

June 4, 2015

# Virginia's Preschool Expansion Grant (VPI+) Program Evaluation - Redacted

In response to RFP No. DOE-VPEG-2015-10  
SRI Education Proposal No. EDD 15-096

## Technical Proposal

*Prepared for*

Marie G. Williams  
Contract/Purchase Officer  
Commonwealth of Virginia  
Department of Education  
James Monroe Building  
101 N. 14th Street  
Richmond, VA 23219  
21st Floor, Procurement Office  
804-225-2040  
marie.williams@doe.virginia.gov

## Offeror Information

*Main Office*

SRI International  
333 Ravenswood Avenue  
Menlo Park, CA 94025-3493  
Phone: 650-859-2000

*Washington, D.C. Office*

SRI International  
1100 Wilson Blvd., Suite 2800  
Arlington, VA 22209-3915  
Phone: 703-524-2053

*Contractual*

Theresa Runkle  
Contracts Manager  
SRI Education  
Phone: 650-859-4385  
Fax: 650-859-3387  
Email: [theresa.runkle@sri.com](mailto:theresa.runkle@sri.com)

*Technical*

Erika Gaylor, Ph.D.  
Sr. Early Childhood Researcher  
SRI Education  
Phone: 650-580-5933  
Fax: 650-859-5258  
Email: [erika.gaylor@sri.com](mailto:erika.gaylor@sri.com)

Shari Golan, Ph.D.  
Center Director  
SRI Education  
Phone: 650-859-4007  
Fax: 650-859-5258  
Email: [shari.golan@sri.com](mailto:shari.golan@sri.com)

## Approved by

Theresa Runkle, Contracts Manager

This proposal may include data that shall not be duplicated, used, or disclosed—in whole or in part—for any purpose other than to evaluate this proposal. If, however, a contract is awarded to SRI International as a result of—or in connection with—the submission of these data, Commonwealth of Virginia Department of Education (the Department) shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Department's right to use information contained in this proposal if it is obtained from another source without restriction. Any data subject to this restriction are indicated in this volume. SRI International is a registered trademark and SRI Education is a trademark of SRI International.



**Tab 1**  
**Table of Contents**



## Table of Contents

Tab 1	Table of Contents .....	1-1
Tab 2	RFP cover sheet and all addenda acknowledgments	
	Addendum No. 1	
	Addendum No. 2	
	Addendum No. 3	
Tab 3	Explanation of Proprietary Information.....	3-1
Tab 4	Offeror’s acceptance of RFP General and Special Terms and Conditions (reference Sections IX and X).....	4-1
Tab 5	Statement of Needs .....	5A-1
	Attachment A .....	5A-1
	PART A .....	5A-1
	1. Logic Model or Theory of Action.....	5A-1
	2. Formative Feedback on Ways to Strengthen the VPI+ Support System and Local Implementation of a High Quality Preschool Program.....	5A-3
	3. Summative Evaluation of the Impact of VPI+ on Children’s School Readiness .....	5A-6
	a. [describes research questions and methods] .....	5A-6
	b. [describes use of PALS as the literacy assessment].....	5A-9
	c. [describes use of additional summative assessments].....	5A-9
	d. [describes rigor and rationale of the evaluation approach] .....	5A-12
	4. Cost-effectiveness Analysis of the VPI+ Program .....	5A-13
	5. Data Products and Reporting .....	5A-17
	a. [describes rapid access by school staff to summative results] .....	5A-17
	b. [describes VDOE and VPI+ implementation team access to results]...	5A-17
	c. [describes required reports and their dissemination] .....	5A-18
	d. [describes sharing evaluation plan with VPI+ implementation team]..	5A-20
	6. Evaluation Advisory Board.....	5A-20
	a. [describes EAB member selection process] .....	5A-20
	b. [describes recommended composition for the EAB] .....	5A-20
	c. [describes role of the EAB for informing the evaluation].....	5A-21
	7. Advisory Role to the VDOE and the VPI+ Implementation Team .....	5A-21
	a. [describes partnership and feedback from the evaluation].....	5A-21

b. [describes consultation on data collection, use, and reporting] .....	5A-21
8. Data Collection and Analysis.....	5A-22
a. [describes data collection and analysis approaches] .....	5A-23
9. Data Security.....	5A-24
10. Compliance with Code of Virginia § 22.1-296.1 .....	5A-24
11. Disaggregated results for different groups within the program .....	5A-25
12. Implementation Plan .....	5A-25
PART B.....	5A-25
Appendix A-1 Preliminary Advisory Board Members.....	5A1-1
Appendix A-2 Proposed Data Elements To Be Requested.....	5A2-1
Attachment B – Response Template for Data Security .....	5B-1
Attachment C – Response Template for Implementation Plan.....	5C-1
1. Implementation Process and Tasks .....	5C-1
2. Map of Data Collection to Evaluation Components .....	5C-9
3. Implementation Plan .....	5C-13
Attachment D –Cover Sheet for Writing Samples.....	5D-1
a. Sample from a Final Report .....	5D-2
b. Sample from a Project Summary .....	5D-12
c. Sample of a Communication to a Non-Technical Audience.....	5D-14
d. Sample of Results of a Cost-Effectiveness Analysis .....	5D-18
Tab 6 Attachment E – Response Template for Offeror Capacity .....	6E-1
1. [describes corporate experience conducting similar evaluations] .....	6E-1
2. [describes financial and management experience] .....	6E-23
3. [describes office locations and accessibility to VPI+ implementation team] ....	6E-24
4. [describes qualifications of key staff members] .....	6E-24
5. [describes staff experience and expertise with] .....	6E-30
a. [multi-site, multi-method evaluations].....	6E-30
b. [rigorous methods] .....	6E-32
c. [formative data collection and feedback] .....	6E-33
d. [reporting to diverse audiences].....	6E-34
e. [peer reviewed publishing].....	6E-36
f. [serving as a trusted, objective partner].....	6E-37
6. [describes evaluation team’s organizational structures and processes] .....	6E-39

7. Resumes for Key Personnel and Letter of Commitment .....6E-41

Tab 7 References for Similar Evaluation Services ..... 7-1

Tab 8 Business Volume

Attachment F- Pricing Template..... 8F-1

Attachment G- Small Business Subcontracting Plan..... 8G-1

Attachment H- State Corporation Commission Form ..... 8H-1

Tab 9 Additional Materials

Bibliography ..... 9-1



**Tab 2**

**RFP Cover Sheet and All Addenda**



**COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF EDUCATION  
REQUEST FOR PROPOSAL (RFP)**

Issue Date: May 8, 2015 RFP# DOE-VPEG-2015-10  
Title: Virginia's Preschool Expansion Grant (VPI+) Program Evaluation  
Commodity Code: 92405, 91838, 91858  
Issuing Agency: Commonwealth of Virginia  
Department of Education  
101 North 14<sup>th</sup> Street  
Richmond, Virginia 23219

Using Agency And/Or Location  
Where Work Will Be Performed: Virginia Public School Divisions

Initial Period Of Contract: From Date of Contract Award Through June 30, 2017 (renewable).

Sealed Proposals Will Be Received Until **June 8, 2015, at 2:00 P.M.** For Furnishing The Goods/Services Described Herein. No proposal shall be accepted after this deadline unless the due date has been previously changed by an Addendum.

All Inquiries For Information Should Be Directed To: Marie Williams Via E-mail marie.williams@doe.virginia.gov by 5:00 P.M. June 1, 2015.

PROPOSALS MUST BE DELIVERED TO THE DEPARTMENT OF EDUCATION, JAMES MONROE BUILDING, 101 N. 14<sup>TH</sup> STREET, RICHMOND, VA, 23219, 21<sup>ST</sup> FLOOR, PROCUREMENT OFFICE, TO THE ATTENTION OF: Marie Williams (See Section X, #7. Identification of Proposal Envelope.) This is NOT a mailing address. It is recommended that proposals be hand delivered or express delivered in advance of the due date and time set for receipt of proposals.

In compliance with this Request For Proposals (RFP) and all conditions imposed in this RFP, the undersigned firm hereby offers and agrees to furnish all goods and services in accordance with the attached signed proposal or as mutually agreed upon by subsequent negotiation, and the undersigned firm hereby certifies that all information provided below and in any schedule attached hereto is true, correct, and complete.

\* Virginia Contractor License No. F0195794 \* DSBSD-certified Small Business No. \_\_\_\_\_  
Class: \_\_\_\_\_ Specialty Codes: \_\_\_\_\_

Name And Address Of Firm:

SRI International  
333 Ravenswood Avenue  
Menlo Park  
California Zip Code: 94025  
eVA Vendor ID or DUNS #: VC0000162404  
Fax Number: (650) 859-3387  
E-mail Address: theresa.runkle@sri.com

Date: June 3, 2015  
By:   
(Signature In Ink)  
Name: Theresa E. Runkle  
(Please Print)  
Title: Contracts Manager  
Telephone Number: (650) 859-4385

**PREPROPOSAL CONFERENCE:** An optional proposal conference will be held at **11:00 A.M on May 21, 2015, in the Wilson Conference Room on the 20th floor of the Monroe Building, located at 101 N. 14<sup>th</sup> Street, Richmond, VA 23219** (Reference: Section X, Paragraph 8 herein). If special ADA accommodations are needed, please contact Marie Williams at 804 225-2040 or marie.williams@doe.virginia.gov by 11:00 A.M on May 18, 2015.

**Note: This public body does not discriminate against faith-based organizations in accordance with the Code of Virginia, § 2.2-4343.1 or against a bidder or offeror because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment.**



May 11, 2015

ADDENDUM NO.1 TO ALL OFFERORS

Reference – Request for Proposal:	RFP #DOE-VPEG-2015-10
Commodity Code:	92405,91838, 91858 – Virginia’s Preschool Expansion Grant (VPI+) Program Evaluation
Dated:	January 28, 201May 8, 2015
For Delivery To:	Department of Education
Offer Due:	Until 2:00 PM, June 8, 2015
Pre-proposal Conference:	11:00 a.m., May 21, 2015

The above is hereby changed to read (for ease of reference, the highlighted text indicates the change):

1. Reference bottom of page 1, **PREPROPOSAL CONFERENCE, VII. PREPROPOSAL CONFERENCE**, first paragraph, add the following as the last sentence:

If the conference telephone number and access code to attend the proposal conference via telephone are needed, please contact Marie Williams at 804 225-2040 or marie.williams@doe.virginia.gov by 11:00 A.M. on May 18, 2015 for the information.

2. Reference **Section VII** (page 17) **PREPROPOSAL CONFERENCE**, 1<sup>st</sup> paragraph, add the following as the last sentence:

If the conference telephone number and access code to attend the proposal conference via telephone are needed, please contact Marie Williams at 804 225-2040 or marie.williams@doe.virginia.gov by 11:00 A.M. on May 18, 2015 for the information.

3. Reference **Section X. #6** (page 26) **IDENTIFICATION OF BID/PROPOSAL ENVELOPE**, change “Due Date” to read same as page 1 - “ June 8, 2015.”

Note: A signed acknowledgment of this addendum and attachment must be received at the location indicated on the RFP either prior to the proposal due date and hour or attached to your proposal. Signature on this addendum does not substitute for your signature on the original RFP document. The original RFP document must be signed.

