sup>70</sup>

A program's quality may also be determined by the qualifications required of the teachers and staff. Teachers with four-year degrees and specialization in early childhood are better prepared to develop meaningful relationships with their students and create safe, nurturing climates that support children's emotional well being. Children cared for by teachers who are highly involved and invested during their preschool years have been found to be less likely to display behavior problems in kindergarten and demonstrate increased social skills through elementary school.<sup>71</sup> High teacher-student ratios allow for the development of these relationships, which provide stability in transitions to new classrooms, contribute to increased social skills, and improve emotional stability.<sup>72</sup>

The National Institute of Child Health and Human Development (NICHD) has conducted extensive research that has contributed to a better understanding of the relationship between preschool quality and child outcomes. The research has shown that higher quality preschool programs defined by high teacher-student ratios, group sizes and higher teacher qualifications results in more responsive teaching and fewer behavior problems from children.<sup>73</sup> Children who attend higher quality preschool have also been reported to have fewer behavior problems, closer relationships with their mothers, and to be better prepared for school.<sup>74</sup>

## Conclusions and Recommendations

In sum, high-quality preschool education is designed to enhance children's social and emotional development. Such programs provide children with highly qualified teachers, small class sizes with high teacher-student ratios, opportunities to pursue their interests and interact with their peer, and activities intentionally designed and implemented to educate the whole child. Among the benefits found from such programs; children are more likely to graduate from high school, continue with higher education, and have lower rates of teen pregnancy, special education placement, disruptive behavior, and arrests. They are more likely to give back to their neighborhoods as adults by participating in volunteer work and contribute more to their communities through higher employment rates and earnings, higher voting rates, increased church attendance, and home ownership.<sup>75</sup> These benefits and associated economic returns have only been found for programs that are high-quality. Benefits have been found for larger scale programs including the Chicago Child Parent Centers, Head Start and Early Head Start. By contrast, length of attendance in typical child care has been associated with modest negative outcomes.

As policymakers design programs and make decisions regarding early education, they should invest in programs that support development of the whole child, including academic, social, and emotional skills. Recommendations for policymakers are as follows:

**1. Include enhanced social and emotional development as a key goal of preschool education programs.**

This does not mean that enhanced cognitive development should be de-emphasized. Both aspects of children's development are important, and one need not be sacrificed to support the other.

**2. Standards should spell out the outcomes that preschool education programs are expected to achieve for social and emotional development.**

Performance standards for preschool education programs should include explicit mention of social and emotional development. The new draft of National Association for the Education of Young Children accreditation standards include discussion of promotion of social and emotional skills and can provide guidance for program administrators who are considering launching new preschool programs.<sup>76</sup>

Then, when policymakers require that progress be measured by indicators, those indicators should map onto the performance standards and should therefore also include measures of social and emotional development. Seventeen states have launched school readiness indicator projects, and their work can provide examples of such indicators.<sup>77</sup>

**3. Expand access to high-quality preschool education programs so that more children can benefit from educational experiences that will improve their socio-emotional development.**

Nationally, only a few states have committed to funding preschool for all 4-year-olds whose parents wish them to attend.<sup>78</sup> High-quality infant and toddler programs, even for the most disadvantaged children remain rare. Substantial new investments should be made to increase access to high-quality child care and preschool education programs designed specifically to enhance early learning and development, broadly defined.

4. **Ensure that all preschool programs are high-quality because only educational programs will support children's social and emotional development.** Such programs have strong leadership, well-prepared teachers, a balanced curriculum, reasonable class sizes and ratios, and partnerships with parents.
5. **Provide administrators and teachers with technical assistance and training to help them implement effective curricula and teaching practices that support children's social and emotional development.** Studies demonstrate that, beyond the traditional aspects of program quality, the content of the curriculum and the teaching practices that teachers employ are critical determinants of a program's ability to benefit children's social and emotional development. Policymakers should ensure that resources are available to help teachers put into practice the best approaches for promoting children's social and emotional development.

## The Last Word

A child's ability to learn and to function as a contributing member of society rests heavily on the development of social competency and emotional health that begins at birth and is greatly influenced during the preschool years. Preschool programs that pursue the highest standards of quality will contribute substantially to this development. And while it may be a difficult and costly responsibility to promote and maintain such standards, the benefits far outweigh the costs. If we value our children and their future, we would be wise to make every effort to provide access to quality preschool programs and endorse such a prescient investment in the social and economic future of our country.

## Endnotes

- <sup>1</sup> Thompson, R.A. (2002). The roots of school readiness in social and emotional development. *Set for Success: Building a strong foundation for school readiness based on the social-emotional development of young children*. 1(1), 8-29. Kansas City, MO: The Ewing Marion Kauffman Foundation.
- <sup>2</sup> National Center for Educational Statistics (NCES) (1995). *Readiness for Kindergarten: Parent and Teacher Beliefs*. Retrieved, March 23, 2005 <http://nces.ed.gov/pubs93/web/93257.asp>
- <sup>3</sup> Rimm-Kaufmann, S.E., Pianta, R.C., & Cox, M.J. (2000). Teachers' judgments of problems in the transition to kindergarten. *Early Childhood Research Quarterly*, 15(2), 147-166.
- <sup>4</sup> Child Trends. (2003). *Kindergarteners' social interaction skills*. Retrieved March 15, 2005 from [http://www.childtrendsdatbank.org/pdf/47\\_PDF.pdf](http://www.childtrendsdatbank.org/pdf/47_PDF.pdf) .
- <sup>5</sup> Bronson, M.B. (2000). *Self-regulation in early childhood*. New York: NY: Guilford Press.
- <sup>6</sup> Ravner, C. C. & Knitzer, J. (2002). *Ready to Enter: What research tells policymakers about strategies to promote social and emotional school readiness among three- and four-year-old children*. New York, NY: National Center for Children in Poverty, Mailman School of Public Health, Columbia University.
- <sup>7</sup> West, J., Denton, J. & Reaney, L.M. (2001). *The kindergarten year: Findings from the Early Childhood Longitudinal Study Kindergarten class of 1999-1999*. Washington, DC: US Department of Education, National Center for Education Statistics.
- <sup>8</sup> West, J., Denton, K. & Reaney L. M. (2001).
- <sup>9</sup> Wallis, C. (2003, December 15). Does kindergarten need cops? *Time Magazine*, 162(24).
- <sup>10</sup> Ladd, G., Birch, S., & Buhs, E. (1999). Children's social and scholastic lives in kindergarten: Related spheres of influence? *Child Development*, 70, 1373-1400.
- <sup>11</sup> Greenwood, C.R. (1991). Longitudinal analysis of time, engagement, and achievement in at-risk versus non-risk students. *Exceptional Children*, 57, 521-534.
- <sup>12</sup> Arnold, D. H., McWilliams, L. & Arnold, E. H. (1998). Teacher discipline and child misbehavior in day care: Untangling causality with correlational data. *Developmental Psychology*, 34, 276-278.
- <sup>13</sup> Rimm-Kaufman, S., Pianta, R. C. & Cox, M. (2000). Teachers' judgments of problems in the transition to school. *Early Childhood Research Quarterly*, 15, 147-166.
- <sup>14</sup> National Scientific Council on the Developing Child (2005). *Children's emotional development is built in to the architecture of their brains* (Working Paper II). Retrieved March 15, 2005 from <http://www.developingchild.net/papers/workingpaperII.pdf>
- <sup>15</sup> Goleman, D. (1994). *Emotional intelligence: Why it can matter more than IQ*. New York: Bantam Books.
- <sup>16</sup> Nagin, D. S., & Tremblay, R. E., (2001) Parental and early childhood predictors of persistent physical aggression in boys from kindergarten to high school. *Archives of General Psychology*, 58, 389-394; LaCourse, E., Cote, S., Nagin, D. S., Vitaro, F., Brendgen, M., & Tremblay, R. E. (2002). A longitudinal-experimental approach to testing theories of antisocial behavior development. *Development and Psychopathology*, 14(4), 909-924.
- <sup>17</sup> Tremblay, R.E. Development of physical aggression from early childhood to adulthood. In: Tremblay R.E., Barr R.G., Peters R.DeV., eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development; 2002:1-6. Available at <http://www.excellence-earlychildhood.ca/documents/TremblayANGxp.pdf>. Accessed December 21, 2006.
- <sup>18</sup> Raver, C.C. (2002). Emotions matter: Making the case for the role of young children's emotional development for early school readiness. *Social Policy Report*, 16(3), 13-19.

- <sup>19</sup> Tremblay, R. E., Pihl, R. O., Vitaro, F., & Dobkin, P. L. (1994). Predicting early onset of male antisocial behavior from preschool behavior. *Archives of General Psychiatry*, 51(9), 732-739.; Crockenburg, S. C. (2003). Rescuing the Baby from the Bathwater: How gender and temperament (may) influence how child care affects child development. *Child Development*, 74(4), 1034-1038.
- <sup>20</sup> Tremblay, R.E. et al (1994).
- <sup>21</sup> Blair, C. (2003). *Self-regulation and school readiness*. Champlaign, IL: ERIC Clearinghouse on Elementary and Early Childhood Education. (Eric Identifier No. ED477640).
- <sup>22</sup> Huffman, L. C., Mehlinger, S. L., & Kerivan, A. S. (2001). Risk factors for academic and behavioral problems in the beginning of school. In *Off to a good start: Research on the risk factors fro early school problems and selected federal policies affecting children's social and emotional development and their readiness for school*. Chapel Hill, NC: University of North Carolina, FPG Child Development Center.
- <sup>23</sup> Ravner, C. C. & Knitzer, J. (2002). *Ready to Enter: What research tells policymakers about strategies to promote social and emotional school readiness among three- and four-year-old children*. New York, NY: National Center for Children in Poverty, Mailman School of Public Health, Columbia University.
- <sup>24</sup> Lyon, G. R. & Krasnegor, N. A. (1996). *Attention, memory, and executive function*. Baltimore, MD: Brookes.
- <sup>25</sup> Huffman, L. C., Mehlinger, S. L. & Kerivan, A. S. (2001).
- <sup>26</sup> Eisenberg, N., Spinrad, T. L., Fabes, R. A., Reiser, M., Cumberland, A., Shepard, S. A., Valiente, C., Losoya, S. H., Guthrie, I. K., & Thompson, M. (2004). The relations of effortful control and impulsivity to children's resiliency and adjustment. *Child Development*, 75(1), 25-46.
- <sup>27</sup> Nagin, D. S. & Tremblay, R. E. (1999). Trajectories of boys' physical aggression, opposition and hyperactivity on the path to physically violent and nonviolent juvenile delinquency. *Child Development*, 70(5), 1181-1196.
- <sup>28</sup> Shonkoff, J. P. & Phillips, D. A. (Eds.) (2000). *From Neurons to Neighborhoods: The science of early childhood development*. Washington, DC: National Academy Press.
- <sup>29</sup> Blair, C. (2003).
- <sup>30</sup> Shonkoff, J. P. & Phillips, D. A. (Eds.) (2000).
- <sup>31</sup> Nagin, D. S. & Tremblay, R. E. (1999).
- <sup>32</sup> Hyson, M., C. Copple, and J. Jones, *Bringing developmental theory and research into the early childhood classroom: Thinking, emotions, and assessment*, in *Handbook of child psychology: Vol. 4. Child psychology in practice*, K.A. Renninger and I.E. Sigel, Editors. In press, Wiley: New York.
- <sup>33</sup> Office of Juvenile Justice and Delinquency Prevention (2002). *Juvenile arrests*. Retrieved March 15, 2005 from <http://ojjdp.ncjrs.org/ojstatbb/crime/qa05101.asp?qaDate=20040801> .
- <sup>34</sup> Sickmund, M. (June 2004). Juveniles in corrections. *Juvenile Offenders and Victims National Report Series Bulletin. NCJ 202885*. Retrieved March 15, 2005 from <http://www.ncjrs.org/pdffiles1/ojjdp/202885.pdf>
- <sup>35</sup> Bureau of Justice Statistics (2005). Corrections statistics. Retrieved March 15, 2005 from [www.ojp.usdoj.gov/bjs/correct.htm](http://www.ojp.usdoj.gov/bjs/correct.htm)
- <sup>36</sup> Moore, S.G. (1992). *The Role of Parents in the Development of Peer Group Competence*. Urbana, IL: ERIC Digest.

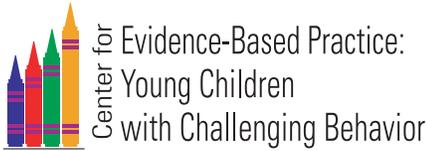
- <sup>37</sup> Sammons, P., Sylva, K., Melhuish, E., Siraj-Blatchford, I., Taggart, B., & Elliot, K. (2003). *Measuring the impact of pre-school on children's social/behavioural development over the preschool period (Technical paper 8b)*. London: Institute of Education, University of London.; Raine, A., Mellingen, K., Liu, J., Venables, P., Mednick, S.A. (2003). Effects of environmental enrichment at ages 3-5 years on schizotypal personality and antisocial behavior at ages 17 and 23 years. *American Journal of Psychiatry*, 160(9), 1627-1635; NICHD Early Childcare Research Network, (2002). Early child care and children's development prior to school entry: Results from the NICHD study of early child care. *American Educational Research Journal*, 39(1), 133-164.
- <sup>38</sup> Thompson, R.A. (2002).
- <sup>39</sup> National Scientific Council on the Developing Child. *Young children develop in an environment of relationships. Working paper #1*. Retrieved March 15, 2005 from [http://www.developingchild.net/papers/paper\\_1.pdf](http://www.developingchild.net/papers/paper_1.pdf)
- <sup>40</sup> Ladd, G.W., Birch, S. H., & Buhs, E.S. (1999). Children's social and scholastic lives in kindergarten: Related spheres of influence? *Child Development*, 70(6), 1373-1400.
- <sup>41</sup> O'Neil, R., Welsh, M., Parke, R. D., Wang, S., & Strand, C. (1997). A longitudinal assessment of the academic correlates of early peer acceptance and rejection. *Journal of Clinical Child Psychology*, 26(3), 290-303.
- <sup>42</sup> If teachers are not skilled enough themselves, many locales are investing in early childhood mental health consultants who can either intervene directly with the children or coach the preschool teachers. See for example: Casas, P. *Toward the ABCs: Building a healthy social and emotional foundation for learning and living*. Chicago, IL: Ounce of Prevention Fund. [www.ounceofprevention.org](http://www.ounceofprevention.org).
- <sup>43</sup> Barnett, W.S. (2002) Early childhood education. In A. Molnar (Ed.) *School Reform Proposals: The Research Evidence* (pp.1-26). Greenwich, CT: Information Age Publishing.
- <sup>44</sup> Peisner-Feinberg, E.S., Burchinal, M.R., Clifford, R.M., Culkin, M.L, Howes, C., & Kagan, S.L., et al (2000). *The children of the cost, quality, and outcomes study go to school: Technical Report*. Chapel Hill: University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Center.
- <sup>45</sup> Schweinhart, L.J. (2004). *The High/Scope Perry Preschool Study Through age 40: Summary, Conclusions, and Frequently Asked Questions*. Retrieved March 15, 2005 from <http://www.highscope.org/Research/PerryProject/PerryAge40SumWeb.pdf>
- <sup>46</sup> Barnett, W.S. (1995). Long-term effects of early childhood programs on cognitive and school outcomes. *The Future of Children*, 5(3), 25-50.; Schweinhart, L.J & Wallgren, C.R. (1993). Effects of a Follow Through program on school achievement. *Journal of Research in Childhood Education*. Vol 8(1), 43-56.
- <sup>47</sup> Lally, J.R., Mangione, P.L., & Honig, A.S. (September, 1987). *The Syracuse University Family Development Research Program: Long-range impact of an early intervention with low-income children and their families*. Sausalito, CA: The Center for Child & Family Studies, Far West Laboratory.
- <sup>48</sup> Johnson, D. L. & Walker, T. (1987). Primary prevention of behavior problems in Mexican-American children. *American Journal of Community Psychology*, 15(4), 375-385.
- <sup>49</sup> Johnson, J. (2006). Parent-Child Development Center Follow-Up Project: Child behavior problem results. *Journal of Primary Prevention*, 27(4), 391-407.
- <sup>50</sup> Royce, J. M., Darlington, R. B., & Murray, H. W. (1983). Pooled analyses: Findings across studies. In Consortium for Longitudinal Studies, (Ed.). *As the twig is bent...lasting effects of preschool programs*. Hillsdale, NJ: Erlbaum.

- <sup>51</sup> Reynolds, A. J., Temple, J., Robertson, D., Mann, E., (2001). Long-term effects of an early childhood intervention on educational achievement and juvenile arrest: A 15-year follow-up of low-income children in public schools. *JAMA: Journal of the American Medical Association*, 285(18), 2339-2346.
- <sup>52</sup> Reynolds, A., Temple, J., Robertson, D. & Mann, E. (2001) *Age 21 cost-benefit analysis of the Title I Chicago Child Parent Center Program*, Madison, WI: Waisman Institute, University of Wisconsin; Reynolds, A. J. (1994). Effects of a preschool plus follow-on intervention for children at risk. *Developmental Psychology*, 30(6), 787-804; Reynolds, A.J. (1997). *The Chicago Child-Parent Centers: A longitudinal study of extended early childhood intervention, Discussion Paper no. 1126-97*. Madison, WI: Institute for Research on Poverty.
- <sup>53</sup> Love, J., Kisker, E., Ross, C. Schochet, P, Brooks-Gunn, J., Paulsell, D. et al. (2002). *Making a difference in the lives of infants and toddlers and their families: The impacts of Early Head Start. Volume 1: Final Technical Report*. Washington, DC: US Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research and Evaluation Administration on Children, Youth and Families, Head Start Bureau. Retrieved March 15, 2005 from [http://www.acf.hhs.gov/programs/opre/ehs/ehs\\_resrch/reports/impacts\\_vol1/impacts\\_vol1.pdf](http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/reports/impacts_vol1/impacts_vol1.pdf)
- <sup>54</sup> Raine et al (2003).
- <sup>55</sup> Walker, S.P., Change, S.M., Powerll, C.A., Simonoff, E., & Grantham-McGregor, S.M. (2006). Effects of psychosocial stimulation and dietary supplementation in early childhood on psychosocial functioning in late adolescence: follow-up of randomised controlled trial. *British Medical Journal*, *BMJdoi:10.1136/bmj.38897.555208.2F* (published 28 July 2006) Available at: <http://www.bmj.com/cgi/reprint/333/7566/472>. Accessed December 21, 2006.
- <sup>56</sup> Belsky, J. (2006) Effects of child care on child development in the USA. In Jef J. van Kuyk (Ed.), *The quality of early childhood education: Report of a scientific conference 2006 (23-32)*. Arnhem, The Netherlands: Cito.
- <sup>57</sup> National Institute of Child Health and Human Development Early Child Care Research Network. (2003). Does amount of time spent in child care predict socioemotional adjustment during the transition to kindergarten? *Child Development*, 74(4), 976-1005.
- <sup>58</sup> Todd, C.M. (2001). *The NICHD Child Care Study Results: What do they mean for parents, child-care professionals, employers and decision makers?* Washington, DC: USDA/CSREES: Extension CARES for America's Children and Youth Initiative.
- <sup>59</sup> Haskins, R. (1985). Public school aggression among children with varying day-care experience. *Child Development*, 56(3), 689-703.
- <sup>60</sup> Sammons P. et al (2003).
- <sup>61</sup> Frede, E.C. (1998). Preschool program quality in programs for children in poverty. In W.S. Barnett and S.S. Boocock (Eds.) *Early care and education for children in poverty: Promises, programs, and long-term outcomes (77-98)*. Buffalo, NY: SUNY Press.
- <sup>62</sup> Schweinhart, L.J. & Weikart, D.P. (1997). The High/Scope preschool curriculum comparison study through age 23. *Early Childhood Research Quarterly*, 12, 117-143; Stipek, D., Feiler, R., Daniels, D., Milburn, S. (1995). Effects of different instructional approaches on young children's achievement and motivation. *Child Development*, 66, 209-223; Sammons, P. et al. (2003); Stipek, D. (1998). Good beginnings: What difference does the program make in preparing young children for school? *Journal of Applied Developmental Psychology*, 19(1), 41-66.
- <sup>63</sup> Weikart, D. P. (1998). Changing early childhood development through educational intervention. *Preventive Medicine: An International Journal Devoted to Practice & Theory*, Vol 27(2), 233-237.

- <sup>64</sup> Epstein, A. (2003). How planning and reflection develop young children's thinking skills. *Beyond the Journal: Young Children on the Web*. <http://www.journal.naeyc.org/btj/200309/Planning&Reflection.pdf>
- <sup>65</sup> Stipek, D., Feiler, R., Daniels, D., Milburn, S. (1995).; Sammons, P. et al. (2003).
- <sup>66</sup> Peisner-Feinberg et al. (2000).
- <sup>67</sup> Bierman K.L. Programs and services proven to be effective in reducing aggression in young children. Comments on Webster-Stratton, Domitrovich and Greenberg, and Loehman. In: Tremblay R.E., Barr R.G., Peters R.DeV., eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development; 2003:1-6. Available at: <http://excellence-early-childhood.ca/documents/BiermanANGxp.pdf>. Accessed December 21, 2006.
- <sup>68</sup> Yoshikawa, H. (1995). Long-term effects of early childhood programs on social outcomes and delinquency. *The Future of Children*, 5(3), 51-74.
- <sup>69</sup> Peisner-Feinberg et al. (2000).
- <sup>70</sup> Votruba-Drzal, E., Coley, R.L., & Chase-Lansdale, P.L. (2004). Child care and low-income children's development: Direct and moderated effects. *Child Development*, 75(1), 296-312.
- <sup>71</sup> Peisner-Feinberg, E. S., Burchinal, M. R., Clifford, R.M., Culkin, M.L., Howes, C., Kagan, S.L., & Yazejian, N. (2001). The relation of preschool child-care quality to children's cognitive and social developmental trajectories through second grade. *Child Development*, 72(5), 1534-1553; Howes, C. (2000). Social-emotional classroom climate in child care, child-teacher relationships and children's second grade peer relations. *Social Development*, 9(2), 191-204; Howes, C. (1990). Can the age of entry into child care and the quality of child care predict adjustment in kindergarten? *Developmental Psychology*, 26(2), 292-303.
- <sup>72</sup> Votruba-Drzal et al. (2004); Howes, C., & Hamilton, C.E. (1993). The changing experience of child care: Changes in teachers and in teacher-child relationships and children's social competence with peers. *Early Childhood Research Quarterly*, 8, 15-32; Peisner-Feinberg, E.S., Burchinal, M.R., Clifford, R.M., Culkin, M.L., Howes, C., Kagan, S.L., et al. (1999). *The children of the cost, quality and outcomes study go to school: Executive summary*. Chapel Hill: University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Center.
- <sup>73</sup> NICHD (2001). Nonmaternal care and family factors in early development: an overview of the NICHD study of early child care. *Applied Developmental Psychology*, 22, 457-492.
- <sup>74</sup> NICHD (2002). Child-care structure-process-outcome: Direct and indirect effects of child-care quality on children's development. *Psychological Science*, 13(3), 199-206.
- <sup>75</sup> Peisner-Feinberg et al. (2000); Consortium for Longitudinal Studies. (1983). *As the twig is bent: Lasting effects of preschool programs*. Hillsdale, NJ: Erlbaum.; Yoshikawa, 1995; Schweinhart, L. J., & Weikart, D. P. (1997). *Lasting differences: The High/Scope Preschool Curriculum Comparison study through age 23* (Monographs of the High/Scope Educational Research Foundation, 12). Ypsilanti, MI: High/Scope Press.
- <sup>76</sup> National Association for the Education of Young Children (NAEYC) (n.d.). Building new NAEYC program standards and accreditation criteria. Retrieved March 15, 2005 from [http://www.naeyc.org/accreditation/next\\_era.asp#standards](http://www.naeyc.org/accreditation/next_era.asp#standards)
- <sup>77</sup> Rhode Island KIDS COUNT. (February 2005). *Getting Ready: Findings from the National School Readiness Indicators Initiative. A 17 State Partnership*.
- <sup>78</sup> Barnett, W. S., Hustedt, J. T., Robin K. B., & Schulman, K. L. (2004). *The state of preschool: 2004 state preschool yearbook*. New Brunswick, NJ: National Institute for Early Education Research, Rutgers University.

This document was prepared with the support of The Pew Charitable Trusts. The Trusts' *Advancing Quality Pre-Kindergarten For All* initiative seeks to advance high quality prekindergarten for all the nation's three- and four-year-olds through objective, policy-focused research, state public education campaigns and national outreach. The opinions expressed in this report are those of the authors and do not necessarily reflect the views of The Pew Charitable Trusts.

**THE PEW CHARITABLE TRUSTS**  
Advancing Quality Pre-Kindergarten for All



Center for Evidence-Based Practice:  
Young Children  
with Challenging Behavior

www.challengingbehavior.org

## Recommended Practices

### *Linking Social Development and Behavior to School Readiness*

Barbara J. Smith, Ph.D. — University of Colorado-Denver and Health Sciences Center

*“From the last two decades of research, it is unequivocally clear that children’s emotional and behavioral adjustment is important for their chances of early school success.” (Raver, 2002)*

There is mounting evidence showing that young children with challenging behavior are more likely to experience early and persistent peer rejection, mostly punitive contacts with teachers, family interaction patterns that are unpleasant for all participants, and school failure (Center for Evidence-Based Practice: Young Children with Challenging Behavior, 2003). Conversely, children who are emotionally well-adjusted have a greater chance of early school success (Raver, 2002). Social and behavioral competence in young children predicts their academic performance in the first grade over and above their cognitive skills and family backgrounds (Raver & Knitzer, 2002).

Science has established a compelling link between social/emotional development and behavior and school success (Raver, 2002; Zins, Bloodworth, Weissberg, & Walberg, 2004). Indeed, longitudinal studies suggest that the link may be causal....academic achievement in the first few years of schooling appears to be built on a foundation of children’s emotional and social skills (Raver, 2002). Young children cannot learn to read if they have problems that distract them from educational activities, problems following directions, problems getting along with others and controlling negative emotions, and problems that interfere with relationships with peers, teachers, and parents. “Learning is a social process” (Zins et al., 2004).

The National Education Goals Panel (1996) recognized that a young child must be ready to learn, e.g., possess the pre-requisite skills for learning in order to meet the vision and accountability mandates of academic achievement and school success. Academic readiness includes the prosocial skills that are essential to school success. Research has demonstrated the link between social competence and positive intellectual outcomes as well as the link between antisocial conduct and poor academic performance (Zins et al., 2004). Programs that have a focus on social skills have been shown to have improved outcomes related to drop out and attendance, grade retention, and special education referrals. They also have improved grades, test scores, and reading, math, and writing skills (Zins et al., 2004).

#### **Social skills that have been identified as essential for academic success include:**

- 🌀 getting along with others (parents, teachers, and peers),
- 🌀 following directions,
- 🌀 identifying and regulating one’s emotions and behavior,
- 🌀 thinking of appropriate solutions to conflict,
- 🌀 persisting on task,





- 🌀 engaging in social conversation and cooperative play,
- 🌀 correctly interpreting other's behavior and emotions,
- 🌀 feeling good about oneself and others.