Marie Williams, VCO  
Director of TCP, Procurement, & FA  
804-225-2040

SRI International  
Name of Firm

 /Contracts Manager  
Signature /Title

June 3, 2015  
Date



May 14, 2015

ADDENDUM NO.2 TO ALL OFFERORS

Reference – Request for Proposal:	RFP #DOE-VPEG-2015-10
Commodity Code:	92405, 91838, 91858 – Virginia’s Preschool Expansion Grant (VPI+) Program Evaluation
Dated:	May 8, 2015
For Delivery To:	Department of Education
Offer Due:	Until 2:00 PM, June 8, 2015
Pre-proposal Conference:	11:00 a.m., May 21, 2015

The above is hereby changed to read:

1. Reference bottom of page 1, PREPROPOSAL CONFERENCE, **VII. PREPROPOSAL CONFERENCE**, change “Wilson” to “Tyler” and “20<sup>th</sup>” to “21<sup>st</sup>”.
2. Reference page 17 **Section VII. PREPROPOSAL CONFERENCE**, 1<sup>st</sup> paragraph, change “Wilson” to “Tyler” and “20<sup>th</sup>” to “21<sup>st</sup>”.
3. Reference **Section II. BACKGROUND** (page 3), 1<sup>st</sup> paragraph, 1<sup>st</sup> sentence, change “2015” to “2014.”
4. Reference ADDENDUM NO.1 TO ALL OFFERORS, RFP information section, correct date listed beside “Dated” to correspond with date RFP was issued – “May 8, 2015.”

Note: A signed acknowledgment of this addendum and attachment must be received at the location indicated on the RFP either prior to the proposal due date and hour or attached to your proposal. Signature on this addendum does not substitute for your signature on the original RFP document. The original RFP document must be signed.

Marie Williams, VCO  
Director of TCP, Procurement, & FA  
804-225-2040

SRI International

\_\_\_\_\_  
Name of Firm

 Contracts Manager  
Signature /Title

June 3, 2015

\_\_\_\_\_  
Date



May 27, 2015

ADDENDUM NO.3 TO ALL OFFERORS

Reference – Request for Proposal:	RFP #DOE-VPEG-2015-10
Commodity Code:	92405, 91838, 91858 – Virginia’s Preschool Expansion Grant (VPI+) Program Evaluation
Dated:	May 8, 2015
For Delivery To:	Department of Education
Offer Due:	Until 2:00 PM, June 8, 2015
Pre-proposal Conference:	11:00 a.m., May 21, 2015

The above is hereby changed as follows:

1. Reference page 10, **Section IV. Statement of Needs**, second bullet in A.1: delete “and grade 3 achievement.”
2. Reference **Attachment D Cover Sheet for Writing Samples**: after “Provide” change “three” to “four.”

Note: A signed acknowledgment of this addendum and attachment must be received at the location indicated on the RFP either prior to the proposal due date and hour or attached to your proposal. Signature on this addendum does not substitute for your signature on the original RFP document. The original RFP document must be signed.

Marie Williams, VCO  
Director of TCP, Procurement, & FA  
804-225-2040

SRI International

\_\_\_\_\_  
Name of Firm

*Shirley E. Russell* / Contracts Manager  
Signature / Title

June 3, 2015

\_\_\_\_\_  
Date



**Tab 3**

**Explanation of Proprietary Information**



SRI International's proposal contains no proprietary data or materials.



**Tab 4**

**Offeror's Acceptance of RFP General and Special Terms and Conditions**



SRI accepts the General and Special Terms and Conditions of RFP# DOE-VPEG-2015-10.



**Tab 5**

**Statement of Needs (Attachments A–D)**



**Attachment A****Response Template for Requirements Set Out in RFP Section IV****Include this attachment and Appendices A-1 and A-2 in Tab 5 of your proposal.**

Describe proposed methods to meet the requirements as set forth in Section IV. Statement of Needs, including the impact evaluation, formative feedback, and cost effectiveness components. Through your description, and without compromising the quality and rigor of your methods, demonstrate your organization's ability to describe rigorous research methods and the rationale for these methods to professionals who are not researchers—to educators, social service providers, program administrators, and policymakers.

**PART A****1. Logic Model or Theory of Action**

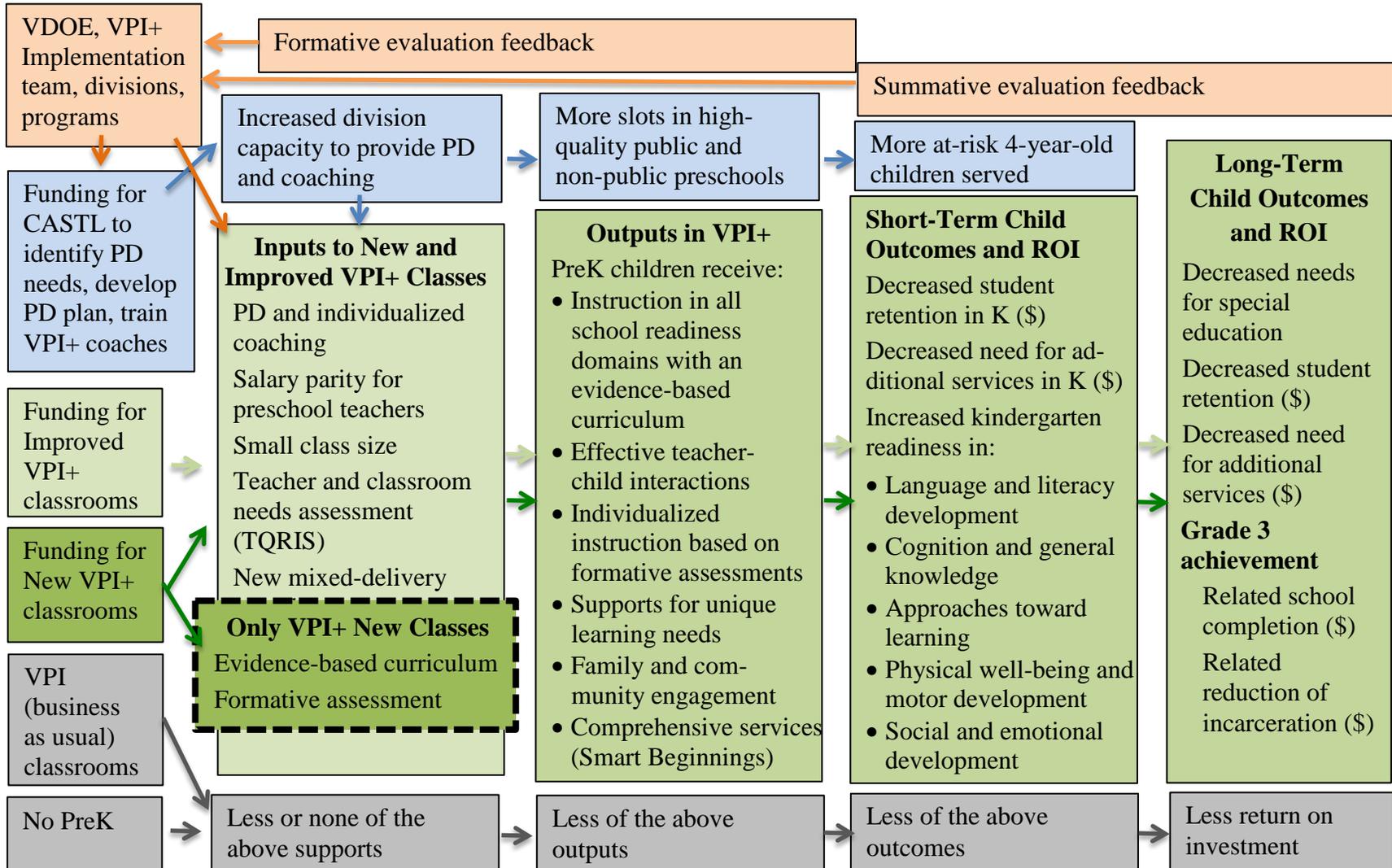
Describe the contractor's proposed logic model or theory of action to support regular communication of evaluation purpose and goals to diverse stakeholders. Describe through your logic model or theory of action how the evaluation will address the following areas of interest to VDOE:

- Barriers and facilitators to statewide VPI+ implementation;
- Non-test-based indicators of the impact of VPI+ on preschool children's kindergarten readiness such as student retention/promotion (kindergarten through grade three), need for additional services (e.g., being served in support programs such as Virginia's Early Intervention Reading Initiative; identified as having a learning disability upon entering kindergarten, identified as needing additional support for learning English), and grade three achievement;
- The impact of VPI+ above and beyond Virginia's current preschool initiative, VPI; and
- The return on investment of VPI+.

**Response A.1:** Given the multifaceted nature of VPI+, both the program and the evaluation will benefit from a logic model that unpacks how the program seeks to improve preschool access, quality, school readiness, and achievement. Exhibit A1 presents a draft logic model for communicating the inputs, outputs, short-term outcomes, long-term outcomes, and return on investment (ROI) expected from VPI+ for both new and existing classrooms. The model also presents the relationships between the model components and how differences are expected for VPI+ classrooms and their students (green boxes and arrows) compared with regular VPI classrooms and their students, and students who receive no preschool (gray boxes and arrows). The model begins with a list of factors that could act as barriers or facilitators to implementation, depending on their status. The logic model also depicts how VDOE's investment in the VPI+ professional development (PD) system (blue boxes and arrows) is expected to impact the quality of the VPI+ classrooms. The model distinguishes between the supports that VPI+ new and VPI+ improved classrooms will receive but focuses on similar types of outcomes for both classrooms, though levels of outcomes may differ given that new VPI+ classrooms receive more supports. The logic model also depicts the influence of the VPI+ implementation team, the divisions, and programs as they make implementation decisions and use feedback from the evaluation to refine their strategies (orange boxes and arrows). The evaluation team will refine the logic model together with VDOE, the VPI+ implementation team, and the evaluation advisory board.

**Exhibit A1. VPI+ Draft Logic Model**

**Barriers/facilitators to VPI+ implementation:** e.g., student mobility, teacher turnover, buy-in to new formative assessment and curriculum, budget changes, and availability of teachers who meet qualifications, existing PD coaches, and classroom space.



## 2. Formative Feedback on Ways to Strengthen the VPI+ Support System and Local Implementation of a High Quality Preschool Program

Describe *the planned research questions and methods* for providing formative feedback on ways to strengthen the VPI+ support system and local implementation of a High Quality Preschool Program, based on the definition of “formative feedback” provided in Section III. Include the *rationale* for selection of these questions and methods. Indicate in your response how you will address any of the following areas of interest in your research plan:

- The types and intensity of support that teachers receive from VPI+ coaches.
- The influence of teacher and administrator professional development activities, including variability in participation, activity types, and dosage.
- The local selection of curriculum and formative assessment (VDOE-selected or other).
- Local experience implementing preschool programs.
- Teacher and leader background, experience, and other qualifications.
- The role and influence of the needs assessment process on local program improvement activities. (The needs assessment shall include data from VSQI ratings in years 1 and 3 for new VPI+ classrooms.)
- The influence of support and services that CASTL will provide to school divisions and coaches.

**Response A.2:** VDOE is trying to address some of the most critical issues in the early learning field, including how to effectively support high-quality early learning environments in a mixed-delivery system, how to address the development and learning of the whole child across the five Essential Domains of School Readiness, and how to increase access for children most at risk but still maintain the high-quality elements predictive of positive child outcomes. A strong formative evaluation will have the potential to impact policy and decision making, and give the leaders at VDOE a large set of data, tools and resources they can use to make real-time adjustments and decisions in the VPI+ program. In accordance with the implementation science framework as operationalized by the National Implementation Research Network, we plan to collect information on implementation in the 11 school divisions to understand the development of the supports and the facilitators and barriers to full VPI+ implementation, including access; PD activities; local context and implementation choices; influences of these activities on enrollment, hiring, and classroom quality; and facilitators and barriers to implementation. As implementation continues, we will collect information about how the VPI+ unfolds and about the experiences of divisions, programs/schools, and staff. Finally, we will collect information on what processes are in place to sustain VPI+ at the end of the grant.

The draft formative **research questions** below are undergirded by the draft logic model and will be refined with VDOE and the VPI+ implementation team.

1. **Access:** To what extent are the number of preschool slots and number of at-risk children being served, overall and by public and non-public preschools, increasing? How many students are enrolled in these classrooms, overall and by race/ethnicity, home language, and special education status?
2. **State PD activities:** To what extent are VPI+ coaches and administrators receiving PD from CASTL to support implementation of an evidence-based curriculum, formative assessments to inform instruction, family engagement strategies, effective teacher-child interactions, and

other practices based on CASTL’s needs assessment? Do these supports meet the needs of division administrators and coaches?

3. **Local PD activities:** To what extent are VPI+ teachers receiving local coaching and PD to support implementation of an evidence-based curriculum, formative assessments to inform instruction, family engagement strategies, effective teacher-child interactions, and other practices based on CASTL’s needs assessment? Do these supports meet the needs of individual teachers?
4. **Classroom quality:** To what extent are VPI+ classrooms providing high-quality teacher and learning environments that address the five school readiness domains, use formative data to individualize instruction, and provide supports to the unique needs of learners? To what extent are the VPI+ classrooms providing comprehensive services and increasing their engagement with families and communities?
5. **Context and other influential factors:** What are the facilitators and barriers to successful implementation? What roles do local context, choices around curriculum and formative assessments, and the backgrounds, experiences, and qualifications of teachers and leaders have in implementation?
6. **Recommendations:** What additional supports do classrooms and programs need for successful implementation?

To answer these questions, we will use the formative evaluation methods mapped to the questions in Exhibit A2 and described below.

#### Exhibit A2. Formative Evaluation Methods, by Question

	Coaching logs	Teacher surveys	Division coordinator interview/surveys	Site visits	Extant and administrative data analysis
1. Access			✓		✓
2. State PD activities	✓		✓	✓	
3. Local PD activities	✓	✓		✓	
4. Classroom quality		✓			✓
5. Context and other influential factors		✓	✓	✓	
6. Recommendations	✓	✓	✓	✓	✓

**Coaching logs and PD observations.** To gather information about the type and intensity of PD and assistance offered by CASTL to local coaches and administrators, the evaluation will ask CASTL staff to keep a log of their PD and assistance sessions to capture dates, hours, participant information (division, school/program, type of program, role), and the content of the PD. The evaluation team will also observe up to four CASTL PD sessions with coaches and administrators per year. We will work with CASTL staff members to develop a log that minimizes burden on them by aligning it with their own program reporting needs. To learn about local coaching and PD activities, the evaluation will ask local coaches to fill out a scannable or

online coaching log throughout the school year. The log will capture content and intensity (hours) of coaching for individual VPI+ teachers and administrators.

**Teacher surveys.** The evaluation team will conduct an online survey with VPI+ and VPI teachers annually each spring to learn about their backgrounds, experiences, and qualifications; participation in PD and coaching; perceived usefulness of PD and coaching; their classroom practices, including use of certain curricula, formative assessments to inform instruction, and selected family and community engagement activities; buy-in for new curriculum and formative assessment; and access to and use of comprehensive services by their students.

**Division administrator phone interviews and surveys.** To gather basic program information, the evaluation team will conduct semistructured interviews and brief surveys twice a year with the division administrators responsible for coordinating their VPI+ classrooms. The interviews will be used for more open-ended questions and the short surveys for more categorical and quantitative types of information. The first round of interviews/surveys will gather information about each division's local experience implementing preschool programs; the leader's background, experiences, and qualifications; local choice of a curriculum and a formative assessment; the characteristics of programs (e.g., full-day, size, staffing, staff qualifications, public or private); and program budget information. Subsequent phone interviews/surveys will focus on accomplishments; the role and influence of CASTL's needs assessment; the types and usefulness of PD the administrators receive from CASTL; local program improvement activities; the structure and focus of teacher coaching; barriers and facilitators to the VPI+ work (e.g., availability of teachers and coaches who meet qualifications, availability of classroom space, buy-in to new formative assessment and curriculum, budget changes, and evaluation feedback); and updated staffing and budget information.

**Site visits.** In Years 2-4, after programs have had a chance to get going and implementation expectations are more clear, we will begin to visit all 11 divisions annually to interview a sample of school/program administrators, local coaches, and VPI+ teachers in both improved and new classrooms (we will use the CLASS/ECERS ratings from the VSQI to stratify new teachers based on high, medium, and low CLASS/ECERS ratings to understand whether coaching supports vary based on the needs of teachers). At each site visit, we will interview two program administrators, two coaches, four teachers of new classrooms, and two teachers of improved classrooms per division (or fewer if divisions have less than this number of staff). We will also try to interview teachers in both public and non-public programs, where possible.

**Extant and administrative data analysis.** The evaluation will request access to CLASS and ECERS data collected on VPI+ classrooms in Years 1 and 3 through the VSQI needs assessment so that we can conduct exploratory analyses on how patterns of PD and coaching (type, intensity, and participation) are related to changes in CLASS/ECERS scores over time. We will also triangulate CLASS/ECERS scores with teacher reports of classroom practices to provide recommendations for future PD and coaching efforts. The evaluation also will use administrative data from VDOE and divisions on VPI and VPI+ program characteristics, including type, costs, and services offered. The evaluation also will examine student enrollment/mobility data and teacher retention data to determine whether enrollment targets are being met and whether high student mobility or teacher turnover rates may be barriers to implementation. Finally, the evaluation team would be interested in analyzing student attendance data if available, given that research has shown that lower attendance in preschool programs is related to poorer outcomes.

Formative evaluation findings will describe state and local progress with VPI+, changes over time in stages and degrees of implementation, as well as key elements of capacity and infrastructure (i.e., implementation drivers, such as organization, leadership, and competency) that shift over time. Reports will capture these elements of implementation science and link them to specific recommendations about how the state can support program improvement. For each of the 11 school divisions, tailored formative evaluation reports will be prepared that include findings and recommendations particular to each division.

### 3. Summative Evaluation of the Impact of VPI+ on Children's School Readiness

- a. Describe the planned research questions and methods for conducting a summative evaluation of the impact of VPI+ on children's school readiness, based on the definition of "summative evaluation" provided in Section III, including results of summative assessments of the children and other measures of success in early elementary school. Include the *rationale* for selection of these questions and methods. Indicate in your response how you will address any of the following areas of interest in your research plan:
  - The extent to which different types of providers (e.g., public or private) influence student outcomes and program costs.
  - The extent to which it is practicable to provide valid results by school division, locale codes as defined by the National Center for Education Statistics (NCES), student or community race/ethnicity, English learner status, disability status, or other relevant factors that may be important for strengthening and sustaining the VPI+ program.

**Response A.3.a:** The VPI+ program holds great promise for improving children's school readiness and later academic outcomes. As shown in the logic model (Exhibit A1), access to high-quality preschool is expected to lead to positive child outcomes across Domains of School Readiness, as well as decreased student retention in kindergarten and decreased need for additional services in kindergarten, and to continue to lead to positive outcomes for years to come, including reduction in special education placement and other services and improved third-grade academic achievement. Finally, the model predicts that increased academic achievement leads to higher graduation rates and reduction in juvenile delinquency and crime rates as adults. In addition, VDOE is interested in whether the impact varies by implementation quality, by location, and by student demographic characteristics. Thus, we have developed research questions and an evaluation approach that will allow VDOE to answer these questions by using existing data, as well as new assessment data, on participating children and matched comparison groups.

For the purposes of the summative evaluation, our understanding is that the intervention includes VPI+ classrooms and participating children across four cohorts corresponding to the four years of grant funding. VPI+ classrooms include both new classrooms, which may be located primarily in school settings, and improved classrooms, which may be located in non-school settings, but how each school division decides to implement the new and improved classrooms will vary and depend on community need and feasibility.

Thus, we propose the following main **research questions** for the summative evaluation:

1. Do children who attend VPI+ classrooms (new and improved) have increased school readiness skills<sup>a</sup> compared with similar children who attend VPI classrooms (referred to as business as usual or BAU)? Do gains vary by child characteristics (e.g., race/ethnicity, English learners [EL], military-family connected) or program characteristics (e.g., private versus public, new versus improved)?
  - a. Do children who attend VPI+ classrooms use less additional services or have lower rates of retention in kindergarten compared with similar children who attend VPI BAU classrooms? Do reductions vary by child characteristics (e.g., race/ethnicity, EL, military-family connected) or program characteristics (e.g., private versus public, new versus improved)?
2. Do children who attend VPI+ classrooms (new and improved) have increased school readiness skills compared with similar children who did not attend any preschool program? Do gains vary by child characteristics (e.g., race/ethnicity, EL, military-family connected) or program characteristics (e.g., private versus public, new versus improved)?
  - a. Do children who attend VPI+ classrooms use less additional services or have lower rates of retention in kindergarten compared with similar children who did not attend any preschool program? Do reductions vary by child characteristics (e.g., race/ethnicity, EL, military-family connected) or program characteristics (e.g., private versus public, new versus improved)?
3. Do early gains associated with attending a VPI+ classroom predict later school and academic outcomes such as a continued reduction in grade retention and need for additional services and improved student achievement in third grade?
4. Does variation in implementation of high-quality classroom elements in VPI+ classrooms result in variation in outcomes and costs? For example, what is the impact of classrooms that implement all 12 high-quality elements on child outcomes, compared with the impact of classrooms that implement only some of the 12 elements?

To address the research questions and evaluate the impact of VPI+, we propose a quasi-experimental design (QED) using propensity score matching to identify a sample of similar VPI classrooms and children attending those classrooms. We propose collecting data on a second comparison group for each cohort that examines kindergarten outcomes in a sample of children who are in the same kindergarten classrooms as children from VPI+ classrooms but did not attend preschool at all. Essentially, we will follow the first two cohorts of VPI+ children through the 4-year project (cohort 1 will reach second grade and cohort 2 will reach first grade), with each cohort having these two comparison groups: VPI BAU, defined as attendance in existing VPI classrooms,<sup>b</sup> and a No PreK comparison group, identified through the existing database of children who did not attend any VPI or VPI+ classroom or any other formal preschool program,

---

<sup>a</sup> We will examine school readiness skills as a continuous score and also use the scores to measure whether children were performing at or above national norms on the five domains, if available.

<sup>b</sup> We assume that all or most of the 11 school divisions continue to have programs that are implementing the VPI preschool program and that samples of classrooms and children can be identified for cohorts 1 and 2 to serve as comparison groups.

including Head Start, Title I, or private community programs using VPI funds (see Exhibit A3) but are in the same kindergarten classrooms as VPI+ participants.