And yet, many children are entering kindergarten and first grade without the social, emotional, and behavioral skills that are necessary for learning and success in school. One survey of over 3000 kindergarten teachers found that 30% claimed at least half of the children in their classes lacked academic skills, had difficulty following directions and working as part of a group; and 20% reported that at least half of the class had problems in social skills (Rimm-Kaufman, Pianta, & Cox, 2000).

Research indicates that children who display disruptive behavior in school receive less positive feedback from teachers, spend less time on tasks, and receive less instruction. They lose opportunities to learn from their classmates in group-learning activities and receive less encouragement from their peers. Finally, children who are disliked by their teachers and peers grow to dislike school and eventually have lower school attendance (Raver, 2002).

#### What can we do to increase school readiness in young children?

- 🌀 **Policy** – Federal and state policies need to reflect the importance of these foundational skills by removing barriers and providing incentives and resources to communities and programs: (1) to improve the overall quality of early care settings; (2) to support families so that they are able to promote positive relationships and social competence in their infants and young children; (3) to prevent problem behavior by addressing social and educational factors that put children at risk for challenging behavior; and (4) to provide effective services and interventions to address social/emotional problems and challenging behavior when they occur.
- 🌀 **Public Awareness** – Federal, state, and local governments and community agencies need to raise the visibility of importance of social competence in school success.
- 🌀 **Knowledge and Skills** – Early care and education professionals need training and on-site technical assistance in evidence-based practices for: (1) promoting social skills (e.g., identifying and regulating emotions, playing cooperatively, following directions, getting along with others, persisting with tasks, problem solving, etc.); (2) preventing problem behavior (through classroom arrangements, individualizing to children's interests and abilities, etc.); and (3) providing effective intervention strategies when needed (e.g. positive behavior support, peer mediated strategies, etc.) (Fox et al., 2003). Early childhood education professionals need to know how to integrate social/emotional learning with literacy, language, and other curricular areas. Professionals need to know how to provide parents with information and support around parenting practices that prevent problems and effectively address challenging behavior.
- 🌀 **Research** – Studies are needed on specific promotion, prevention, and intervention strategies to establish their efficacy for specific groups of children in particular settings. Research is also needed on policy and programmatic features that result in more effective services for children and families related to social development.

*“The emotional, social, and behavioral competence of young children is a strong predictor of academic performance in early elementary school.” (Zero to Three, 2003)*

The reproduction of this document is encouraged.

### References

- Center for Evidence-Based Practice: Young Children with Challenging Behavior (2003). Facts about young children with challenging behaviors. [www.challengingbehavior.org](http://www.challengingbehavior.org)
- Division for Early Childhood (DEC) Position statement on interventions for challenging behavior. [www.dec-sped.org](http://www.dec-sped.org)
- Fox, L., Dunlap, G., Hemmeter, M.L., Joseph, G., & Strain, P. (2003). The teaching pyramid: A model for supporting social competence and preventing challenging behavior in young children. *Young Children*, 58(4), 48-52.
- National Education Goals Panel (1996). The national education goals report: Building a nation of learners. Washington DC: US Government Printing Office.
- Raver, C., & Knitzer, J. (2002). Ready to enter: What research tells policymakers about strategies to promote social and emotional school readiness among three- and four-year old children. New York, NY: National Center for Children in Poverty. [nccp@columbia.edu](mailto:nccp@columbia.edu)
- Raver, C. (2002). Emotions matter: Making the case for the role of young children's emotional development for early school readiness. *Social Policy Report of the Society for Research in Child Development*, 16(3), 1-20.
- Smith, B., & Fox, L. (2002). Systems of service delivery: A synthesis of evidence relevant to young children at risk for or who have challenging behavior. Center for Evidence-Based Practice: Young Children with Challenging Behavior. [www.challengingbehavior.org](http://www.challengingbehavior.org)
- ZERO TO THREE (2003). Assuring school readiness by promoting healthy social and emotional development. Washington, DC: ZERO TO THREE Policy Center.
- Zins, J., Bloodworth, M., Weissberg, R., & Walberg, H. (2004). The scientific base linking social and emotional learning to school success. In J. Zins, R. Weissberg, M. Wang, & H. J. Walberg (Eds.), *Building academic success on social and emotional learning: What does the research say?* (pp. 1-22). New York: Teachers Press, Columbia University.

### On the web

- [www.challengingbehavior.org](http://www.challengingbehavior.org)  
Center for Evidence-Based Practice: Young Children with Challenging Behavior
- [www.csefel.uiuc.edu](http://www.csefel.uiuc.edu)  
Center on the Social and Emotional Foundations for Early Learning
- [www.zerotothree.org](http://www.zerotothree.org)  
ZERO TO THREE

# Social Policy Report

*Giving Child and Youth Development Knowledge Away*

Volume XVI, Number 3

2002

## Emotions Matter: Making the Case for the Role of Young Children's Emotional Development for Early School Readiness

C. Cybele Raver

### *Summary*

This Social Policy Report considers the importance of young children's emotional development for their school readiness, suggesting that social scientists can provide policy makers with concrete ways to conceptualize, measure and target young children's emotional adjustment in early educational and child care settings. This Report then reviews a recent and persuasive body of rigorous research, to determine whether children's emotional adjustment can be significantly affected by interventions implemented in the preschool and early school years.

Results of this review suggest that family, early educational, and clinical interventions offer policy makers a wide array of choices in ways that they can make sound investments in young children's emotional development and school readiness. This research suggests that, while young children's emotional and behavioral problems are costly to their chances of school success, these problems are identifiable early, are amenable to change, and can be reduced over time.

What kinds of investments should policy makers be advised to make, at what point in young children's development, and in what settings? While modest investments in low-cost interventions initially may seem appealing, this report suggests that there are few bargains to be had when investing in young children's emotional adjustment. With this caveat in mind, the findings of this report suggest that policy makers should broaden early elementary educational mandates for school readiness to include children's emotional and behavioral adjustment as key programmatic goals. Policy makers should consider targeting young children's emotional adjustment prior to school entry, in diverse settings such as Head Start, child care settings, as well as in the first few years of school. Finally, young children's emotional adjustment can serve as an important benchmark of programmatic success in other policy arenas focusing on child welfare, family support, and economic self-sufficiency, as well as in education.

## Social Policy Report

### Editor

Lonnie Sherrod, Ph.D.  
sherrod@fordham.edu

### Associate Editor

Jeanne Brooks-Gunn, Ph.D.  
brooks-gunn@columbia.edu

### Director of SRCD Office for Policy and Communications

Lauren Fasig, Ph.D., JD  
SRCD@apa.org

### Interim Managing Editor

Angela Dahm Mackay  
admackay@umich.edu



### GOVERNING COUNCIL

Ross D. Parke	Sandra Graham
Esther Thelen	Donald J. Hernandez
Michael Rutter	Aletha Huston
W. Andrew Collins	J. Steven Reznick
Ronald G. Barr	Mary K. Rothbart
Jeanne Brooks-Gunn	Arnold Sameroff
Cynthia Garcia-Coll	John W. Hagen

### POLICY AND COMMUNICATIONS COMMITTEE

Connie Flanagan	Marilou Hyson
Ellen Pinderhughes	Fred Rothbaum
Jeanne Brooks-Gunn	Hiro Yoshikawa
Natasha Cabrera	Stephanie Jones
Vivian Gadsden	John W. Hagen
Robert Granger	Lauren Fasig
Donald J. Hernandez	Lonnie Sherrod

### PUBLICATIONS COMMITTEE

Susan B. Campbell	Aletha Huston
Mark Appelbaum	Deborah Johnson
Yvonne Caldera	J. Steven Reznick
Nancy Eisenberg	Neil Salkind
Sandra Graham	John W. Hagen
	W. Andrew Collins

## From the Editor

This issue addresses the importance of young children's emotional development for school readiness.

There is currently at the national level a great deal of concern for literacy and learning to read. Certainly literacy could not be more important. Children frequently fail in school because they fall behind in acquisition of basic skills, early in their school careers.

This report, however, highlights the interrelatedness of development, particularly early in life. Young children cannot learn to read if they have emotional and behavioral problems that distract them from reading lessons; such problems interfere with the acquisition of basic early skills. Two sidebars offer additional information on early emotional development and the development of self-regulation.

Emotional development and behavioral self-regulation are as important to early development as learning to read. In order to promote literacy, early educational programs have to attend to the whole child, attending also to the promotion of emotional development and health. Head Start was originally founded (by distinguished developmental psychologists such as Edward Zigler, Shepherd White, and Bettye Caldwell) with exactly this view of the whole child. And social and emotional development are part of the performance standards for early Head Start and Head Start. In the national evaluation of Head Start, social and emotional development were listed by staff as being most important. Now as conversations begin about moving Head Start to the Education Department, it is critical that we maintain this view that attends to emotional as well as cognitive development. This article presents the research justification for doing that.

The article also summarizes literature demonstrating that a variety of interventions can help young children who have already developed emotional and behavioral adjustment problems become more prepared for school. We know what to do and how to do it—in regard to promoting early development and preparing children for school; it is just a matter of basing our decisions on what we know about early child development.

Hopefully, this issue of the *Social Policy Report* will contribute to making that happen.

Lonnie R. Sherrod, Editor

## Emotions Matter: Making the Case for the Role of Young Children’s Emotional Development for Early School Readiness

C. Cybele Raver

Irving B. Harris Graduate School of Public Policy Studies  
University of Chicago

Recently, policy makers, researchers and educators have intensified their interest in supporting young children’s readiness to learn as they enter school (National Education Goals Panel, 1998). Surveys of teachers suggest there is justifiable cause for concern. For example, in one recent, nationally representative survey of over 3,000 teachers, 30% of the Kindergarten teachers reported that at least half of the children in their class lacked academic skills, had difficulty following directions, and working as part of a group, and 20% reported that at least half the class had problems with social skills (Rimm-Kaufman, Pianta & Cox, 2000). The portrait that emerges from these statistics is one where many children are not sufficiently ready to make the transition to Kindergarten. Exposed to a wide range of psychosocial stressors, children in poor neighborhoods are at greater risk for developing emotional and social difficulties (Dodge, Pettit & Bates, 1994; Brooks-Gunn, Duncan, & Aber, 1997). Schools in low-income communities are therefore likely to be called upon to meet the needs of a greater number of young children with behavioral problems within Kindergarten classrooms (Conduct Problems Prevention Research Group, 1999; Rimm-Kaufman, et al., 2000). Conversely, emotional skills among low-income children may serve an important protective function, whereby children who are able to effectively handle their emotions and behavior despite exposure to multiple stressors are more likely to do better, academically, than their peers (Raver & Zigler, 1997). In this light, what can developmental psychologists tell policy-makers about supporting young children’s school readiness?

From the last two decades of research, it is unequivocally clear that children’s emotional and behavioral adjustment is important for their chances of early school success. Certainly, cognitive maturity plays a central role in children’s academic performance. However, psychologists’ and educators’ emphasis on cognition and on children’s academic preparedness continues to overshadow the importance of

children’s social and emotional development for early school readiness (Aber, Jones, & Cohen, 2000; Hyson, 1994; Fantuzzo, et al., 1999; Raver & Zigler, 1997). This message is not new—what is new, however, is the emergence of a powerfully persuasive body of research on ways to support young children’s emotional, behavioral and academic adjustment just as policy interest in early school readiness is “heating up.” With this window of opportunity in mind, the following paper will make three, inter-related points:

1. Young children’s emotional adjustment matters.

Children who are emotionally well-adjusted have a significantly greater chance of early school success while children who experience serious emotional difficulty face grave risks of early school difficulty.

2. Recent advances in developmental and clinical research suggest that children vary in their levels of emotional competence and relative risk for developing behavioral and emotional difficulties. Developmental research offers several frameworks for understanding the child, family, classroom and environmental factors that are associated with children’s varying levels of skill versus difficulty, giving policy makers clear “sign posts” for multiple avenues for intervention.

3. Research on family, early educational, and clinical interventions offers policy makers a wide array of choices in ways that they may want to invest in young children’s emotional development and school readiness. Modest investments in low-cost interventions initially may seem

appealing, but the following review suggests that there are few bargains to be had when investing in young children’s emotional adjustment. Specifically, some children with serious emotional problems live in extremely vulnerable families, where parents struggle with a host of economic, psychological, and social difficulties. Policies aimed at young children’s emotional adjustment and school readiness may need to be cohesive and comprehensive if we expect to have a

measurable, positive impact on increasing children’s chances for school success. In other words, while short-term and relatively low-cost solutions supporting children’s emotional competence are available, they are unlikely to work for children who face the greatest emotional hurdles. While young children’s emotional problems are costly, results from some of the interventions reviewed suggest that these problems are identifiable early, are amenable to change, and can be reduced over time.

*Children who are emotionally well-adjusted have a significantly greater chance of early school success while children who experience serious emotional difficulty face an increased risk of early school difficulty.*

The following paper briefly reviews relevant research from developmental, clinical, and educational psychology, evaluating recent empirical evidence on which these assertions are made. First, longitudinal research linking children's social and emotional adjustment to their academic achievement is briefly considered, highlighting ways that emotions matter to children's school success. Second, this paper presents a brief overview of children's emotional adjustment from developmental and clinical frameworks, so that policy makers understand the individual, family and classroom processes that might be targeted in order for policy interventions to be effective. Third, the bulk of this paper then examines a range of interventions in order to address the question of which type of program is most effective in fostering children's emotional adjustment. When is a good time to intervene, for whom, and in what settings? While it would appear to make the most sense to get children "ready" for school by targeting the preschool years, researchers and clinicians have not generally focused on treating emotional problems in children younger than school-age, until relatively recently (Campbell, Shaw, & Gilliom, 2000). Therefore, in this review, programs aimed at increasing children's "school readiness" by improving their emotional adjustment is broadly construed to span two developmental periods—1) when children enter school, in Kindergarten and 1<sup>st</sup> grade, and 2) prior to school entry.