To create the comparison groups, for cohort 1, we will first identify a sample of children in VPI classrooms in fall 2015 and a sample of children in kindergarten classrooms in fall 2016 in the same 11 school divisions who match on the two enrollment criteria for VPI+: 4 years old on September 30 of the preschool year and household income at or below 200% of the federal poverty level. Then, we will use propensity score matching, or other matching methods as appropriate, to identify children who are statistically equivalent to the children in the VPI+ classrooms. Because many factors may account for why or how children came to be enrolled in VPI+ classrooms (i.e., it is not random assignment) versus VPI BAU classrooms, we propose to use propensity score matching techniques that will identify matched comparison groups using child-level data that pairs each VPI+ child participant with a comparison child on the basis of the conditional probability of participation in the VPI+ classroom given a set of observable characteristics. A propensity score will be derived from a logit regression where the probability that the child was a VPI+ participant is modeled by using data on observable demographic indicators of interest, which will include at a minimum the child's gender, race/ethnicity, EL status, and age, and any parent/family demographic information, if available (e.g., parent education). We believe this approach will work well for the VPI BAU comparison group and is the strongest design. We plan to identify eligible children for the comparison group prior to fall 2015 for cohort 1 and prior to fall 2016 for cohort 2, using extant data. To identify a No PreK comparison group, we propose sampling kindergarten children from the same kindergarten classrooms as VPI+ children attend in fall 2016 and fall 2017. Children will be eligible for the No PreK comparison group if they did not attend preschool as defined above and are the same age and meet the household income requirement. The No PreK comparison group will be identified at the beginning of kindergarten in fall 2016 and fall 2017 for their respective cohorts.

### Exhibit A3. Design and Timeline of the Summative Assessment Evaluation

Year 1 (2015-16)		Year 2 (2016-17)		Year 3 (2017-18)		Year 4 (2018-19)		Beyond the evaluation		
Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Year 5	Year 6	
VPI+ PreK <i>n</i> = 2683		K						3		
VPI PreK (BAU) <i>n</i> = 1000		K						3		
No PreK		K <i>n</i> = 1000						3		
		VPI+ PreK <i>n</i> = 2985	K						3	
		VPI PreK (BAU) <i>n</i> = 1000	K						3	
		No PreK	K <i>n</i> = 1000						3	

Summative assessments in fall and spring of preschool and fall of kindergarten will be collected on all children in the VPI+ classrooms. The same assessments and timeline will be followed for

the VPI BAU sample of children, and the same assessments will be collected in kindergarten for the No PreK comparison sample. We propose trained assessors will collect all the assessment data for the first two cohorts to increase the reliability and rigor of the evaluation. Beginning in year 3, preschool teachers will collect summative assessment data on children in fall and spring, and beginning in year 4, kindergarten teachers will collect summative assessment data on children who participated in the VPI+ program. We propose conducting the summative evaluation for the first two cohorts of VPI+ for two reasons: (1) it will give the program a chance to develop its system of high-quality elements and supports and allow for an assessment of the effects of any variations in implementation from year to year on child outcomes; and (2) it will allow for the proper training and supports for preschool and kindergarten teachers to be in place to ensure successful and appropriate summative assessment data collection.

The selected design will allow the state to understand the impact of VPI+ above and beyond the existing VPI classrooms—important information for creating a sustainability system and future expansion across the state; and it also will allow the state to understand the impact of VPI+ compared with No PreK, which will be essential for showing the impact of high-quality preschool and justifying the investment. However, the latter comparison uses a less rigorous design and thus, is considered exploratory (see response A.3.d). Because the evaluation will collect student demographics, program participation type and dosage (i.e., attendance), variation in program implementation and quality, and possibly other information about services received, the evaluation will be able to examine the influence of these factors on child outcomes, including the school readiness domains, participation in special education, grade retention, and attendance in grades K-2 and achievement in the early grades.

Additionally, the evaluation design will allow the state to conduct follow-up analysis of VPI+ children and the comparison children in third grade and beyond (i.e., beyond the length of the evaluation). More information about the rationale for the design is described below in 3d.

- b. The Contractor must use the results of the Phonological Awareness Literacy Screening (PALS) as the literacy assessment to evaluate children in preschool (PALS preK) and in kindergarten (PALS K). Describe the contractor's proposed approach to collaboration with the participating school divisions as they administer and score PALS preK and PALS K;

**Response A.3.b:** As stated in the RFP, PALS data will be collected in all VPI+ classrooms and public kindergarten classrooms and is used as a screening tool in VPI classrooms. The evaluation team will work with VDOE to identify all data elements already collected in the 11 school divisions, including PALS PreK and PALS K, and develop a plan to obtain the PALS data to inform the summative evaluation. These data will be used to examine the impact of VPI+ and VPI BAU on literacy, one of the five Essential Domains of School Readiness. If data are not collected systematically in VPI classrooms in fall and spring, we will use the kindergarten assessment only.

- c. The Contractor must administer *additional summative assessments* related to the Domains of School Readiness to all children in new VPI+ preschool classrooms (fall and spring) and to these same children in fall of their kindergarten year.
  - Describe the proposed additional assessments, assessment methods, power analysis, and evidence of reliability and validity from studies of diverse students that reflect the student population in Virginia on multiple characteristics, such as race/ethnicity, rural/urban, and socioeconomic status as set forth in Section III (Definitions).

**Response A.3.c.1:** Data about children’s early literacy skills and their fine and gross motor skills are systematically collected in VPI, VPI+, and kindergarten classrooms using PALS and a VDOE-approved local assessment of physical health and motor development, but no consistent information is collected about children’s school readiness in other domains. Although the domains are broad (e.g., social and emotional development includes behavior problems, social skills, and emotional regulation), recent research suggests that math, executive functioning and behavioral self-regulation, and the ability to develop and maintain positive relationships with others (peers and adults) are critical to not only promoting development in each of those domains but also promoting learning in other areas.<sup>1, See Tab 9</sup> Exhibit A4 shows the proposed additional summative assessments to address the three domains not currently measured in preschool and kindergarten classrooms: cognition and general knowledge, approaches to learning, and social and emotional development. We believe these assessments will provide a more complete picture of participating children’s skills and whether the program is achieving the goal of preparing children for school, workforce, and life success. All measures in Exhibit A4 can be used with children 4 to 6 years of age, children living in different geographic regions, and children from different socioeconomic backgrounds and from different racial/ethnic groups. These assessments have been widely used in the same populations of children who will be participating in the VPI+.

To measure cognition and general knowledge, we have proposed a measure of math—the **Woodcock-Johnson (WJIII-R) Applied Problems subtest**<sup>2</sup>—and a measure of executive functioning—the **Dimensional Change Card Sort (DCCS) task**.<sup>3, 4</sup> The Applied Problems subtest is a widely used norm-referenced measure of a limited number of early math skills (e.g., counting, number sense) in which the assessor asks a child a series of questions and records the child’s answers until the child answers incorrectly for six items.<sup>c, 5, 6</sup> The DCCS task is a widely used measure of executive functioning—cognitive flexibility—and is available in Spanish and has been used with bilingual children. The DCCS task is a measure of executive functioning, specifically attentional shifting or cognitive flexibility, requiring children to sort picture cards based first on one dimension (e.g., color), then on another dimension (e.g., shape), becoming increasingly more difficult. It takes about 10 minutes to administer.

To measure approaches to learning, we propose the teacher-reported **Teacher-Child Rating Scale (T-CRS-2)**,<sup>7</sup> which asks teachers to rate students on 38 items and has 4 subscales: task orientation, assertiveness, peer social skills, and behavior control. The task orientation subscale taps into the construct identified by the NRC’s definition of approaches to learning. The peer social skills and behavior control subscales of the T-CRS will be used to assess the social and emotional development domain. The T-CRS-2 has robust psychometric properties and has been used in urban, rural, and suburban populations and has separate normative thresholds for these groups, as well as gender.

Finally, we also propose the **Head Toes Knees Shoulders (HTKS)**<sup>8, 9</sup> measure, a brief assessment of children’s behavioral self-regulation, which are aspects of executive functioning as well as part of a child’s social and emotional development. It takes approximately 10 minutes to administer and requires children to play a game in which they must do the opposite of what the

---

<sup>c</sup> We also reviewed the Research-based Early Mathematics Assessment-Short Version (REMA-SV) because it assesses a broader range of early math skills believed to be predictive of school success. There is some evidence that REMA-SV is sensitive to differences in young children’s early math skills.<sup>5</sup> However, it does not have norm references.

assessor asks. It has shown strong reliability and validity in multiple studies and across diverse samples of children. It has primarily been used in experimental school-based research, translated into multiple languages, and used both within and outside the United States.

#### Exhibit A4. Additional Summative Assessments Proposed

Domain	Skills	Measure	Sensitive to change and variation	Reliability	Validity	Norm-referenced
Cognition and general knowledge	Numeracy, counting	WJIII-R Applied Problems subtest		✓	✓	✓
Cognition and general knowledge	Cognitive flexibility, attention shifting	DCCS	✓	✓	✓	Not yet
Approaches to learning	Task persistence	T-CRS:2 Task orientation	✓	✓	✓	✓
Social and emotional development	Self-regulation	HTKS	✓	✓	✓	
Social and emotional development	Social skills	T-CRS:2 Peer social skills	✓	✓	✓	✓
Social and emotional development	Problem behaviors Self-regulation	T-CRS:2 Behavior control	✓	✓	✓	✓

**Note:** See the additional materials tab for references of publications on the validity, reliability, sensitivity to change, normative data, and cultural relevance of these assessments.

**Power analysis.** For cohort 1, there are an estimated 13,825 low-income 4-year-olds, 7,714 of whom are served through publicly-funded preschool (VPI, Title I, Head Start). For the cohort 1 VPI BAU comparison group, we propose identifying approximately 100 classrooms in VPI sites that have similar classroom or program characteristics as VPI+ classrooms (if possible) and then sampling 10 children per classroom to yield a comparison sample of 1,000 children. With this design and sample size, power analysis suggests that the evaluation would be able to detect small effect sizes (in the range of .13 to .15), which is appropriate given that the groups may have small differences in the types of learning supports provided to children.

There are an estimated 6,131 low-income 4-year-olds across the 11 school divisions who will not be served in 2015-16 (cohort 1). The school divisions plan to serve 2,683 of these 6,131 children with VPI+ funds (in either new or improved classrooms) which leaves 3,448 children not served by the VPI, Head Start, Title I or VPI+ programs in 2015-16. For the No PreK comparison group, we propose identifying 1,000 children from this estimated 3,448 which is only feasible if they attend the same kindergarten classrooms as the VPI+ children. For this comparison, power analysis suggests that we will be able to detect small to moderate effect sizes. We will follow the same sampling procedures for cohort 2, with the same power to detect small to moderate effects.

**Subgroup analysis.** We expect to have enough power from the first two cohorts of VPI+ children to examine the extent to which different types of providers (e.g., public versus private or school-based versus community-based) impact child outcomes. However, our ability to examine whether the impact of VPI+ classrooms varies by type of provider will be determined in part by how the 11 school divisions implement the funds. If the number of children in some categories is low, it not only would limit our ability to analyze the impact for these groups, it also would make it hard to report these differences and maintain confidentiality of participants. Another limitation is selection bias. Families with specific characteristics or with children with various characteristics may be more likely to enroll in one program type over another. Overall, we think it will be possible to detect minimum detectable effects of .2 to .3 for the different child characteristics identified in the RFP (i.e., race/ethnicity, rural/urban, ELL status, military-connected families, and possibly differences within the low-income eligibility criteria).

- Describe the proposed summative assessments for use that have norm referenced data available at the state or national level to permit the VPI+ team to determine the extent to which children in the program are meeting or exceeding normative averages.

**Response A.3.c.2:** The T-CRS (2.0) manual provides normative thresholds for different subgroups of children, including those from different geographic settings and by gender. The WJ Applied Problems subtest has norm-referenced standard scores, adjusted for age. Both of these assessments provide the norms at the national level and will allow the VPI+ team to determine the percentage of children meeting/exceeding normative averages. At this time, neither the DCCS nor HTKS assessment has norm-referenced data to use to identify whether VPI+ participants are performing at or above normative averages. However, these data may become available in the next 1 to 2 years. To our knowledge, there are no assessments in this domain that provide normative data at the current time.

- d. Describe the extent to which your approach meets the most rigorous standards established for education research and evaluation and how your approach minimizes threats to internal validity. (The VDOE's preferred methods for impact evaluation are, in order of preference: randomized controlled trials, regression discontinuity designs, and other quasi-experimental designs (i.e., interrupted time series and non-equivalent control group). VDOE does not expect the VPI+ program evaluation to be amendable to randomization, although it is possible that one or more local programs will have more demand from eligible participants than there is space available.)

**Response A.3.d:** We identified the proposed quasi-experimental design with matched comparison groups (using propensity score matching) and direct assessments of children's math, self-regulation, and executive functioning skills and teacher report of social and emotional development and approaches to learning as the most appropriate design to empirically evaluate the impacts of VPI+ on children's early learning outcomes compared with VPI BAU. Our understanding is that the VPI+ initiative is an enhanced version of the state preschool program that has been in existence since 1996. Although some studies of the earlier version of the preschool program (VPI) have shown positive impacts on children's outcomes at kindergarten, early grade achievement, and, most recently, retention, the findings have not always been consistent, reflecting a need to support high-quality implementation to achieve the intended child outcomes.<sup>10, 11</sup> These previous evaluations suggest that VPI+ is ready for a study of its effectiveness, where the enhanced program and its impacts are studied under "typical" contexts in new settings to understand how best to scale up a high-quality state preschool program.

Several different designs are available to examine the research questions, each with different advantages and disadvantages. The most rigorous designs include randomized controlled trial (RCT), regression discontinuity design (RDD), and quasi-experimental designs (QED) that include a comparison group. The least rigorous design would be a simple pre-post design or post-only design. Because there are clear questions of impact of the VPI+ program on child outcomes, with the goal of using the most rigorous design, the evaluation team carefully considered the options of conducting an RCT, RDD, or QED. We examined each of these design options, taking into account the priority research questions of VDOE, estimated sample sizes, availability of different comparison groups within each school division, likelihood of obtaining unbiased impact estimates and the precision of these estimates, the possibility of making causal attributions, ability to generalize findings to all programs (or to specific types of programs), resources required to implement the design, and demands placed on local programs and other evaluation stakeholders. We also placed a fair amount of weight on the use of existing data to reduce the burden on school divisions and their staff and on the development of a sustainable data collection system for summative assessments. Finally, we considered the relative feasibility of each design, given the goal to begin data collection in fall 2015.

On the basis of these considerations, we eliminated the RCT design option because random assignment of children may interfere with school divisions' plans for increasing access to certain groups of children and serving as many children as possible. We also carefully considered an RDD, which is typically used when there is a clear cut-off for program eligibility, as VPI+ has. An RDD involves comparing the trajectories of children who just missed the cut-off (in the case of VPI+, age on September 30) with those of children who are eligible and assessing both groups of children at the same time prior to preschool and at kindergarten entry. For this design to work for the VPI+ evaluation, there would need to be a system in place to identify the children who did not meet the age cut-off and for a large number (approximately 1,000) to be in community-based settings to allow the team to conduct the direct assessments. This does not seem feasible given the description of implementation to begin this fall. Another major disadvantage to using RDD is the inability to conduct meaningful follow-up beyond the kindergarten year as both groups eventually (or potentially) receive the VPI+ preschool intervention. Therefore, we determined the best design was a QED with equivalent comparison groups created by using propensity score matching to allow the evaluation to confidently make causal attributions. This technique is described in more detail above but essentially strengthens the QED because when done well with adequate, high-quality data to create the comparison group can be even more rigorous than RCT.<sup>12</sup> As described above, the QED will only work for the VPI+ versus VPI BAU comparison. We propose to conduct exploratory comparisons of kindergarten assessment scores in the No PreK comparison groups to VPI+ children in the same kindergarten classrooms. While this one analysis is less rigorous because no baseline assessments will be collected, it will provide important information to VDOE about how children with no PreK differ from those who attended VPI and VPI+ at kindergarten entry and as they progress through school.

#### **4. Cost-effectiveness Analysis of the VPI+ Program**

Describe the *planned research questions* and *methods* for determining the cost-effectiveness of the VPI+ program, based on the definition of "cost-effectiveness analysis" provided in Section III. Include the *rationale* for selection of these questions and methods.

**Response A.4:** In a landscape of limited resources and extensive need, it is crucial to understand whether public investments are making effective use of public and private dollars. VDOE is

interested in how to implement preschool programs in the most cost-effective way, given limitations of funding but the promise of state-supported strategies such as single point of entry, braided funding, and blended classrooms. Related to cost-effectiveness, the VPI+ will fund classrooms to implement specific improvements based on the community and program needs, which will allow VDOE to examine how variations in implementation of high-quality preschool elements impact child outcomes, as well as how impact varies by setting (i.e., private versus public). Cost-effectiveness analysis is an approach for understanding the impact of a particular social investment in terms of outcomes achieved per unit of money invested. Whereas a straightforward cost analysis simply looks at costs associated with inputs (such as the cost to provide a single year of high-quality preschool), cost-effectiveness also examines the effectiveness of those investments in later years, expressed in terms of child outcomes of monetary benefits.

**Research questions.** To understand how efficiently VPI+ is using public funding, we propose the following research questions:

1. What is the rate of future positive outcomes for children who attended the VPI+ program, compared with similar children in comparison groups (i.e., children who attended traditional VPI classrooms or who did not attend preschool)?
2. What are the cost savings to society for children who attended the VPI+ program, compared with similar children in comparison groups?
3. What is the societal benefit-cost ratio for children who attended the VPI+ program, compared with similar children in comparison groups?

**Methods.** In each of the four years of the project, the cost-effectiveness analysis will proceed through the same sequence of steps, outlined below. In the first year of the project, more time will be spent establishing the theoretical framework, specifics of data collection and methodology, and cost parameters. As the project continues, these elements will be updated as new data are available. Effectiveness parameters comparing each of the program groups will be reanalyzed annually as results from the summative assessments become available.

The cost-effectiveness analysis will proceed through the following 10 steps, following the procedure outlined by Cellini and Kee (2010).<sup>13</sup>

**(1) Setting the framework for the analysis.** Effectiveness can be measured either in terms of desirable child outcomes achieved as a result of the program (such as improved kindergarten readiness levels or graduation rates) or in terms of the financial savings realized as a result of the initial investment. Our proposed analysis will examine both measures.

A comprehensive literature review will be conducted to understand in detail the research base on effectiveness, costs, and cost-benefit of high-quality preschool programs. The literature review will encompass areas including components and cost drivers of high-quality preschool, short- and long-term outcomes of preschool in various implementation contexts, cost-benefit methodology theory and application, and costing methods for public programs.

**(2) Deciding whose costs and benefits should be recognized.** Cost-effectiveness estimates will be calculated for four groups of children: (1) those in new VPI+ classrooms, (2) those in improved VPI+ classrooms, (3) those in traditional VPI classrooms, and (4) those who did not attend preschool. The analysis will be repeated following each of the program years.

For each of the three groups who received some type of preschool, we will measure average costs, outcomes, and benefits for all children who enrolled, regardless of whether they completed the program. This intent-to-treat approach will provide a more realistic picture of the actual, “real-world” costs to administer a program, taking into account the reality that some children may not complete the program, may move elsewhere, or may attrite for other reasons.

We will examine separately the effects of dosage and individual quality attributes within each of the three groups. The dosage variable would represent the number of months children were in either of the programs; the quality attributes would represent separate, measurable aspects of quality that vary within the program model such as teacher qualifications or services offered.

Benefits will be estimated for public agencies that realize savings, such as school districts and social welfare departments, as well as for parents, children, and state taxpayers.

**(3) Identifying and quantifying costs and benefits.** We will measure real benefits and costs (i.e., net gains to society), rather than transfers of resources from one agency, group of people, or geographic area to another. For the purposes of this evaluation, only tangible benefits will be estimated. Tangible benefits include measurable benefits that can be quantified in terms of dollar values. Although intangible benefits (such as reduced suffering as a result of lower rates of child abuse) are also important effects of preschool programs, they cannot as easily be monetized.

Two types of costs will be identified for the program: direct program costs and indirect costs for administration, infrastructure, and other necessary system investments. Program costs will be identified by using administrative data collected from each of the school division coordinators for each of the preschool program groups, including data from each of the participating school divisions, as well as from VDOE and a cost survey that captures information not included in the administrative data. These data will include total expenditures, and any expenditure data available at the school, classroom, or child level. Indirect costs will be drawn from state and district administrative expenditures, including the TQRIS program. Per-child costs will be disaggregated on the basis of program type, district, and other program characteristics, such as teacher salary, staff-child ratios, and professional development expenditures. We will examine cost and outcome data separately for private and public providers.

Research has shown that high-quality preschool programs can create benefits in a wide range of areas.<sup>14, 15, 16</sup> On the basis of this literature, benefits will be quantified for a variety of categories. These might include increased graduation rates, reduced special education, student attendance, reduced retention in grade, decreased participation in the criminal justice system, and decreased participation in the child welfare system. This process has been used to develop early childhood cost-effectiveness calculators in several states, including Colorado, New York, and Minnesota. In addition, a cost methodology developed for the U.S. Office of Child Care’s Provider Cost of Quality Calculator will be used to help derive cost input parameters.

**(4) Projecting costs and benefits over the life of the program.** For each cohort of children, costs and benefits will be calculated from children’s entry into the program through age 25. Costs will be incurred only in the years in which children are in the preschool program. Benefits will be calculated for each successive year following the preschool program, so that aggregate benefits can be evaluated at any given point in time in the future. This will allow for the estimation of a variety of questions—for example, at which future year the financial benefits of the program have equaled the initial investment. Disaggregating benefits by year can also be

useful to compare the annualized return and speed of return with comparable public or private investments.

Over time, additional cohorts will enter the program. Our analysis will aggregate the costs and benefits of each cohort, providing an overall cost-benefit view from 2016 (when the first set of children have completed the program) through 2036 (when the first set of children turn 25).

**(5) Monetizing costs and benefits.** Financial data will be analyzed to estimate actual per-child costs to participate in each of the three program models, including direct classroom- and school-level expenditures, as well as administrative costs. Costs will be based on budget data or actual expenditures for the most recent program year, and calculated separately for public and private providers. Cost categories that might be monetized include administrative costs, staff salaries, professional development, coaching, TQRIS evaluations, and child assessments. .

Achievement of each of the outcome categories will be quantified in financial terms by using a variety of data, including expenditure data from school districts and data from public agencies, including average salary data, and average expenditures in the juvenile justice and child welfare systems. When available, administrative data on expenditures will be directly analyzed. When longitudinal data on outcomes or expenditures for children in each of the four groups are not available, parameters on outcome rates and cost-benefit ratios will be drawn from the research literature.

Certain state and district expenditures (e.g., administrator salaries) that are not exclusively directed toward VPI and VPI+ will also be incorporated, using activity-based costing to determine the proportion of these costs that should be applied to VPI and VPI+.

**(6) Quantifying benefits in terms of units of effectiveness.** The cost-effectiveness of the VPI+ program will be expressed in units equal to the increased proportion of children who achieve a given future outcome, compared with non-VPI+ children. These units can then be tied to cost input data to yield a total cost to achieve one unit of a particular outcome (for example, the cost to eliminate one year of special education). The outcome can then be monetized to estimate the cost-benefit of the program for that particular outcome.