This review is also broadly framed with respect to its scope: It focuses both on universal interventions targeting all children regardless of income and on programs tailored to assist low-income children, given that family- and neighborhood-level economic disadvantage increase children's risk for behavioral and academic difficulty (Bolger, Patterson, Thompson & Kupersmidt, 1995; Duncan, Yeung, Brooks-Gunn & Smith, 1998). This review examines a "continuum" of service delivery options, considering interventions that target children at low, moderate and high risk with programs of correspondingly low, moderate and high intensity (Webster-Stratton & Taylor, 2001). In order to evaluate the merit of various types of intervention, this review focuses primarily on experimental evaluation research using randomized design; exceptions (where non-experimental evaluation studies are also considered) are clearly noted. Where appropriate, this paper also provides standardized estimates of the size of the impact, or effect for the interventions that are described<sup>1</sup>. (Unfortunately, sufficient data were not available to calculate these estimates in many of the studies reviewed). Finally, the paper concludes with a set of concrete policy recommendations.

*Children who are disliked by teachers and peers grow to like school less, feeling less love for learning and avoid school more often.*

## I: Children's Emotional Adjustment Predicts Their Early School Success

Over the last twenty years, a series of studies has clearly demonstrated that children's emotional and social skills are linked to their early academic standing (Wentzel & Asher, 1995). Children who have difficulty paying attention, following directions, getting along with others, and controlling negative emotions of anger and distress, do less well in school (Arnold et al., 1999; McLelland, Morrison & Holmes, 2000). More recently, evidence from longitudinal studies suggests that this link may be causal: For many children, academic achievement in their first few years of schooling appears to be built on a firm foundation of children's emotional and social skills (Alexander, Entwistle, & Dauber, 1993; Ladd, Kochendorfer & Coleman, 1997; O'Neil, Welsh, Parke, Wang & Strand, 1997).

Specifically, emerging research on early schooling suggests that the relationships that children build with peers and teachers are a) based on children's ability to regulate emotions in prosocial versus antisocial ways and that b) those relationships then serve as a "source of provisions" that either help or hurt children's chances of doing well, academically, in school (Ladd, Birch & Buhs, 1999, p.1375). Psychologists find that children who act in antisocial ways are less likely to be accepted by classmates and teachers (Kupersmidt & Coie, 1990; Shores & Wehby, 1999), participate less in classrooms and do more poorly in school than their more emotionally positive, prosocial counterparts, net of the effects of children's pre-existing cognitive skills and family backgrounds (Ladd et al., 1999). One caveat is that children's early academic skills and emotional adjustment may be bidirectionally related, where young children who struggle with early reading and learning difficulties may grow increasingly frustrated and more disruptive (Arnold et al., 1999; Hinshaw, 1992). Clearly our understanding of the causal and reciprocal influences of children's cognitive, language, and emotional competences on later academic achievement would be greatly benefited by additional research. With this caveat in mind, the bulk of longitudinal evidence for the importance of social and emotional adjustment for children's success in early academic contexts is convincing and clear.

How large a difference does children's emotional adjustment make? Children's emotional and behavioral difficulty with peers and teachers is not just a "feel good" issue: Children's aggressive, disruptive behavior has serious, long-term costs, both to the children themselves, and to their communities. Specifically, twenty years of research has now clearly established that aggressive young children who are rejected by their classmates in their first years of schooling

are at grave risk for lower academic achievement, greater likelihood of grade retention (being “held back”), greater likelihood of dropping out of school, and greater risk of delinquency and of committing criminal juvenile offenses in adolescence (Jimerson, Egeland, Sroufe & Carlson, 2000; Kupersmidt & Coie, 1990; Miller-Johnson et al., 1999; Vitaro, Laroque, Janosz & Tremblay, 2001).

Children with emotional difficulties are likely to “lose out” academically, in a number of ways. First, disruptive children are tough to teach: As early as preschool, teachers provide disruptive children with less positive feedback, so that disruptive children spend less time on task and receive less instruction (Arnold, et al., 1999; McEvoy & Welker, 2000; Shores & Wehby, 1999). Negative and conflictual relationships with one’s Kindergarten teacher have been found to forecast children’s later academic difficulties through early elementary school (Hamre & Pianta, 2001). Second, emotionally negative, angry children may lose opportunities to learn from their classmates as children gather to work on projects together, help each other with homework, and provide each other with support and encouragement in the classroom (Berndt & Keefe, 1995; Ladd et al., 1999). Third, children who are disliked by teachers and classmates grow to like school less, feeling less love for learning, and avoid school more often, with lower school attendance (Berndt & Keefe, 1995; Birch & Ladd, 1997; Murray & Greenberg, 2000). The costs of being socially rejected or withdrawn with peers and teachers may be particularly great for low-income children, increasing their risk of later school difficulty (Coolahan, Fantuzzo & Mendez, 2000).

Given this compelling evidence that children’s emotional adjustment plays an important part in predicting their likelihood of school success, the next question is then: How do we aid children to develop emotional competence and avoid emotional difficulties, so that they come to school ready to learn? Two different approaches to early emotional adjustment are briefly outlined in the next section, so that policy makers can strengthen their understanding of the multiple potential avenues for intervention when targeting children’s school readiness.

## II: Frameworks for Understanding Young Children’s Emotional Competence and Difficulty

Emotional competence: One framework used by many developmental psychologists suggests that children have a set of “emotional competencies” in ways that they think about and handle their own and others’ emotions (Saarni, 1990). Children’s ability to recognize and label different emotions provides them with powerful social tools: Using words, children can “talk through” rather than act out their feelings of anger, sadness, or frustration (Denham & Burton, 1996). Some children have more difficulty than others in correctly identifying both their own and others’ emotions and in thinking

of appropriate solutions to common social problems (e.g. resolving conflict with a peer) (Denham, 1998; Garner, Jones, Gaddy & Rennie, 1997). These children persistently misinterpret social situations (perceiving other children’s motives as hostile rather than benign), and they then respond

*Children’s ability to label and manage different emotions provides them with powerful social tools: Using words, children can “talk through” rather than act out their negative feelings.*

aggressively, eventually becoming disliked and rejected by their peers (Dodge & Feldman, 1990).

In a related avenue of research on children’s emotional competence, some investigators focus less on what children know about emotions and more on how children manage or regulate their negative emotions. On the basis of their ability to effectively manage their impulses and feelings, children arrive to formal classrooms with differing “behavioral styles” that have been characterized as more “prosocial” (where children engage in social conversation, cooperative play, and sharing), or “antisocial” in nature (where children hit, argue, and act in oppositional and defiant ways) (Eisenberg & Fabes, 1992; Rubin, Coplan, Fox & Calkins, 1995). Children who have trouble regulating their emotions and behavior may have an especially hard time accurately processing the details of an emotionally upsetting situation, as described earlier (Lemerise & Arsenio, 2000).

Children’s emotional styles are thought to be influenced by both children’s temperaments and by parents’ varying uses of warmth, control, and harshness in the home (Eisenberg & Fabes, 1992; Kopp, 1989; Patterson, Reid & Dishion, 1992; Thompson, 1994; Wakschlag & Hans, 1999). Specifically, children who demonstrate lower emotional competence and more emotional difficulties are more frequently found in families where parents express more negative emotion, engage in more conflict, and are ineffective in helping children deal with their feelings (Cummings & Davies, 1994; Denham, et al., 2000; Eisenberg, Cumberland & Spinrad, 1998; Garner et al., 1997; Gottman, Katz & Hooven, 1996). Correspondingly, children from more emotionally positive and less emotionally explosive households know more about emotions and are more likely to respond in prosocial rather than aggressive ways, in ambiguous situations.

What does this developmental framework mean for policy? A number of early educational programs have implemented “emotions” based curricula and “social skills training programs” to aid children to appropriately identify, choose, and enact prosocial solutions to typical “social” problems such as dealing with conflicts with friends. A few of these interventions also provide teachers with extensive training in effectively building warm relationships with students, creating more positive and productive classroom climates, managing disruptive behavior, and helping young children to develop greater behavioral self-control. Alternately, some programs target families as the place to intervene, aiding parents in appropriate ways to handle their own and their children’s anger and distress. Brief review of whether these programs are successful is included, below.

Young children’s emotional and behavioral problems and disorders: A number of investigators in the area of developmental psychopathology focus on “externalizing problem behaviors” among children who have serious and persistent difficulty controlling their feelings of anger and distress. Children with chronic, severe problems acting out in inappropriate, aggressive ways are viewed as having an emotional or behavioral disorder (EBD) (Quinn, Kavale, Mathur, Rutherford & Forness, 1999) and some of these children are at serious risk for antisocial and delinquent behavior in adolescence and early adulthood (Moffit, 1993; Loeber, Keenan & Zhang, 1997; Nagin & Tremblay, 1999).

How do clinical psychologists explain the development of children’s severe, chronic and emotional and behavioral problems? Again, psychologists point to parenting practices as one significant (if not sole) influence in children’s development of behavior problems, and therefore families’ parenting styles are often a major locus of intervention (Denham et al., 2000; also see Selkelitch & Dumas, 1996 and McEvoy & Welker, 2000 for reviews).

Consistently, researchers also identify “family adversity” or “cumulative risk” as a second environmental influence on young children’s development of later emotional and behavioral disorder. Evidence for this construct of “cumulative risk” has burgeoned, with recent research indicating that it is the extensiveness of multiple risks (e.g. parents’ problems with mental illness, illegal activity, low educational attainment, alcohol and drug abuse, having to rely on public assistance, parenting as a single parent), rather than any single, one of these factors, that best predicts children’s emotional and academic status (Ackerman et al., 2000; Campbell, Shaw & Gilliom, 2000; Sameroff, Seifer, Baldwin & Baldwin, 1993; Yoshikawa, 1994). Impulsive, oppositional preschoolers who are exposed to a high number of these accumulated environmental risks are substantially more likely to fall into an “early starter” group of children who continue to struggle

with severe behavior problems through middle childhood, rather than “growing out” of their aggressive, acting out behavior (Campbell et al., 2000). Clinical research on the treatment of children’s behavioral problems provides a similar portrait of their exposure to cumulative risk. Among one survey of children receiving intensive “integrated” mental health services for behavioral problems, for example, the majority of families struggled with poverty, substance abuse problems and, for ¼ of the families, a history of mental illness (Foster et al., 2001).

It is important to note that this research identifies children at greatest risk for bad outcomes: Without wanting to negatively label any child, this research asks us to recognize that some children manifest the early warning signs of a serious behavioral disorder and are deserving of treatment rather than social stigma or rejection. It is also important to remember that only 60% of children who demonstrate elevated levels of disruptive, aggressive behaviors in early childhood will manifest high levels of antisocial and delinquent behavior, later on (Campbell et al., 2000; Nagin & Tremblay, 1999) and that behavioral assessments of children’s externalizing problems are subject to considerable measurement error (Bennett, Lipman, Racine & Offord, 1998; Lochman et al., 1995). Therefore, it is doubly important to 1) exercise a great deal of caution in identifying and treating children who manifest behavioral problems and 2) to recognize that the environments that shape children’s problematic behavior, such as homes and schools, must be as much the focus of “treatment” (i.e. intervention efforts) as are children (McEvoy & Welker, 2000). With these caveats in mind, it is equally important to recognize the value of identifying and treating children who most need clinical services, as one of many ways to support young children’s school readiness.

### III: Avenues of Intervention— Programs That Support Children’s Emotional Competence and Ameliorate Their Emotional Problems

Can the trajectories of children who are headed for emotional and behavioral trouble be deflected, so that they are redirected onto a more positive course of school success rather than school failure? Can the number of children who are “school ready” in any given school or district be increased, by helping families and teachers to support children’s development of emotional understanding and prosocial behavioral styles? There are a wealth of interventions that have been implemented at the family, child care, school, and clinical site levels to address these questions. This paper cannot review all the relevant evaluations of each of these areas of intervention, comprehensively. Instead, broad conclusions will be drawn from different areas of research, relying on relevant meta-analyses, literature reviews, and specific studies, where

## Emotion Knowledge and Emotion Utilization Facilitate School Readiness

Carroll E. Izard  
University of Delaware

Although largely ignored for a long time, we have known for decades that children's emotion knowledge (EK) contributes to their ability to regulate their emotions and behavior. We have also known for a long time that emotion and self-regulation correlates with various measures of social and academic competence. Emotion knowledge (EK) in older children and adults has many facets. EK in young children has fewer aspects, but these include the capacity for emotion perception and emotion labeling, the two facets that constitute the fundamental infrastructure of EK. Without these two parts of the foundation, scaffolding of the more complex aspects of EK cannot occur. For example, empathy (a vicarious emotional experience) is impossible if the observer cannot detect the emotion signals of the other person. Moreover, if the observer accurately detects the emotion signal, she or he will still need to label it (symbolize it in awareness) to facilitate social communication and make an optimally empathic response. Thus poor skills in emotion perception and labeling greatly diminish the capacity for empathy, the prosocial behavior it can motivate, and its inhibitory effects on aggression. EK in the present context refers mainly to emotion perception and emotion labeling.

Recently we have learned something about the antecedents or causal processes in the development of emotion knowledge (EK) and the causal processes that flow from EK to social skills, academic competence, and peer acceptance—a critical factor in social functioning and success in school. Emotion expression and discourse about emotion feelings in the home, parental use of emotion coaching, and the child factors of emotionality/temperament and verbal ability contribute to the development of EK. Children with low thresholds for negative emotions and poor skills for regulating them will influence the social environment in a way that tends to restrict opportunities to increase

understanding of emotions. Such children may require emotion-centered preventive intervention to realize good progress on the key preschool developmental task of making connections among emotion feelings, appropriate thoughts, and effective behavioral strategies.