Two types of effectiveness estimates will be collected: those based on short-term (proximal) outcomes, and those based on long-term (distal) outcomes. Proximal outcomes, such as kindergarten readiness, will be measured directly based on child-level summative assessments. In each successive year of the evaluation, summative data on first- and second-grade outcomes from school districts can be incorporated into the analysis as available.

Distal outcomes for VPI+ children cannot be measured directly within the 4-year span of the evaluation. Therefore, these outcomes will be estimated on the basis of existing literature examining the relationships between kindergarten assessment scores, preschool quality, child demographics, and future outcomes. These outcomes will necessarily contain more uncertainty than the proximal outcomes since they incorporate more assumptions about future behavior.

**(7) Discounting costs and benefits to obtain present values.** Costs and benefits will be discounted or adjusted to represent present values at the time the analysis is conducted. Future benefits will be discounted based on estimates of an appropriate measure of inflation, such as the consumer price index, using the year the child completes the preschool program as the unadjusted time point. Any costs from years prior to the final program year will be adjusted upward to represent the value of current dollars.

**(8) Computing a cost-effectiveness ratio.** A cost-effectiveness ratio will be computed for each outcome by dividing the total per-child costs associated with the program by the increase in the likelihood of achieving that outcome, yielding a cost to achieve each additional outcome. A benefit-cost ratio will be computed by dividing the total discounted benefits across all quantifiable outcome categories by the total costs of the program.

**(9) Performing sensitivity analysis.** A sensitivity analysis will be conducted by varying key assumptions within the cost-effectiveness model and comparing key results, especially cost-effectiveness and benefit-cost ratios. Assumptions that will be varied include differential rates of outcome achievement for different groups, benefits associated with those outcomes, discount rates, and program costs.

This procedure will help identify which assumptions, when changed, do not yield a significant difference in results, and which do and are therefore more sensitive to modification. The implication for variables with more sensitivity is that they should be interpreted conservatively, with the acknowledgment that benefit-cost ratios associated with them are estimates with a wide range of uncertainty.

**(10) Making recommendations where appropriate.** Recommendations will be based on results of the analyses and interpreted within the context of the sensitivity analyses described above. A calculator will be developed in Excel that allows users to understand how changing certain parameters, such as the number of participating children or the number of providers who receive various amounts of professional development, affects cost and savings estimates.

## 5. Data Products and Reporting

- a. Describe the proposed methods to provide teachers and administrators (and other local authorized users) with rapid access to summative assessment results (particularly in preschool) to use in preparing individualized student instructional plans and teacher professional development.

**Response A.5.a:** We will quickly process, clean, and analyze the summative data after each data collection window. Within 8 weeks of the first data collection window, SRI will use a programming template to produce child-, school-, and division-level reports that include an explanation of the measures, guidance on how to interpret the findings (including the percentage of children meeting or exceeding normative averages), and the actual results (e.g., distribution of scores). The production of these reports will become faster for subsequent reports (e.g., 4 weeks). VDOE and the VPI+ implementation team will receive a draft of the reporting template for review and feedback before the reports are produced. SRI will send division coordinators secure website links and passwords to access the reports for their divisions. VDOE and the VPI+ implementation team will also have password-protected access to all the divisions' secure websites. We propose to hold data engagement webinars or meetings with all the coordinators to review how to interpret the reports and the system for distribution of the reports before the first release of reports. The VPI+ implementation team may also want to think about guidance or strategies they would like to give the division coordinators on how to use these data and on how the data should not be used.

- b. Describe the proposed methods to provide VDOE and the VPI+ Implementation Team with access to summative assessment results in the fall and spring of each year of the contract period.

**Response A.5.b:** VDOE and the VPI+ implementation team also will be given access to a password-protected website that contains the state-level, division-level, and school-level reports. In addition, 12 weeks after the first data collection window, SRI will prepare a data set containing individual records of the summative data results. Again, the time needed to prepare the data set will be less for subsequent data sets (e.g., 6 weeks). That data set will be shared with VDOE via a secure web-based file exchange program (Accellion) that SRI uses with highly confidential data. To promote a more useful and efficient data set, SRI will work with VDOE to develop a codebook and format for all data files in advance of the export. A key issue will be for SRI to receive the state testing identifier and unique local student identifier for all the children to include in the data files so the data can easily be integrated with the longitudinal data system.

c. Describe the process you plan to use to develop and disseminate data and reports as described in Section IV, Statement of Needs (and in Section VIII):

i. Biannual Formative Feedback Reports

**Response A.5.c.i:** The evaluation team will prepare separate formative feedback reports for the VPI+ implementation team and each of the 11 school divisions that will be delivered by December 31 and June 30 of each grant year. The reports will focus on the successes and challenges in the areas of access, professional development, program implementation, and instructional quality. In addition, access findings will examine whether slot and enrollment targets are being met overall and for particular subgroups. Professional development findings will include data on the type, intensity, and content of PD and coaching being delivered and teacher perceptions regarding how well PD and coaching are meeting their needs. Instructional quality findings will include the extent to which teachers are addressing all five school readiness domains, using an evidence-based curriculum, using formative assessments to inform and individualize instruction, and providing supports for the unique needs of learners, as well as CLASS and ECERS ratings. Other program implementation findings will include data on the extent to which students are receiving comprehensive services, the extent to which family and community engagement is occurring, and other implementation issues, such as staff hiring and retention, student mobility, and budget challenges. The report for the VPI+ implementation team will also provide recommendations for improving leadership and support services that facilitate strong local implementation. The reports for the local school divisions will provide feedback about the strengths and challenges specific to them and offer recommendations for improvement.

ii. Quarterly Progress Reports

**Response A.5.c.ii:** SRI will submit quarterly progress reports to the VPI+ implementation team on evaluation activities by October 31, January 31, April 30, and July 31 of each grant year in years 1-3 and in year 4 on October 31, January 31, April 30, and June 30. These reports will include: (1) Financial update: including amount invoiced during the quarter, amount invoiced to date, total funds remaining, and percentage of total contract activities completed to date; (2) Technical update: including a list of all evaluation activities completed in the quarter and activities planned for the next quarter; (3) Problem identification and mitigation plan: including identification of any challenges the evaluation team has faced in completing evaluation activities, proposed or enacted solutions, and status on mitigation of challenges; and (4) Other information: including other items requested by VDOE or the VPI+ implementation team. An SRI project coordinator will meet by phone or in person with our primary VPI+ contracting officer within a week of submission to discuss any questions he or she has about the report.

### iii. Annual Results Reports

**Response A.5.c.iii:** Interim results from the summative evaluation of VPI+ will be summarized in an annual report to be submitted to the VPI+ implementation team by August 1 in grant years 1-3. The report will be designed to support reporting to the U.S. Department of Education about progress on the Preschool Expansion Grant. The annual report will present interim findings on the impact of VPI+ on the Essential Domains of School Readiness and other indicators of success (e.g., on-time promotions; rates of participation in special education and student support programs, such as reading recovery or English Language Development services), and any results regarding factors that may be influencing children's outcomes and other program impacts. The report will include findings for VPI+ new classrooms, VPI+ improved classrooms, and comparison VPI (business as usual) classrooms and for kindergarten children who did not participate in any preschool. Percentages of children meeting or exceeding normative averages will also be provided for each of the domains. The report will include a user-friendly executive summary that can easily be shared with the many partners working on VPI+ and other stakeholders interested in the progress of VPI+. Finally, the report will include technical appendices that provide more detail about the statistical methods and results.

### iv. Annual Cost Effectiveness Reports

**Response A.5.c.iv:** A cost-effectiveness report will be furnished annually to VDOE, by August 1 of grant years 1-3, that includes valid results related to the cost-effectiveness of VPI+. Each annual report will be based on data available at that time. For example, in year 1 it may focus on comparative costs between the various types of preschool programs (i.e., VPI+ new, VPI+ improved, and traditional VPI), present the outcomes that will be tracked in future reports and how we expect to quantify and monetize them, and make recommendations where appropriate. Subsequent reports will be able to report on cost effectiveness findings and relationships between certain types of costs and improved outcomes.

### v. Final Comprehensive Evaluation Report

**Response A.5.c.v:** The evaluation team will prepare 12 final comprehensive reports—1 state-level report and 1 report for each school division—by June 30, 2019. In the state-level report, overall findings and variations by divisions will be captured, but divisions will not be named. The reports to the school divisions will cover the same topics and types of data as the state-level report but present findings specific to each division. All the reports will include an executive summary; a chapter on summative impacts on students (including performance within the various school readiness domains, on-time promotion, and participation in special education and other support services); a chapter on formative findings about the successes and challenges regarding access, professional development, instructional quality, and implementation of components; a chapter on the cost-effectiveness of the two VPI+ models (new and improved) compared with traditional VPI and matched children who do not receive preschool; a chapter on lessons learned; and a final chapter on recommendations for next steps. As with the interim summative reports, we will work with VDOE to make sure the information in the comprehensive report can easily feed into required reports to the U.S. Department of Education regarding its Preschool Expansion Grant.

- d. Describe the plan to facilitate VPI+ Implementation Team understanding of the methods, data products, and reports, and data collection requirements of the evaluation; and

**Response A.5.d:** Within the first 3 weeks of the contract, we will prepare a draft evaluation plan document and presentation in which we will clearly lay out the purpose of the evaluation, the formative and summative research questions, the research methods (data collection and analysis), the data products (e.g., data sets) and reports, and a project timeline for all these activities. The plan will include an appendix with the data collection requirements for VDOE, divisions, CASTL, and schools/programs. We also will develop a two-page summary of the evaluation design to provide a high-level summary. We recommend having a 4- to 6-hour meeting with the VPI+ implementation team to carefully review the plan and to obtain feedback. This plan will also be shared with the evaluation advisory board for feedback. Once all feedback is received, we will produce a final evaluation plan and brief summary that can be shared with divisions and other stakeholders. We recommend that SRI present the evaluation design to division VPI+ coordinators and gather their suggestions about rolling out the evaluation as soon as possible after the VPI+ implementation team has approved the plan.

## **6. Evaluation Advisory Board**

Describe how the offeror proposes to use an evaluation advisory board that includes experts in preschool and early childhood education, impact evaluation, formative evaluation, and cost-effectiveness evaluation. The advisory board shall include experts from Virginia who are not grant partners, and may include experts from outside of Virginia. If the offeror also chooses to establish a technical working group (or advisory board subgroup) to support the evaluation methodology, that process and anticipated outcome must also be described.

- a. Describe the process of selecting the evaluation advisory board.

**Response A.6.a:** In Appendix A-1, we have proposed a preliminary list of several Virginia-based and other national candidates with expertise related to preschools and early education, and/or impact, formative, and cost-effectiveness evaluation who could serve on an evaluation advisory board (EAB) to help guide the development of study methods and protocols and provide input on the interpretation of findings and the final report. We have worked with several of the recommended EAB members, and we are confident that each of them can make substantial contributions to the evaluation design, protocols, and reports. As part of the project kick-off meeting, SRI and SRC will work with the VPI+ implementation team to select 10 individuals to invite to serve on the panel and some alternates in case some candidates are unable to serve. Once the desired members are selected, SRI will invite the selected members to participate.

- b. Describe the make-up of the advisory board and other groups that may be used to inform project approach or interpretation of results.