The child factor of verbal ability also contributes very substantially to the development of EK. Correlations between either receptive or expressive vocabulary and EK range from about .30 to .60 across a number of studies. Thus conditions that contribute to delayed development of verbal ability also contribute to delays in the development of EK.

More recent studies have shown that EK contributes to the prediction of social and academic competence even after controlling for the effects of verbal ability and emotionality/temperament. In addition to the direct effects of EK on behavioral and academic outcomes, it also plays the role of mediator. In a longitudinal study of Head Start children, emotion knowledge in preschool mediated the effect of verbal ability on academic competence in third grade. Path analysis of data from a study of first and second grade children in a rural/small town district revealed that verbal ability predicted EK, EK predicted social skills, and social skills, in turn, mediated the effect of EK on peer acceptance. Thus, knowing about emotions, and even having the right emotion feeling, are not enough. Socioemotional competence depends on emotion utilization, the use of skills motivated by the emotion. The classic example is empathy, where prosocial behavior occurs only when the motivation of modulated vicarious emotion experience drives relevant helping behavior. Empathy without prosocial action has limited value. Social and academic competence require emotion modulation and the skills to utilize the adaptive motivation inherent in modulated emotion. (For references, email <izard@udel.edu>.

appropriate. The overview provided below is organized by age range of the children served and by levels of programmatic intensity.

#### *Intervening When Children Enter School*

A wide range of interventions identifies children's entry into formal schooling as a prime opportunity to affect children's social, emotional, and academic competence. While many of these programs recognize that children's emotional development is grounded in their earlier experiences in infancy and toddlerhood, their primary focus is in targeting children in Kindergarten or 1<sup>st</sup> grade.

**Low-intensity interventions in the classroom:** Largely based on the model of emotional competence outlined above, some programs have been implemented to change the way that children think about emotions and social situations. Using modeling, role play, and group discussion, teachers can devote relatively small amounts of class time to instruct children on how to identify and label feelings, how to appropriately communicate with others about emotions (e.g. to use words instead of fists), and how to resolve disputes with peers. Often, these curricula are taught for about 2 hours a week, for between 12 and 20 weeks, and they are available as commercially distributed packages (Conduct Problems Prevention Research Group, 1999b; Frey et al., 2000; Greenberg, Domitrovitch, & Bumbarger, 1999; Quinn et al., 1999). The potential gain is that such programs can be offered "universally" to all children in a given classroom, for relatively low cost. As a result, the climate of the classroom may become significantly less chaotic and more conducive to learning (Conduct Problems Prevention Research Group, 1999b). The potential drawback is that these programs may yield only a modest, short-term impact on children's social and emotional behavior (with effect sizes less than .3) (Quinn et al., 1999).

Classroom-based programs have been more effective when they have targeted both children's knowledge of emotions and children's emotional and behavioral self-control through classroom based "games" that reward discipline and cooperation. Some of these programs place substantially greater investment in improving classroom climates through teacher training (in one intervention, this included as much as 60 hours of training) and appear to yield stronger positive effects (Ialongo, Poduska, Werthamer & Kellam, 2001). In that intervention, for example, children who were randomly assigned to the program in 1<sup>st</sup> grade were significantly less likely to be diagnosed with conduct disorder, significantly less likely to have been suspended from school, and significantly less likely

*Classroom-based programs have been more effective when they have targeted both children's knowledge of emotions and children's emotional and behavioral self-control.*

to need mental health services, 5 years later, than were children assigned to a control group (with effect sizes equal to .4, Ialongo et al., 2001). While these findings support the value of classroom-based approaches, children's emotional adjustment and school success may also be maximized by coordinating classroom intervention with parent-based approaches (Ialongo et al., 2001).

**Low- to moderate-intensity interventions in the home — Parent training programs:** From the developmental and clinical frameworks outlined above, it is clear that many psychologists view parenting as playing a key role in children's emotional adjustment. Based on this body of research, a number of interventions have been designed to reduce children's risk for emotional difficulties by aiding parents to increase their positive interactions with their children, to set firm limits on children's negative behaviors, and to reduce their use of harsh parenting practices when the adults, themselves, become angry or upset (McEvoy & Welker, 2000; Kazdin, 1987; Serketich & Dumas, 1996; Webster-Stratton, 1998).

These programs vary in their approach, their intensity, and the locations in which they are implemented (e.g. home visiting programs, telephone support, parenting skills workshops offered by health care providers, parent educators, social work staff). Generally, these programs have shown moderate success (Kazdin, 1987). One concern is that the link between harsh parenting and children's manifestation of behavior problems has been found to hold true for white families but not African American families in some studies, suggesting that interventions must be placed in culturally-grounded frameworks that take community norms, values, and attitudes towards parenting into account (Deater-Deckard & Dodge, 1997; Spieker et al., 1999). A second, significant concern is that the effects of these programs may be more transitory than long-lasting (Corcoran, 2000).

"Multi-pronged" home/school interventions for children at moderate risk: More intensive interventions have also been designed for children who exceed some criterion level of disruptiveness in their first few years of formal schooling. Because the goals of these programs are to help children most prone to externalizing problems, they are termed "targeted" or "indicated" preventive interventions, and they address children's emotional and behavioral difficulties on both home and school fronts. While these programs are more costly to run and are targeted at fewer children, they are expected to pay off in the long run, by reducing the prevalence of costly outcomes such as criminal offenses and drop-out from school among a

smaller group of high risk children (Eddy, Reid & Fetrow, 2000; Kazdin, 1997; McEvoy & Welker, 2000; Conduct Problems Prevention Research Group, 1992; Ialongo et al., 2001).

For example, in one recent intervention, children who were identified as disruptive were given classroom-based social skills training, and their parents were trained to encourage children's positive behaviors, to use "time-outs" for negative behaviors, to supervise children's after-school activities, and to problem-solve in times of family crisis (Tremblay et al., 1995; Vitaro et al., 1999). In some programs, teachers are also provided with additional training, and parent-teacher partnerships are strengthened by regular conferences and phone contact (Ialongo et al., 2001; Reid et al., in press). Recently, a large-scale, multi-site program for young children, called FAST-TRACK, has been implemented, where all children in a given classroom receive 22 weeks of social and emotional skills curricula, regardless of their relative emotional or behavioral risk (Conduct Problems Prevention Research Group, 1999a). In addition, 10% of the enrolled kindergartners who exhibited a high number of behavior problems both at home and school were included, with their parents, in parent training, peer group training, and academic tutoring. Some programs such as "Let's Invest in Families Together" (LIFT) take the prevention program into additional settings, such as the playground, where children may be teased or bullied (Eddy et al., 2000).

Results from a number of experimental studies (using randomized designs) suggest remarkable effectiveness of these multipronged programs on reducing children's disruptive behavior. These gains range from modest improvements in children's social, emotional, and academic skills after 1 year in the FAST-TRACK program, to effect sizes of as high as 1.5 reported by Eddy, et al.'s (2000) LIFT program (Stoolmiller, Eddy & Reid, 2000). These interventions demonstrate clearly that multi-pronged programs translate to significant improvements by reducing children's behavioral problems and their use of special services, and by increasing children's social skills and their reading readiness (Conduct Problems Prevention Research Group, 1999a; Ialongo et al., 2001). These multi-pronged programs have also shown more effectiveness in reducing the likelihood that children will engage in delinquent behaviors, such as drug and alcohol use (Stoolmiller et al., 2000), and in being held back a grade or more, than did the less expensive, lower-intensity, classroom-only interventions described earlier (Vitaro et al., 1999).

*More intensive interventions (that include both parent- and teacher-training) demonstrate remarkable effectiveness in reducing children's emotional and behavioral problems.*

Some researchers have pointed out that these findings are not sustained over longer periods of time, and that children's high school drop-out rates are not significantly affected by the intervention program. This has led investigators to suggest that "one-shot" interventions in early childhood may not be sufficient, and that children may need "booster" levels of intervention support in high school in order to improve chances of later school success. Others have

suggested that children with marked behavioral and emotional disorder need more comprehensive, intensive services offered in a clinical setting.

High-intensity clinical interventions for high-risk children: It is important to note that the majority of children in

poverty are doing well, emotionally, and should not be stigmatized or viewed from a deficit-oriented perspective (Garcia Coll, Meyer & Brillon, 1995; Garner & Spears, 2000). However, a small percentage of young children in poverty struggle with serious emotional and behavioral disturbance, and these children deserve access to the same level of intensive clinical intervention services that their more affluent counterparts are likely to purchase through private insurers. Specifically, there exist a range of programs designed to lower the risk of young children's development of serious emotional and behavioral problems in families struggling with multiple, chronic stressors such as high risk of maltreatment, mental illness, substance abuse, and domestic violence. School-based mental health consultation programs, for example, pair psychologists, social workers and psychiatrists with local school districts in order to identify, assess and treat young children who are in serious emotional and behavioral trouble. Clinicians from local community mental health organizations observe classrooms, provide teachers with training in early childhood mental health and development, and provide child- and family-centered psychotherapy to families in need (Cohen & Kaufmann, 2000). As of this writing, no evaluations of school-based consultation programs using randomized trial design could be found. However, the potential for such programs seems promising.

Because harsh, coercive parenting has been identified as a likely predictor of young children's behavior problems, and because juvenile delinquency has consistently been identified as a likely consequence of these same problems, there is considerable overlap between home-based intensive clinical interventions designed to assist multiply stressed families at risk for maltreatment and multi-modal programs designed to reduce the likelihood of juvenile offending among

youth. Of these programs, multisystemic approaches appear to be the most rigorously evaluated and the most successful, with older children. Specifically, these programs offer families comprehensive services from clinically-trained caseworkers that work intensively with a small number of families in home, school and community settings (for review of results, see Henggeler, 1999). This approach has strong potential for success with families with young children, given its track record with older children using stringent standards of randomized-trial evaluation (Campbell et al., 2000).

#### *Intervening Prior to School Entry*

One developmental axiom is that intervention early in the course of development is more cost-effective than later treatment for children and their families (see Alexander & Entwistle, 1988; Jimerson et al., 2000). Accordingly, there are a wealth of programs designed for families with infants, aimed at reducing risks and supporting positive outcomes among families facing significant poverty-related risks. One problem in considering these programs is that few of these have specifically focused on children's emotional adjustment as a targeted outcome, and so have not extensively assessed their effectiveness in this regard. Instead, programs have hoped to improve low-income children's academic and cognitive performance, indirectly, by working with families (Brooks-Gunn, Berlin & Fuligni, 2000; Yoshikawa, 1994). These programs are briefly reviewed, below, in "broad-brush" fashion.

Home visiting programs for parents of infants and young children: Because many of children's emotional problems appear to be so profoundly affected by parenting practices, many intervention programs aimed at helping adults parent more effectively may also indirectly improve children's emotional and behavioral outcomes. Specifically, many of these programs aim to improve families' provision of sensitive, responsive care, and to curtail families' use of inconsistent and harsh parenting as an indirect means of improving children's later life chances (see Brooks-Gunn et al., 2000; Corcoran, 2000; Gomby, Culross & Behrman, 1999 for reviews). Home visiting demonstration projects have been implemented in a wide array of rural and urban settings and vary broadly in the types of services they offer, from teaching parents about appropriate developmental milestones, early learning, and effective parenting, to public health and social welfare foci oriented towards improving maternal mental health, economic self-sufficiency, and social support (Brooks-Gunn et al., 2000; Gomby et al., 1999; Olds et al., 1998).

Exhaustive review of the efficacy of these programs is too great a task to be tackled here (Brooks-Gunn et al., 2000; Olds & Kitzman, 1990; 1993). Conclusions that can be drawn from smaller experimental and quasi-experimental studies is that some demonstration home visiting programs have generally shown small gains in improving parents' provision

of sensitive, nurturing care and in reducing parents' negative, coercive behaviors (with effect sizes rarely exceeding .2). However, when these programs have been taken to scale, and larger evaluations using randomized design have been conducted, results have been considerably less encouraging (See Gomby et al., 1999; Goodson, Layzer, St. Pierre, Bernstein & Lopez, 2000). Surprisingly, few studies have examined whether the program has been effective in indirectly supporting children's emotional development (Brooks-Gunn et al., 2000; Yoshikawa, 1994).

Moderate-intensity interventions in child care and early educational settings: Given that 61% of children ages 3-5 spend a significant portion of their day with child care providers other than their parents, it is particularly important to focus on child care's effects on young children's emotional development and school readiness (Arnold et al., 1999). Child care providers identify preschoolers' disruptiveness as a serious problem in their classrooms, and children might learn greater emotional and behavioral self-control in smaller classes with increased teacher training and support (Arnold et al., 1999; Denham & Burton, 1996; Gross et al., 1999; Hamre & Pianta, 2000). Yet few experimental studies have been carried out that focus on improving child care quality and caregivers' classroom management practices as avenues for decreasing children's emotional and behavioral difficulties (Webster-Stratton, 1999). It is clear that considerable additional research is needed to examine the question of whether and how child care quality may affect young children's emotional development and school readiness (Arnold et al., 1997; Hagekull & Bohlin, 1995).

Among early educational settings, Head Start stands out for its historical commitment to supporting young children's social and emotional development (Zigler & Styfco, 1995). Findings regarding the impact of early educational settings such as Head Start and state-funded preschool programs on young children's emotional development, however, are mixed. On one hand, results from longitudinal studies of intervention programs such as the Chicago Child-Parent Centers and High Scope/Perry Preschool suggest that this form of intervention is well worth the investment, leading to extremely long-term social and academic gains for enrolled children (Barnett, 1995). On the other hand, few evaluations of early educational interventions have utilized a randomized design, leading to skepticism regarding the validity of claims of programmatic success.