**Response A.6.b:** We recommend including four national experts and six Virginia-based experts, who are not grant partners, that cover a wide range of areas that will be important the VPI+ evaluation. Areas of relevant expertise include child development, social-emotional development, cognitive development (including math and science), approaches to learning, health and physical development, assessment of young children, transition to school, dual-language learners and language development, school readiness, PreK-3 initiatives, Virginia's early learning standards (Foundation Blocks) and Milestones, early learning professional preparation and development, curriculum, inclusive practices/special education, quality rating and improvement systems, comprehensive service systems, and program, formative, impact, and cost-benefit evaluations. Some members of the EAB should include Virginia division administrators and preschool directors or teachers to help identify ways to make the evaluation

more useful to division staff and teachers. VPI+ implementation team members will be encouraged to attend EAB meetings to hear firsthand feedback offered by the EAB members.

- c. Describe the role the advisory board will play in informing the evaluation process.

**Response A.6.c:** The evaluation team is experienced in working with advisory boards on previous projects (e.g., KEA Case Studies, the Center for IDEA Early Childhood Data Systems, and the Early Childhood Outcomes Center), and we have developed ways to maximize the value of the limited time available with members. The panel will be convened three times during the first year of the study to provide feedback on the evaluation design and once each subsequent year to provide feedback on evaluation findings and their implications for program improvement and further evaluation work. At the first meeting, the EAB will provide input on the evaluation approach. At the subsequent meetings, the EAB will reflect on the evaluation findings and provide input on reports. One week prior to the meetings, SRI will provide draft documents and materials to the EAB members. SRC will handle all logistics for the meetings and the preparation of detailed meeting minutes, noting all observations, reflections, and recommendations of the panel members. SRI and SRC will provide meeting summaries to the VPI+ implementation team within 3 weeks of each meeting. Each EAB member will receive a \$1,000 honorarium for participating in each meeting and travel expenses.

- d. Include in **Appendix A-1** a list of preliminary advisory board members, including current job titles.

**Response A.6.d:** See Appendix A-1 for a list of preliminary evaluation advisory board members.

## 7. Advisory Role to the VDOE and the VPI+ Implementation Team

- a. Describe your approach to serving as a partner to the VDOE and the VPI+ Implementation Team while providing constructive and objective feedback on the project.

**Response A.7.a:** The work VDOE and the VPI+ implementation team are undertaking is ambitious and critically important. Using objective evaluation data to learn how to do this work well and refine the initiative's strategies to obtain better results will need to be a shared value among all VPI+ stakeholders. During VPI+ implementation team meetings, the evaluation co-PIs and project coordinators will discuss formative and summative evaluation findings and our recommendations with the VPI+ implementation team. Other members of the evaluation team will also participate in these meetings as appropriate. We recommend that time at the meetings be set aside when new formative and summative findings are available. Before those meetings, we will distribute reports or user-friendly summaries to enable VDOE and VPI+ implementation members to come to the meetings prepared with questions and comments. The evaluation team's feedback will focus on both strengths and areas for possible improvement, as well as recommendations for addressing some of the challenges. As partners, we will solicit feedback from VDOE and the VPI+ implementation team on ways we can better clarify our findings in reports and make them more useful for the VPI+ stakeholders. We also will work with VDOE and the VPI+ implementation team to ensure that the evaluation design is addressing the critical issues and providing the information needed for informed decision making.

- b. Describe your approach to providing consultation on matters related to new data collection required by the grant award, data use for program monitoring, public reporting, and developing public-facing and authorized-use only reports (e.g., reports

described in Virginia's Preschool Expansion grant application section (C)(2)(b)) that will provide information about preschool children's progress and outcomes through third grade, to include kindergarten readiness, retention/promotion from kindergarten through grade 3, and grade 3 achievement.

**Response A.7.b:** The co-PIs and SRC's evaluation director will provide consultation to VDOE on new ways of using and reporting data and bring in other SRI and SRC experts as needed. SRI has helped several states meet federal grant reporting requirements, including our current work with Washington with its Maternal, Infant, and Early Childhood Home Visiting (MIECHV) grant and in Minnesota with its Race to the Top – Early Learning Challenge grant. We are familiar with GPRA performance measures and reporting. Within the first 2 weeks of the contract, SRI will work with VDOE to review the federal reporting requirements and to identify ways to build the needed data either into the evaluation activities undertaken by our team or into subgrantee progress reporting requirements. SRI is also familiar with advising states on ways to strengthen their statewide longitudinal data systems, data quality, and use of data through our national TA Center for IDEA Early Childhood Data Systems (DaSy) and through our leadership of the Early Childhood Outcomes Center for more than a decade. In addition, SRI has been conducting an IES grant in Virginia focused on improving middle school and high school math achievement in rural school divisions and has become familiar with Virginia's Longitudinal Data System (VLDS). SRI quantitative analysts will leverage this experience and knowledge to integrate essential preschool program and child outcome data into its longitudinal data system to support analysis, policy development, and decision making around preschool through third grade systems and policies, as well as tracking these children beyond third grade.

We can also provide consultation on progress monitoring systems and reports. As part of our evaluation of First 5 California, SRI developed a performance monitoring module for our web-based data system that allowed funders to track grantees' progress on specific objectives in terms of ratios (e.g., 40 out of 200 providers trained), percentages (e.g., 30% of children received an immunization), and dichotomous variables (e.g., yes or no for designing a new training module). Performance objectives included an explanation of the objective, a category variable, due dates, and whether the goal was met, not met, or was still in progress, so that performance objectives could be sorted by those variables.

SRI and SRC are happy to provide consultation on developing public-facing reports and can share samples of reports as needed. SRI and SRC have experience communicating effectively with a variety of audiences, including public officials, service providers, school personnel, parents and youth, advocacy and community groups, and other researchers. Our researchers, analysts, writers, editors, and graphic designers produce materials to communicate findings in compelling and accessible ways. Examples include annual and final reports, community profiles, fact sheets, media releases, memos tailored to questions by funders, practice and policy briefs, case study reports, book chapters, journal articles, and presentations at state, national, and international conferences. In addition, our staff have supported the use of results through hands-on data workshops with schools, councils, and community members. SRI also has extensive experience producing reports and data sets that are for authorized use only.

## **8. Data Collection and Analysis**

- a. Describe the planned data collection approach (e.g., direct assessment from a trained assessor; online or paper survey; observational protocol), including the extent to which summative assessments will be administered to kindergarten-aged children who did not

participate in VPI+ and to children who were served in grant-funded “improved” classrooms. The offeror shall provide a plan for a data collection approach including the data collection schedule.

**Response A.8.a:** Below we describe the data collection and analysis approach for the summative evaluation; sections 2 and 3 describe the formative and cost-effectiveness evaluation methods.

**Data collection approach.** Trained assessors will administer three direct child assessments (WJIII Applied Problems, DCCS, and HTKS). The direct assessment will be supplemented by data from the PALS PreK, PALS K, and the motor development assessment being completed by preschool and kindergarten teachers. In addition, teachers will be asked to complete a teacher rating for all these children regarding their social skills, emotional adjustment, and approaches to learning using the T-CRS (2.0).

Three waves of data (fall of PreK, spring of PreK, and fall of kindergarten) will be collected for the first two cohorts of children in new VPI+ classrooms (n=5,668 total), a sample of children in improved VPI+ classrooms (n=2,000 total), and a sample of children in VPI BAU classrooms (n=2,000 total). A sample of 2,000 kindergarten children who did not attend a preschool program will be assessed in the fall of their kindergarten years.

Fall assessments will be administered September 10-October 31, and spring assessments will be administered April 1-May 20. The fall dates will allow children to adjust to preschool and kindergarten but not allow too much time to pass to capture an accurate baseline of children’s skills. The spring dates will allow time to produce the spring assessment result reports before the end of the year. We will schedule approximately 45 minutes per student to allow for transitions, although we estimate that the battery of direct assessments will take approximately 30 minutes per child. During these same data collection windows, we will collect the T-CRS on all participating children through an online secure survey application. SRI has already used this measure for another preschool program evaluation and has it in a ready-to-use format.

In the spring of year 2, the evaluation team will help train the VPI+ preschool teachers to administer the direct child assessments for math, approaches to learning, and self-regulation. Training will be done through a train-the-trainer model. We will train school division staff, coaches, and teacher leaders, who will then learn how to train VPI+ preschool teachers who will be expected to administer these assessments in the fall and spring of years 3 and 4. The evaluation team will also create training resources that can be accessed on the Web, such as video examples of the assessments being conducted and recorded training sessions on the implementation of the assessments. A similar train-the-trainer model will be used to train new and additional division staff to help kindergarten teachers learn how to administer the summative assessments in year 4 (the evaluation team will conduct the kindergarten assessments in years 2 and 3). Results from the assessments will be recorded by teachers either on scannable forms that are submitted to SRI or by entering the results into a secure online survey interface. More details about the implementation of the data collection approach are included in Attachment C.

**Data analysis.** The magnitude of the impact of VPI+ on child outcomes will be tested using hierarchical linear modeling (HLM) where we will adjust for important covariates (e.g., pretest scores and demographic characteristics). We will use a two-level HLM model where children are nested in classrooms to account for the contribution of classroom characteristics on child outcomes. To examine the impact of different subgroups on child outcomes, we will use moderation analysis and test reasonably sized subgroups defined by child or program

characteristics described above to determine if the impact varies by these groups. To conduct moderation analyses, HLM regressions will be modified by adding the moderators as covariates.

- b. Include in **Appendix A-2** a table that lists the proposed data elements that VDOE or participating school divisions will be requested to collect and provide to the evaluator to facilitate the evaluation. The VDOE will use this information to inform school divisions of records they need to keep as the VDOE and the VPI+ Implementation team collaborate to finalize the data collection strategy for the program evaluation.
- The table shall include data elements and the level needed (e.g., individual student- or teacher-level records; aggregate data by classroom, school, or division), and the specific years of records that will be required.
  - Depending on the proposed methods, data types may include (but are not limited to): child-level characteristics, background and performance records; teacher and administrator characteristics, background and experience, and qualifications; teacher and administrator participation in professional development activities; program characteristics and services provided; community characteristics; and cost of services and supports.
  - VDOE encourages contractors to review available data elements from VDOE’s [Student Record Collection](#) and [Master Schedule Collection](#) to understand the availability of data that VDOE already collects.

**Response A.8.b:** See Appendix A-2 that includes student record collection and master schedule items.

## 9. Data Security

Complete Attachment B – Response Template for Data Security as it pertains to for Section IV. Statement of Needs requirement A.9 and any other data referenced in your proposal.

**Response A.9:** See Attachment B.

## 10. Compliance with Code of Virginia § 22.1-296.1

Indicate below how you will ensure compliance with the requirements set forth in *Code of Virginia* § 22.1-296.1 which requires that, “as a condition of awarding a contract for the provision of services that require the contractor or his employees to have direct contact with students on school property during regular school hours or during school-sponsored activities, the school board shall require the contractor to provide certification that all persons who will provide such services have not been convicted of a felony or any offense involving the sexual molestation or physical or sexual abuse or rape of a child.” Any person making a materially false statement regarding any such offense shall be guilty of a Class 1 misdemeanor and, upon conviction, the fact of such conviction shall be grounds for the revocation of the contract to provide such services and, when relevant, the revocation of any license required to provide such services. School boards shall not be liable for materially false statements regarding the certifications required by this subsection.

**Response A.10:** SRI and SRC will require copies of FBI and criminal background checks, as well as TB tests, from all staff members who will have direct contact with students. SRI and SRC use this process routinely on projects involving data collection with children. SRI will verify clearance based on these checks and documents before the research team member can begin work at any schools. Background checks will be updated annually. Staff will also be asked

to sign an agreement acknowledging that they must report immediately any new convictions that occur after the background check takes place, in the unlikely case that this occurs.