Specifically, nonrandomized studies cannot rule out the possibility that families with differing levels of skills, attitudes, and competencies choose whether or not to enroll their children in early interventions. If families with comparatively more skill and competence are more likely to enroll their children in early interventions, some investigators point out that children's successes that should be attributed to family

## School Readiness and Regulatory Processes

Claire B. Kopp

Raver challenges us to understand more fully the causes of inadequate social and emotional readiness for school. A useful starting point involves distinguishing three crucial regulatory processes—physiological, emotional, self-regulation—from each other. Thinking about the distinctiveness of each process including developmental origins and associated risk factors should lead to greater understanding of children’s dys-regulation and intervention needs. This decoupling approach does not negate the reality that school readiness entails a seamless melding of all three processes.

Physiological regulation (PR) typically begin in the early weeks of life with gradually emerging control of bio-physiological systems (e.g., digestion, arousal, sleep). Over time PR transitions into a bio-behavioral process in which arousal control is intrinsic to infant attention, social-interactions, and learning. Optimally, arousal control reflects a day and night cycle with daytime periods of observant attentiveness alternating with quiet alertness, and nighttimes containing restful sleep. Physiological dys-regulation is apparent in the newborn period, particularly among babies exposed to prenatal/perinatal risks. However, even healthy babies show non-optimal PR due to chaotic rearing contexts and inadequate parenting. The result: children who continue to have disturbed sleep, heightened irritability, and erratic alertness, and subsequent compromised attention, learning, emotion competencies, and social experiences. A new challenge (e.g., school entry) typically overwhelms these children because of their fragile bio-behavioral regulatory systems.

In contrast to the more generalized aspect of PR, emotion-regulation (ER) refers to modulating the intensity of emotion responses such as anger, fear, pleasure, sadness, and other emotions. Effective ER

means a response is appropriate to context, enhances rather than jeopardizes bio-behavioral well-being, and guides subsequent social and cognitive activities. ER begins during the 1<sup>st</sup> and 2<sup>nd</sup> years of life, and depends on appropriate caregiver inputs (e.g., soothing, facilitation of infant attention to potential soothers, descriptions of feelings) such that babies and toddlers *intentionally* reduce fretfulness by exploring interesting sights, engaging in play, gesturing to parents for assistance, finding self-soothers (e.g., blanket), and talking about their distress. During the 2<sup>nd</sup> and 3<sup>rd</sup> years, the growth of ER is also a function of children’s understanding of their own and others’ emotion states, and their ability to reason about emotions. Risk factors include inadequate parenting, children with heightened reactivity to stimuli, and language skills inadequate for handling interpersonal disputes.

In contrast to PR and ER, self-regulation (SR) is fundamentally a balancing of self defined needs with respect to societal/cultural values and norms. For young children, SR involves the ability to comply with everyday family norms, including delaying behaviors as appropriate. Parents typically begin socializing toddlers to norms by the second year. Because toddlers do not readily accept limitations, the growth toward effective SR requires perceptive parenting *and* an emotional bond between parent and child. In turn, children must be attentive to parents’ messages and understand their own role in SR. In addition to the parent and child risk factors noted above, another important one concerns limited parental inputs about everyday rules.

This sidebar has highlighted the unique features of regulatory processes, and noted their parallel developmental trajectories. It should be apparent that integration of the processes leads to competent school readiness.

competencies are misinterpreted as resulting from the intervention (Mayer, 1997). One recent meta-analysis of State-funded preschools emphasizes that the lack of rigorous evaluation design seriously hampers any interpretation that can be made of the few, modest gains (with most effect sizes of approximately .2) regarding participants' school readiness (Gilliam & Zigler, 2001). A national randomized trial evaluation of Head Start is planned in the next few years, and such results will likely provide a clearer index of the ways that Head Start may make a difference for young children's emotional development and school readiness.

**Moderate- to high-intensity home/classroom interventions:** Many interventions designed for families facing high risk combine both of the components described above, offering families home visits in infancy followed by enrollment in "enriching" early educational programs in toddlerhood (Brooks-Gunn et al., 2000; Yoshikawa, 1995). Results of randomized-trial evaluations of these demonstration programs (such as BEEP, CARE, IHDP), suggest positive effects on parenting, with mixed results regarding their effects on young children's emotional development (Brooks-Gunn et al., 2000). Early findings from randomized-trial research with a nationally implemented program of 0-3 family support for early school readiness (Early Head Start) are promising. Specifically, families in the Early Head Start program demonstrated more supportive parenting, with children demonstrating lower levels of aggression and greater emotional self-regulation, than did families in the control group, with modest effects (of approximately .1 to .2) in more established programs that had been implemented in both homes and centers.

Recent research suggests that early educational settings may offer a valuable opportunity to implement multi-pronged, comprehensive teacher- and parent-training programs that specifically target children's emotional and behavioral adjustment. One program, titled "The Incredible Years," offers comprehensive training to Head Start parents, teachers, and children, over 12 weeks (Webster-Stratton, 1998). This intervention has led to significant improvements in teachers' use of more positive, less harsh classroom management practices, improved classroom climate, and less disruptive behavior on the part of children (with effect sizes averaging .6, Webster-Stratton, Reid & Hammond, 2001). Importantly, the intervention also yielded improvements in skills important to children's school readiness, such as their greater engagement and more self-reliance in the classroom (Webster-Stratton et al., 2001). Similar to the school-aged, multi-pronged interventions reviewed earlier, this set of intervention studies demonstrates that substantial gains can be made in improving young children's emotional and behavioral adjustment when both home and school fronts are targeted.

**High-intensity interventions aimed at improving infant and preschool mental health:** A small number of clinically-oriented programs can be identified that offer comprehensive mental health services to both mothers and their infants or young children. Families enrolled in these services have largely been identified as needing services because of social service providers' concerns with economic self-sufficiency (Knitzer, Cauthen & Kisker, 1999), maternal psychopathology (e.g. maternal depression, Dickstein et al., 1998), maternal substance abuse (Lester, Boukydis & Twomey, 2000), or child health and mental health problems diagnosed early (e.g., low birth weight, neurological impairment, early-onset conduct problems or developmental delay). Interestingly, these programs emphasize the therapeutic benefit of repairing "breakdowns" in dyadic relationships for both parents and children, aiding the parent-child "system" to get back on an optimal track. Few large-scale, randomized trial evaluations of these programs have been conducted, and fewer still include long-term emotional or school readiness outcomes among participating children. It stands to reason that families facing a large number of grave psychosocial stressors may need this level of intensive, clinical support in order to avoid long-term, costly emotional and behavioral problems.

Similarly, there have been a number of recent calls to improve screening and treatment efforts for toddlers and

*Preschool and child care settings offer a valuable opportunity to implement comprehensive, multi-pronged interventions that support young children's emotional and behavioral adjustment.*

preschool-aged children with serious emotional and behavioral problems (Arnold et al., 1999; Briggs-Cowan, Carter & Skuban, & Horwitz, 2001; Fantuzzo et al., 1999; Gross et al., 1999; Yoshikawa & Knitzer, 1997). For example, teachers have significant concerns for some of their students' overactivity, inattentiveness, and disruptiveness, with Head Start teachers reporting that 10% of their students exhibit high levels of antisocial, aggressive behavior (Kuperschmidt, Bryant & Willoughby, 2000). Despite these concerns, Head Start teachers face multiple barriers in referring children for emotional and behavioral difficulties (Fantuzzo et al., 1999). Head Start teachers have few opportunities for classroom-level mental health consultation and support, and, despite a national Head Start Performance Standard mandate to serve children with emotional and behavioral disorders, participating children rarely receive special services for these difficulties (Fantuzzo et al., 1999).

There is some sparse evidence that, despite these barriers, Head Start might be an excellent site for service provision to young children at high risk for later behavioral difficulty (see Fantuzzo et al., 1996; Lara, McCabe & Brooks-Gunn, 2000). For example, in additional randomized studies of the “Incredible Years” intervention (described earlier), almost all (90%) of the Head Start children with conduct problems who were in the “treated” group showed a “clinically significant” (e.g. a 30% or greater) reduction in their acting out, aggressive, and oppositional behavior, as compared to improvements in behavior for only 27% of the control group children (effect sizes immediately post-treatment were in the .5 range) (Webster-Stratton & Hammond, 1997). Unfortunately, this kind of intervention stands as an exception rather than the rule in the early childhood clinical literature: Few other clinically-oriented, multi-modal, and rigorously-evaluated interventions, designed and implemented for high-risk, low-income preschoolers, could be found for this review (see Arnold et al., 1999; Fantuzzo et al., 1996). While recent Federal initiatives and literature reviews on Head Start children’s mental health have signaled increased interest in this area (see Webster-Stratton & Taylor, 2001; Yoshikawa & Knitzer, 1997), there is clearly still much to be learned regarding the prevalence and treatment of behavior problems among Head-Start eligible preschoolers, and regarding the long-term social and academic benefits of providing treatment in the preschool years.

#### IV: Summing up — Cautions and Recommendations

**Cautions:** One question that arises from this review is: How we can explain the widely varying levels of effectiveness that have been demonstrated across these different types of interventions? Three cautions are offered in an effort to explain variation in past programmatic success and to frame our expectations for the success of future interventions.

First, programmatic success is clearly reliant, in great measure, on the extent to which families participate in the programs designed to serve them (Brooks-Gunn et al., 2000). In many studies, across a wide diversity of types of intervention, rates of attrition in programs are alarmingly high and program participation rates are worrisomely low (Corcoran, 2000; Gomby et al., 2001; Kazdin, Mazurick & Bass, 1993; Korfmacher, Kitzman & Olds, 1998; Yoshikawa, Rosman & Hsueh, 2001). Many investigators have suggested that the quality of partnership or “therapeutic alliance” between the practitioner/educator/clinician and the family need improvement (Corcoran, 2000; Brooks-Gunn et al., 2000; Orrell-Valente et al., 1999). In addition, it may be that programs are not sufficiently comprehensive in addressing both parental and child mental health problems. Specifically, as this review suggests, some children at high risk for emotional and academic difficulty live in vulnerable families

facing multiple ecological stressors that make participation in programs very difficult (Liaw, Meisels & Brooks-Gunn, 1995). Some children who are acting out, in school, face not one, but many problems at home, and those problems are likely to be serious, long-term and requiring of significant attention by professionals in the legal, psychological and social work communities, rather than simply through a short-term parenting curriculum, for example (St. Pierre & Layzer, 1998). In sum, it is clear from the cumulative risk literature that families who may need intervention services most, may be least able to participate in interventions unless these programs address at least some of these stressors, directly.

Second, it may be unreasonable to expect long-term emotional and behavioral gains on the part of young children, if their families continue to face chronic, structural stressors that erode children’s psychosocial health. It is inappropriate to expect that a short-term program lasting a year or less will “inoculate” a child from the debilitating consequences of a chronic, recurring set of material hardships such as deep poverty, inadequate housing, and violent surroundings. As many leaders in the field of poverty research have noted (Chase-Lansdale & Brooks-Gunn, 1998; Huston et al., 2001; Yoshikawa, 1999) this is certainly one of the driving tenets behind Welfare Reform efforts: to raise families out of poverty rather than simply aiding poor families cope with the material hardships that they face. This means a) that policy makers and the public may need to lower their expectations of psychosocially-oriented interventions, if they are not paired with interventions aimed at families’ economic security at the structural level and b) that structural interventions, such as improvements in family income, neighborhood safety and residential stability may have important and significant effects on children’s emotional and behavioral well-being, that are well worth tracking (see for example, Duncan & Brooks-Gunn, 2000; Katz, Kling & Liebman, in press; Knitzer, Yoshikawa, Cauthen & Aber, 2000; Morris, 2002). For example, programs such as Moving to Opportunity (conducted by the U.S. Department of Housing and Urban Development (HUD)) suggest that providing low-income families with housing in a safer, more affluent neighborhood significantly reduces low-income boys’ behavior problems (demonstrating an effect size of .5 when compared to their control group counterparts) (Katz et al., in press). While neighborhood and family poverty extend beyond the scope of this paper, it is important to highlight the critical need for continued research on the impact of structural and economic interventions (such as Welfare Reform efforts) on young children’s emotional health and school readiness.

Third, we must recognize that the economic, employment, and policy contexts in which high-risk families have changed substantially from the conditions under which many models of interventions were originally designed and implemented,

now over 20 years ago (e.g. Olds et al., 1999). Home visiting and family involvement components of many programs may be particularly challenging to implement when increasing numbers of low-income mothers face strong policy mandates to enter and stay in the workforce. Unless welfare reform policies are substantively amended to allow parent participation in early childhood interventions to “count” as employment, it is likely that stressed, economically insecure families may have to place participation in home visiting prevention/intervention efforts as a lower priority than participation in work and work-related activities (Gyamfi, Brooks-Gunn & Jackson, 2001; Lamb-Parker, Piotroski, Baker, Kessler-Sklar, Clark & Peay, 2001). State and local family support, early education, and welfare-to-work policy professionals need to insure that programs are coordinated, rather than working at cross-purposes, when taking families’ time and attention.

#### Recommendations:

The first set of recommendations following from this review is that educational policy makers at the Federal, state and local levels should capitalize on public support for young children’s school readiness by making a range of investments in their emotional adjustment as well as their academic skills. In service of this goal, it is key that policy makers, researchers, and the public recognize that children’s emotional and behavioral difficulties are amenable to change. Specifically, results from a wide range of randomized, rigorous interventions demonstrate that children’s emotional development is plastic and open to environmental influence. Multi-pronged intervention efforts that are implemented on home and school fronts significantly deflect children’s negative behavioral trajectories and significantly improve their chances for later school success. Early childhood and educational policy professionals are specifically urged to consider the following options as ways to strengthen children’s school readiness:

- Target children prior to school entry, in diverse settings such as Head Start, child care settings, as well as in the first few years of school.

These settings are often already supportive of the importance of early social and emotional health, and have already made substantial programmatic commitments to this area of young children’s development. These commitments should be strengthened with additional funding and support.

- Broaden early elementary educational mandates for school readiness to include children’s emotional and behavioral adjustment as key programmatic goals. In our haste to increase children’s pre-literacy skills, for example, it is essential that we do not lose sight of the contributions that children’s emotional and behavioral adjustment makes to their chances for academic success.

- Consistently assess young children’s emotional adjustment, using psychometrically valid measures of both their emotional and behavioral competence and difficulty, in child care and early educational settings as well as during their transition through the first few years of elementary school.

It is clear from this review that much remains to be learned regarding the role of children’s emotional adjustment in predicting their likelihood of later academic success. Tracking children’s emotional adjustment along with children’s early academic progress will aid both researchers and policy professionals in answering key questions regarding the impact of improvements versus decrements in children’s emotional adjustment on their ability to do well, academically, over time.

- Support young children with interventions that span a range of programmatic intensity.

Low-cost, universal interventions may provide tangible benefits by in making preschool and early elementary classrooms more positive and less chaotic learning environments. However, review of the literature suggests that these benefits are best realized when children who are at gravest risk for negative emotional and academic problems are also provided with more intensive services,

implemented in both home and classroom contexts. A number of the innovative interventions reviewed earlier have successfully found ways to offer much-needed services to these children without stigmatizing them or losing the support of important stakeholders such as parents and teachers. Therefore, leaders are strongly encouraged to support the provision of both low-intensity, universal programs and higher-intensity supports for the families who have been identified as needing these services most. These models deserve broader implementation, with carefully designed evaluations that test whether there are significant emotional, behavioral, and academic gains for both the intervention participants and for the classrooms in which these children are enrolled.

*Improvements in family income, neighborhood safety, and residential stability may have important and significant effects on children’s emotional and behavioral well-being.*

- Pay close attention to issues of quality assurance and attrition when investing in young children’s emotional adjustment and school adjustment by implementing innovative interventions.

It is key that researchers, evaluators, and practitioners maximize programs’ chances of success by making sure that the most stressed families who may show the most substantial gains are identified, enrolled and complete the program. The quality of services that are offered must remain consistent and well-documented across the “life” of the program’s implementation if both intervention successes and difficulties are to be clearly and carefully understood.

- A small proportion of young children will need integrated, comprehensive services available to multiple members of their families in order for gains in children’s school readiness to be realized.

Multiple agencies serving young children must be provided with the support needed to work collaboratively. Teachers in Head Start, pre-Kindergarten, Kindergarten, and elementary classrooms deserve professional support by being given training and better access to clinical service referral for young children and their families. This level of clinical consultation and support will help teachers focus more effectively on the job of teaching, while also helping young children who manifest clinically elevated levels of emotional and behavioral difficulty get the services that they need (Fantuzzo et al, 2001). While models of “systems of care” have begun to be built among juvenile justice, child welfare, public health and mental health systems of service delivery for older children (Holder, Friedman, & Santiago, 2001), these services are sorely needed for younger children (Yoshikawa & Knitzer, 1997).

A second set of recommendations can be directed to intervention-oriented funders, policy makers, and investigators in other areas of child welfare, family support, and economic self-sufficiency, as well as in education. Specifically, researchers and policy professionals in these other areas are urged to consider improvements in young children’s emotional development as worthy targets of intervention and as key benchmarks of programmatic success. The second major conclusion that can be drawn from research reviewed earlier is that we have considerably more to learn about the course of young children’s emotional development, particularly in the context of large-scale interventions of all kinds. In the past, investigators have been reticent to include measures of children’s emotional development, arguing that there were few robust, reliable and valid measures, and that many were difficult to use (for review, see Raver & Zigler, 1997). That has since changed: a wide range of excellent

assessment tools is now available with which to assess young children’s emotional and behavioral skills (Fantuzzo, Manz & McDermott, 1998; Fantuzzo, Coolahan, Mendez, McDermott, & Sutton-Smith, 1998; Raver & Zigler, 1997).

A third set of recommendations is also clear and is addressed to both policy audiences: Without economic security, many families and children will be hard pressed to be emotionally healthy, well-regulated and ready for school. We must make sure that Welfare Reform and school readiness objectives and programs work together, rather than at odds with one another. One major concern with Welfare Reform efforts in the late 1990’s was that low-income mothers’ entry into the workforce would be paralleled by increases in mothers’ levels of stress, use of detrimental parenting strategies, and corresponding decrements in children’s emotional well-being. It appears from recent review of results across multiple demonstration projects that employment mandates, paired with incentives, have not had the deleterious effects on young children’s emotional well-being that some had feared (Huston et al, 2001; Morris, et al., 2000; Yoshikawa, 1999). Just as school readiness programs need to be mindful of Welfare Reform demands that families face, so too can Welfare Reform efforts benefit from substantive attention to parental and child psychological and emotional health.

### Notes

<sup>1</sup> Estimates of effect size provide a standardized way to evaluate the magnitude of the impact of a particular intervention on a given child outcome. While omnibus tests of significance (e.g. F or t statistics and their p values) inform the reader of a significant difference between control and intervention groups on a given outcome, effect size estimates inform the reader about how large or small that difference is. For example, consider a hypothetical classroom intervention designed to increase children’s ability to work prosocially with peers: An effect size of .1 would, in most cases, be considered modest, in that a treatment with a .1 effect size would be associated with an increase of 1/10 of a standard deviation in their ability to work with their peers. In contrast, an effect size of .5 would suggest that the treatment is associated with an improvement of a full ½ of a standard deviation in children’s ability to work with their peers. For a more comprehensive discussion of ways to calculate effect size estimates, the practical importance of findings based on considerations of effect size, and different ways of interpreting the meaning of small and large effects, see McCartney & Rosenthal, 2000.

## Acknowledgements

Support for this research was provided by the National Center for Children in Poverty, Mailman School of Public Health, Columbia University, the McCormick-Tribune Foundation, and a Faculty Scholars Award from the William T. Grant Foundation. Many thanks to J. Lawrence Aber, David H. Arnold, Greg J. Duncan, Pamela Garner, Elizabeth Gershoff, Jacqueline D. Goldsby, Jane Knitzer, Ross Thompson, and Hirokazu Yoshikawa for their invaluable comments on previous drafts.

## References

- Aber, J. L., Jones, S. & Cohen, J. (2000). The impact of poverty on the mental health and development of very young children. In C. H. Zeanah (Ed), *Handbook of Infant Mental Health*, 2<sup>nd</sup> Edition. New York: Guilford Press, pp. 113-128.
- Ackerman, B. P., Izard, C. E., Schoff, K., Youngstrom, E. A., and Kogos, J. (2000). Contextual risk, caregiver emotionality, and the problem behaviors of 6- and 7-year-old children from economically disadvantaged families. *Child Development*, 70, 236-248.
- Alexander, K. L., Entwisle, D. R., & Dauber, S. L. (1993). First grade classroom behavior: Its short and long-term consequences for school performance. *Child Development*, 64, 801-814.
- Arnold, D. H., Ortiz, C., Curry, J. C., Stowe, R. M., Goldstein, N. E., Fisher, P. H., Zeljoja A., & Yershova, K. (1999). Promoting academic success and preventing disruptive behavior disorders through community partnership. *Journal of Community Psychology*, 5, 589-598.
- Arnold, D. H., McWilliams, L. & Arnold, E. H. (1998). Teacher discipline and child misbehavior in day care: Untangling causality with correlational data. *Developmental Psychology*, 34, 276-287.
- Barnett, W. S. (1995). Long-term effects of early childhood programs on cognitive and school outcomes. *Future of Children*, 5, 25-50.
- Bennett, K. J., Lipman, E. L., Racine, Y. & Offord, D. R. (1998). Annotation: Do measures of externalizing behaviors in normal populations predict later outcome?: Implications for targeted interventions to prevent conduct disorder. *Journal of Child Psychology and Psychiatry*, 39, 1059-1070.
- Berndt, T. J. & Keefe, K. (1995) Friends' influence on adolescents' adjustment to school. *Child Development*, 66, 1312-1329.
- Birch, S. H. & Ladd, G. W. (1997). The teacher-child relationship and children's early school adjustment. *Journal of School Psychology*, 35, 61-79.
- Briggs-Cowan, M. J., Carter, A. S., Skuban, E. M., Horwitz, S. M. (2001). Prevalence of social-emotional and behavioral problems in a community sample of 1- and 2-year-old children. *Journal of American Academy of Child and Adolescent Psychiatry*, 40, 811-819.
- Bolger, K. E., Patterson, C. J., Thompson, W. W., & Kupersmidt, J. B. (1995). Psychosocial adjustment among children experiencing persistent and intermittent family economic hardship. *Child Development*, 66, 1107-1129.
- Brooks-Gunn, J., Berlin, L. & Fuligni, A. (2000). Early childhood intervention programs: What about the family? In J. Schonkoff & S. Meisels (Eds.) *Handbook of early childhood intervention* (2<sup>nd</sup> Edition). New York: Cambridge University Press.
- Brooks-Gunn, J., Duncan, G. & Aber, J. L. (1997). *Neighborhood poverty: Context and consequences for children*. New York: Russell Sage.
- Burchinal, M. R., Roberts, J. E., Riggins, R., Zeisel, S. A., Neebe, E. & Bryant, D. (2000). Relating quality of center-based child care to early cognitive and language development longitudinally. *Child Development*, 71, 339-357.
- Campbell, S. B., Shaw, D. S., & Gilliom, M. (2000). Early externalizing behavior problems: Toddlers and preschoolers at risk for later maladjustment. *Development and Psychopathology*, 12, 467-488.
- Chase-Lansdale, L. & Brooks-Gunn, J. (1995). *Escape from poverty: What makes a difference for children?* New York: Cambridge University Press.
- Cohen, E. & Kaufmann, R. (2000). *Early childhood mental health consultation*. Washington D. C.: Center for Mental Health Services, SAMHSA, US Department of Health and Human Services.
- Coie, J. D., Lochman, J., Terry, R. & Hyman, C. (1992). Predicting early adolescent disorder from childhood aggression and peer rejection. *Journal of Consulting and Clinical Psychology*, 60, 783-792.
- Conduct Problems Prevention Research Group (1999). Initial impact of the Fast Track Prevention Trial for Conduct Problems: I. The high-risk sample. *Journal of Consulting and Clinical Psychology*, 67, 631-647.
- Conduct Problem's Prevention Research Group (1999). Initial impact of the Fast Track Prevention Trial for Conduct Problems:II Classroom effects. *Journal of Consulting and Clinical Psychology*, 67, 648-657.
- Coolahan, K., Fantuzzo, J. & Mendez, J. (2000). Preschool peer interaction and readiness to learn: Relations between classroom peer play and learning behavior and conduct. *Journal of Educational Psychology*, 92, 458-465.
- Corcoran, J. (2000). Family interventions with child physical abuse and neglect: A critical review. *Children and Youth Services Review*, 22, 563-591.
- Crick, N. R. & Dodge, K. A. (1994). A review and reformulation of social-information-processing mechanisms in children's social adjustment. *Psychological Bulletin*, 115, 74-101.
- Cummings, E.M. & Davies, P. (1994). *Children and marital conflict: The impact of family dispute and resolution*. Guilford series on social and emotional development. New York, NY, USA: The Guilford Press.
- Danziger, S., Corcoran, M., Danziger, S. Heflin, C., Kalil, A., Levine, J., Rosen, D., Seefeldt, K., Siefert, K. & Tolman, R. (1999). Barriers to the employment of welfare recipients. Paper presented at the Harvard University Inequality Summer Institute. Cambridge, MA.
- Deater-Deckard, K. & Dodge, K. A. (1997). Externalizing problems and discipline revisited: Nonlinear effects and variation by culture, context and gender. *Psychological Inquiry*, 8, 161-175.
- Deater-Deckard, K., Dodge, K. A., Bates, J., Pettit, G. (1998). Multiple risk factors in the development of externalizing behavior problems: Group and individual differences. *Development and Psychopathology*, 10, 469-493.
- Denham, S. A. & Burton, R. (1996). A social-emotional intervention for at-risk 4-year-olds. *Journal of School Psychology*, 34, 3, 225-245.
- Denham, S. A., Workman, E., Cole, P. M., Weissbrod, C., Kendziora, K. T., & Zahn-Waxler, C. (2000). Prediction of externalizing behavior problems from early to middle childhood: The role of parental socialization and emotion expression. *Development and Psychopathology*, 12, 23-45.
- Dickstein, S., Seifer, R., Hayden, L., Schiller, M., Sameroff, A.J., Keitner, G., Miller, I., Rasmussen, S., Matzko, M., & Dodge-Magee, K. (1998). Levels of family assessment II: Impact of maternal psychopathology of family functioning. *Journal of Family Psychology*, 12, 23-40
- Dodge, K. A. & Feldman, E. (1990). Issues in social cognition and sociometric status. In S. A. Asher and J. D. Coie (Eds). *Peer rejection in childhood*. (pp. 119-154) NY: Cambridge University Press.
- Dodge, K. A., Pettit, G. S. & Bates, J. E. (1994). Socialization mediators of the relations between socioeconomic status and child conduct problems. *Child Development*, 65, 649-660.
- Duncan, G. J. & Brooks-Gunn, J. (2000). Family poverty, Welfare Reform and child development. *Child Development*, 71, 188-196.
- Duncan, G.J., Brooks-Gunn, J., & Klebanov, P.K. (1994). Economic deprivation and early childhood development. *Child Development*, 65, 296-318.
- Duncan, G. J., Yeung, W. J., Brooks-Gunn, J. & Smith, J. R. (1998). How much does childhood poverty affect the life chances of children? *American Sociological Review*, 63, 406-423.
- Eddy, J. M., Reid, J. B. & Fetrow, R. A. (2000). An elementary school-based prevention program targeting modifiable antecedents of youth delinquency and violence: Linking the Interests of Families and Teachers (LIFT). *Journal of Emotional and Behavioral Disorders*, 8, 165-176.
- Eisenberg, N. & Fabes, R.A. (1992). Emotion, regulation, and the development of social competence. In Clark, Margaret S. (Ed) et al., *Emotion and social behavior*. Review of personality and social psychology, Vol.14. (pp. 119-150). Newbury Park, CA, USA: Sage Publications.
- Eisenberg, N., Cumberland, A. & Spinrad, T. L. (1998). Parental socialization of emotion. *Psychological Inquiry*, 9, 241-273.
- Fantuzzo, J., Coolahan, K., Mendez, McDermott, P., & Sutton-Smith, B. (1998). Contextually-relevant validation of peer play constructs with African American children. *Journal of Applied Developmental Psychology*, 19, 101-115.
- Fantuzzo, J., Mendez, J., McElroy, H., Balraj, V., Turner, L., & Sutton-Smith, B. (2000). The process of socialization of behavior problems in young children. *Journal of Applied Developmental Psychology*, 21, 101-115.
- Foster, E. M., & Yang, S. (2000). The role of family structure in the development of emotional and behavioral problems. *Journal of Emotional and Behavioral Disorders*, 8, 165-176.

Frey, K. S., Hirshstein, M. K., & Guzzo, B. A. (2000). Second Step: Preventing aggression by promoting social competence. *Journal of Emotional and Behavioral Disorders*, 8, 102-112.

Garcia Coll, C. T, Meyer, E. C., Brillion, L. (1995). Ethnic and minority parenting. M. H. Bornstein, et al. (Eds). *Handbook of parenting, Vol. 2: Biology and ecology of parenting*. (pp. 189-209). Mahwah, NJ, USA: Lawrence Erlbaum Associates, Inc.

Garner, P.W., Jones, D. C., Gaddy, G. & Rennie, K. M. (1997) Low-income mothers' conversations about emotions and their children's emotional competence. *Social Development*, 6, 37-52.

Garner, P. W. & Spears, F. M. (2000). Emotion regulation in low-income preschoolers. *Social Development*, 9, 246-264.

Gilliam, W. S. & Zigler, E. F. (2001). A critical meta-analysis of all evaluations of state-funded preschool from 1977 to 1998: Implications for policy, service delivery and program evaluation. *Early Childhood Research Quarterly*, 15, 441-474.

Gomby, D. S., Culross, P. L., & Behrman, R. E. (1999). Home visiting: Recent program evaluations – Analysis and recommendations. *The Future of Children*, 9, 4-26.

Gottman, J. M., Katz, L. F., & Hooven, C. (1996). Parental meta-emotion philosophy and the emotional life of families: Theoretical models and preliminary data. *Journal of Family Psychology*, 10, 243-268.

Goodston, B. D., Layzer, J. I., St. Pierre, R. G., Bernstein, L. S., & Lopez, M. (2000). Effectiveness of a comprehensive, five-year family support program for low-income children and their families: Findings from the Comprehensive Child Development Program. *Early Childhood Research Quarterly*, 15, 5-39.

Greenberg, M T., Domitrovitch, C., & Bumbarger, B. (1999). Preventing mental disorder in school-aged children: A review of the effectiveness of prevention programs. A report submitted to the Center for Mental Health Services, Substance Abuse Mental Health Services Administration, U.S. Department of Health and Human Services.

Greenberg, M. T., Lengua, L. J., Coie, J. D., Pinderhughes, E. E., Bierman, K., Dodge, K. A, Lochman, J. E., & McMahon, R. J. (1999) Predicting developmental outcomes at school entry using a multiple-risk model: Four American communities. *Developmental Psychology*, 35, 403-417.

Grella, C. E. (1996). Background and overview of mental health and substance abuse treatment systems: Meeting the needs of women who are pregnant or parenting. *Journal of Psychoactive Drugs*, 28, 319-343.

Gyamfi, P., Brooks-Gunn, J. & Jackson, A. O. (2001). Associations between employment, and financial and parental stress in low-income single Black mothers. *Women and Health*, 32.

Hagekull, B. & Bohlin, G. (1995). Day care quality, family and child characteristics, and socioemotional development. *Early Childhood Research Quarterly*, 10, 505-526.

Hamre, B. K. & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through Eighth grade. *Child Development*, 72, 625-638.

Henggeler, S.W.(1999). Multisystemic therapy: An overview of clinical procedures, outcomes, and policy implications. *Child Psychology & Psychiatry Review*, 4, 2-10.

Hinshaw, S. P. (1992). Externalizing behavior problems and academic underachievement in childhood and adolescence: Causal relationships and underlying mechanisms. *Psychological Bulletin*, 111, 127-155.

Huston, A. C., Duncan, G. J., Granger, R., Bos, J., McLoyd, V., Mistry, R., Crosby, D., Gibson, C., Magnuson, K., Romich, J., & Ventura, A. (2001). Work-based antipoverty programs for parents can enhance the school performance and social behavior of children. *Child Development*, 72, 318-336.

Hyson, M. C. (1994). *The emotional development of young children*. New York: Teachers College Press.

Ialongo, N., Poduska, J., Werthamer, L., & Kellam, S. (2001). The distal impact of two first-grade preventive interventions on conduct problems and disorder in early adolescence. *Journal of Emotional and Behavioral Disorders*, 9, 146-161.

Jimerson, S., Egeland, B., Sroufe, A., & Carlson, B. (2000). A prospective longitudinal study of high school dropouts and their predictors. *Journal of School Psychology*, 38, 1-15.

Katz, J., & Gottman, J. M. (1996). The relationship between marital quality in the home and children's behavior in school. *Journal of Family Psychology*, 10, 243-268.

Kazdin, S. L. (1994). Treatment of conduct problems in children. *Psychological Bulletin*, 115, 1-28.

Kazdin, S. L., & Henggeler, S. W. (1999). The effectiveness of multisystemic therapy in the treatment of conduct problems in children. *Journal of Emotional and Behavioral Disorders*, 7, 2-10.

Knitzer, J., Cauthen, N. K., & Kisker, E. (1999). Enhancing the well-being of young children and families in the context of welfare reform. Washington DC: Office of the Assistant Secretary for Planning and Evaluation, US Department of Health and Human Services.

Knitzer, J., Yoshikawa, H., Cauthen, N. K., & Aber, J. L. (2000). Welfare reform, family support, and child development: Perspectives from policy analysis and developmental psychopathology. *Development and Psychopathology*, 12, 619-632.

Kochanska, G. & Akshan, N. (1995). Mother-child mutually positive affect, the quality of child compliance to requests and prohibitions, and maternal control as correlates of early internalization. *Child Development*, 66, 236-254.

Kopp, C. (1989). Regulation of distress and negative emotions: A developmental perspective. *Developmental Psychology*, 25, 343-354.

Kupersmidt, J. B., Bryant, D., & Willoughby, M. (2000). Prevalence of aggressive behaviors among preschoolers in Head Start and community child care programs. *Behavioral Disorders*, 26, 42-52.

Kupersmidt, J. B. & Coie, J. D. (1990). Preadolescent peer status, aggression, and school adjustment as predictors of externalizing problems in adolescence. *Child Development*, 61, 1350-1362.

Ladd, G. W. (1990). Having friends, keeping friends, making friends and being liked by peers in the classroom: Predictors of children's early school adjustment? *Child Development*, 61, 1081-1100.

Ladd, G. W., Birch, S. H. & Buhs, E. S. (1999). Children's social and scholastic lives in kindergarten: Related spheres of influence? *Child Development*, 70, 1373-1400.

Ladd, G. W., Kochenderfer, B. J. & Coleman, C. (1997). Classroom peer acceptance, friendship and victimization: Distinct relational systems that contribute uniquely to children's school adjustment. *Child Development*, 68, 1181-1197.

Lamb-Parker, F., Piotrowski, C. S., Baker, J. L., Kessler-Sklar, S., Clark, B. & Peay, L. (2001). Understanding barriers to parent involvement in Head Start: A research community partnership. *Early Childhood Research Quarterly*, 16, 35-51.

Lara, S. L., McCabe, L. A. & Brooks-Gunn, J. (2000). From horizontal to vertical management styles: A qualitative look at Head Start staff strategies for addressing behavior problems. *Early Education and Development*, 11, 283-306.

Lemerise, E. A. & Arsenio, W. F. (2000). An integrated model of emotional processes and cognition in social information processing. *Child Development*, 71, 107-118.

Lennon, M. C., Bloome, J. & English, K. (2001). Depression and low-income women: Challenges for TANF and welfare-to-work policies and programs. New York: National Center for Children in Poverty.

Lester, B. M., Boukydis, C. F. Z. & Twomey, J. E. (2000). Maternal substance abuse and child outcome. In C. H. Zeanah (Ed.), *Handbook of Infant Mental Health (2nd Edition)*, New York: Guilford Press, pp. 161-175.

Liaw, F., Meisels, S. J. & Brooks-Gunn, J. (1995). The effects of experience of early intervention on low birth weight, premature children: the Infant Health and Development Program. *Early Childhood Research Quarterly*, 10, 405-431.

Lochman, J. E. and the Conduct Problems Prevention Research Group (1995). Screening for child behavior problems for prevention programs at school entry. *Journal of Consulting and Clinical Psychology*, 63, 549-559.

Loeber, R., Keenan, K. & Zhang, Q. (1997). Boys' experimentation and persistence in developmental pathways toward serious delinquency. *Journal of Child and Family Studies*, 6, 321-357.

Mayer, S. E. (1997). *What money can't buy. Family income and children's life chances*. Cambridge, MA: Harvard University Press.

McCartney, K. & Rosenthal, R. (2000). Effect size, practical importance and social policy for children. *Child Development*, 71, 173-180.

McEvoy, A. & Welker, R. (2000). Antisocial behavior, academic failure and school climate: A critical review. *Journal of Emotional and Behavioral Disorders*, 8, 130-140.

McLelland, M. M., Morrison, F. J., & Holmes, D. L. (2000). Children at risk for early academic problems: The role of learning disabilities. *Journal of Emotional and Behavioral Disorders*, 8, 141-150.

Miller, M. E., & Lerner, R. M. (1993). The role of family in the development of children's social competence. *Journal of Family Psychology*, 7, 1-15.

Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review*, 100, 175-199.

Morrison, F. J., & Lerner, R. M. (1997). The role of family in the development of children's social competence. *Journal of Family Psychology*, 11, 1-15.

Morrison, F. J., & Lerner, R. M. (1998). The role of family in the development of children's social competence. *Journal of Family Psychology*, 12, 1-15.

Morrison, F. J., & Lerner, R. M. (1999). The role of family in the development of children's social competence. *Journal of Family Psychology*, 13, 1-15.

Morrison, F. J., & Lerner, R. M. (2000). The role of family in the development of children's social competence. *Journal of Family Psychology*, 14, 1-15.



## About the Authors

**C. Cybele Raver** is an associate professor in the Irving B. Harris Graduate School of Public Policy Studies at the University of Chicago. She also serves as a faculty affiliate at the University's Center for Human Potential and Public Policy. Raver conducts research on predictors of optimal parenting and of young children's emotional development in the context of socioeconomic disadvantage. She is particularly interested in examining developmental models of child and family well-being within policy contexts such as Welfare Reform and early educational intervention. Her work is currently supported by a William T. Grant Foundation Faculty Scholars Award and the McCormick-Tribune Foundation.

**Carroll Izard** is Trustees Distinguished Professor of Psychology at the University of Delaware. He studies emotions, emotional development, and the translation of emotion theory and research into preventive interventions. Currently, he focuses on the development of emotion knowledge and emotion regulation in Head Start children and ways of utilizing emotions to enhance individual and social functioning and prevent mental health problems.

**Claire B. Kopp** is a developmental psychologist. Her primary research interests relate to social and emotion development in young children, with special emphasis on self-regulation and emotion regulation. She has been past editor of the SRCD Newsletter.

## Purpose

*Social Policy Report* (ISSN 1075-7031) is published four times a year by the Society for Research in Child Development. Its purpose is twofold: (1) to provide policymakers with objective reviews of research findings on topics of current national interest, and (2) to inform the SRCD membership about current policy issues relating to children and about the state of relevant research.

### Content

The *Report* provides a forum for scholarly reviews and discussions of developmental research and its implications for policies affecting children. The Society recognizes that few policy issues are noncontroversial, that authors may well have a "point of view," but the *Report* is not intended to be a vehicle for authors to advocate particular positions on issues. Presentations should be balanced, accurate, and inclusive. The publication nonetheless includes the disclaimer that the views expressed do not necessarily reflect those of the Society or the editors.

*Social Policy Report* is a quarterly publication of the Society for Research in Child Development. The *Report* provides a forum for scholarly reviews and discussions of developmental research and its implications for the policies affecting children. Copyright of the articles published in the *Report* is maintained by SRCD. Statements appearing in the *Report* are the views of the author(s) and do not imply endorsement by the Editors or by SRCD.

Electronic access to the *Social Policy Report* is available at the *Report's* website:  
<http://www.srcd.org/spr.html>

Subscriptions available at \$20.00 to nonmembers of SRCD, single issues at \$5.00, and multiple copies at reduced rates. Write SRCD Executive Office below or phone (734) 998-6578.

**SRCD Executive Office  
University of Michigan  
505 East Huron, Suite 301  
Ann Arbor, MI 48104-1567**

*Social Policy Report*

---