### **11. Disaggregated results for different groups within the program.**

Describe how the contractor will consider the extent to which it is practicable to provide valid results by school division, locale codes as defined by the National Center for Education Statistics (NCES), student or community race/ethnicity, English learner status, disability status, or other relevant factors that may be important for strengthening and sustaining the VPI+ program.

**Response A.11:** When possible, findings will be presented by certain program characteristics and certain student demographics to examine whether impacts on child outcomes and costs vary by implementation, by program and teacher characteristics, by location, and by student demographic characteristics. However, before committing to reporting results by subgroups, we will need to review the prevalence of specific groups to ensure that there are large enough numbers for meaningful results. Also, we will want to maintain confidentiality by not reporting out cell sizes less than 10, and we will follow any additional guidance provided by VDOE, the VPI+ implementation team, and federal standards to ensure protection of participants' privacy.

### **12. Implementation Plan**

Complete Attachment C - Response Template for Implementation Plan as it relates to Section IV. Statement of Needs requirement A.12.

**Response A.12:** Please see Attachment C.

### **PART B**

Describe a comprehensive program evaluation that includes the extent to which children's participation in "improved" classrooms (as defined in Section III) impacts child outcomes and program cost-effectiveness. The extent to which participating divisions use grant funds to improve existing classrooms will vary by school division. Describe your plan for exploring the extent to which these varied services and dosage impact student outcomes and costs. VDOE anticipates this grant to fund no more than 118 "improved" classrooms across the 11 school divisions.

Please note that:

- grant funds may not be used to purchase new curricula or formative assessments in improved classrooms;
- school divisions are not required to have "improved" classrooms rated with VSQI ratings; and .
- school divisions are not required to provide summative assessments to students in "improved" classrooms

**Response B:** Improved VPI+ classrooms are included in the summative evaluation design described in item 3. The evaluation design collects the same data for both improved VPI+ classrooms and new VPI+ classrooms. However, improved VPI+ classrooms will receive fewer supports than new VPI+ classrooms, and they are likely to vary more in implementation. The evaluation will use these natural differences in implementation to explore the relationship between them and student growth and program costs.



**Appendix A-1****Preliminary Evaluation Advisory Board Members**

<b>Name</b>	<b>Job Title and Affiliation</b>	<b>Expertise</b>
<b>Experts from Virginia</b>		
Craig Ramey, Ph.D.	Professor of Psychology, Virginia Tech Carilion Research Institute Professor of Pediatrics, Virginia Tech Carilion School of Medicine Virginia Tech University	Researcher with expertise in impact evaluation Member of Virginia's Smart Beginnings Advisory Board
Helene Stebbins, M.P.P.	Senior Policy Director for the Alliance for Early Success Consultant, National Center for Children in Poverty Member of Advisory Council, Virginia Early Childhood Foundation	Member of Virginia's Smart Beginnings Advisory Board
Mark E. Emblidge, Ph.D.	Professor of Practice in Education Leadership, Foundations and Policy (EDLF) School of Education, University of Virginia	Representative from a nonparticipating school division and has been on the Southern Regional Education Board since 2004
Adam Winsler, Ph.D.	Associate Chair, Professor Department of Psychology George Mason University	Researcher with expertise in children's transition to school; development of self-regulation; early education for English language learners; school readiness; and early school trajectories among diverse, low-income, urban preschoolers
Phyllis Mondak	Adjunct faculty Virginia Commonwealth University	Inclusive practices, Part C and 619 procedures/ processes/law Task force work group chairperson for Virginia's Early Childhood Advisory Council
Katie Squibb, Ph.D.	Research and Evaluation Associate Virginia Early Childhood Foundation	Researcher with expertise on Virginia's QRIS, kindergarten assessment

Name	Job Title and Affiliation	Expertise
<b>Experts from Virginia (concluded)</b>		
Isabel Bradburn, Ph.D.	Research Director, Child Development Center for Learning and Research Virginia Tech University	Researcher with expertise on early care and education programs and QRIS, with roles on Virginia Early Childhood Advisory Council
Christopher E. Chin, Ph.D.	Co-Director, The Literacy Institute Virginia Commonwealth University	Researcher with expertise on early and family literacy projects; has served as a consultant for local and state literacy- and early-childhood-related projects and initiatives, and is currently chairman for the Evaluation and Accountability committee for the Governor's Early Childhood Professional Development Task Force
<b>National Experts</b>		
William Gormley, Ph.D.	Professor of Public Policy Co-Director, Center for Research on Children in the U.S. (CROCUS) Georgetown University	Researcher with expertise in impact evaluations
Deborah Phillips, Ph.D.	Professor, Department of Psychology Georgetown University	Researcher with expertise in impact evaluations
Margaret (Peg) Burchinal, Ph.D.	Senior Scientist & Director Data Management and Analysis Center, Frank Porter Graham Child Development Institute Professor, Department of Psychology University of North Carolina, Chapel Hill	Researcher with expertise in methodology and impact evaluations
Steve Barnett, Ph.D.	Board of Governors Professor, Rutgers Director, National Institute for Early Education Research (NIEER) Rutgers University	Researcher with expertise in methodology and impact evaluations
Karen Diamond, Ph.D.	Professor Emerita, Human Development and Health Studies College of Health and Human Sciences Purdue University	Researcher with expertise in effective approaches for teaching preschool children at risk for later school failure because of poverty or disability, including coaching

Name	Job Title and Affiliation	Expertise
<b>National Experts (continued)</b>		
Jeanne Brooks-Gunn, Ph.D.	Virginia and Leonard Marx Professor of Child Development and Education Teachers College and College of Physicians and Surgeons Columbia University Co-director, National Center for Children and Families Co-director, Columbia University Institute for Child and Family Policy	Researcher with expertise in impact evaluations
Eugene Garcia, Ph.D.	Professor Emeritus, Mary Lou Fulton Teachers College Arizona State University	Researcher with expertise in dual-language learners; chaired the National Task Force on Early Education for Hispanics
Lisa Lopez, Ph.D.	Associate Professor, Educational Psychology University of South Florida	Researcher with expertise in dual-language learners
Karen Blase, Ph.D.	Senior Scientist, Frank Porter Graham Child Development Institute University of North Carolina, Chapel Hill	Researcher with expertise in formative evaluation: implementation science
James Heckman, Ph.D.	Henry Schultz Distinguished Service Professor of Economics University of Chicago	Researcher with expertise in cost-benefit studies of early learning programs, Nobel Prize in Economics
Ruby Takanishi, Ph.D.	Senior Research Fellow, Education Policy Program New America Foundation	Researcher with expertise in PreK-3rd grade evaluation
Paula Jorde Bloom, Ph.D.	Michael W. Louis Endowed Chair of the McCormick Center for Early Childhood Leadership and Professor of Early Childhood Education National Louis University, Illinois	Researcher with expertise in formative evaluation: early childhood leadership to manage early childhood programs and improve teacher quality
Lynn Karoly, Ph.D.	Senior Economist, RAND Professor, Pardee RAND Graduate School	Researcher with expertise in cost-effectiveness analysis of early education and intervention programs

Name	Job Title and Affiliation	Expertise
<b>National Experts (concluded)</b>		
Gary Henry, Ph.D.	Patricia and Rodes Hart Chair Distinguished Professor of Public Policy and Education Department of Leadership, Policy, and Organizations Peabody College, Vanderbilt University	Researcher with expertise in cost-effectiveness analysis of early education and intervention programs
Doug Clements, Ph.D.	SUNY Distinguished Professor, Learning and Instruction Graduate School of Education State University of New York, Buffalo	Researcher with expertise in cognitive development (math)
David Dickinson, Ph.D.	Professor, Dept. of Teaching & Learning Peabody College, Vanderbilt University	Researcher with expertise in language development
C. Cybele Raver	Professor of Applied Psychology Department of Administration, Leadership, and Technology New York University	Researcher with expertise in approaches to learning and social-emotional development
Clancy Blair, Ph.D.	Professor of Cognitive Psychology Department of Administration, Leadership, and Technology New York University	Researcher with expertise in approaches to learning and social-emotional development
Daryl Greenfield, Ph.D.	Professor of Psychology and Pediatrics University of Miami	Researcher with expertise in cognitive development (science)
Stephen Sanders, Ed.D.	Director & Professor, School of Physical Education & Exercise Science University of South Florida	Researcher with expertise in health and physical development
Mary Louise Hemmeter, Ph.D.	Professor, Dept. of Special Education Peabody College, Vanderbilt University	Researcher with expertise in social-emotional development

## Appendix A-2

## Proposed Data Elements (2015–2019)

Variables	Anticipated Source of Data
<b>Individual Student-Level Data</b>	
State Testing Identifier	VDOE: SRC (Fall, Spr, EOY, Dec1)
Unique Local Student Identifier	VDOE: SRC (Dec1)
Student first, middle, last name	Schools or Divisions
Serving Division Code	VDOE: SRC (Fall, Spr, EOY)
Serving School/Center Code	VDOE: SRC (Fall, Spr, EOY)
Active Status Code	VDOE: SRC (Fall, Spr, EOY)
Entry Date and Code	VDOE: SRC (Fall, Spr, EOY)
Exit Date and Code	VDOE: SRC (Fall, Spr, EOY)
Gender Code	VDOE: SRC (Fall, Spr, EOY)
DOB	VDOE: SRC (Fall, Spr, EOY)
Military Compact Statute Flag	VDOE: SRC (Fall, Spr, EOY)
Military Student Identifier	VDOE: SRC (Fall, Spr, EOY) [if added for the 2015-16 year]
Grade Level Code	VDOE: SRC (Fall, Spr, EOY)
Full-Day K Status (Kindergarten Half-Day Flag)	VDOE: SRC (Fall, Spr, EOY)
Ethnic Flag and Race Code	VDOE: SRC (Fall, Spr, EOY)
SPED Status (Primary Disability Code & Spec Ed Weekly Time %)	VDOE: SRC (Fall, Spr, EOY)
Inclusion (Special Ed in Regular Early Childhood Setting Flag)	VDOE: SRC (Dec1)
Disadvantaged Status Flag (FRPL, TANF, or Medicaid)	VDOE: SRC (Fall, Spr, EOY)
Home Language Code	VDOE: SRC (Fall, Spr, EOY)
ESL Service Code	VDOE: SRC (Fall, Spr, EOY)
Aggregate Days Present and Absent	VDOE: SRC (Fall, Spr, EOY)
Unexcused Absences	VDOE: SRC (EOY)
Kindergarten Readiness Assessment Flag (child administered readiness assessment prior to first day of kindergarten)	VDOE: SRC (Fall, Spr, EOY)
PK Experience Code	VDOE: SRC (Fall, Spr, EOY)
PK Weekly Time Code	VDOE: SRC (Fall, Spr, EOY)
PALS PreK and PALS K scores	Divisions or VDOE
Physical and motor development assessment scores	Divisions or VDOE
REMA/TEAM Short Version scores (math assessment)	Evaluation team: direct assessment

<b>Variables</b>	<b>Anticipated Source of Data</b>
Dimensional Change Card Sort score (cognition and executive functioning)	Evaluation team: direct assessment
Heads, Toes, Knees, Shoulders Task scores (approaches to learning and self-regulation)	Evaluation team: direct assessment
Teacher Child Rating Scale scores (approaches to learning and task persistence)	Evaluation team: direct assessment
<b>Teacher-Level Data</b>	
Local Provider ID	VDOE: MSC Record B (Fall, EOY)
First, Middle, Last Name	VDOE: MSC Record B (Fall, EOY)
FTE	VDOE: MSC Record B (Fall, EOY)
High-Quality Professional Development (Y/N)	VDOE: MSC Record B (Fall, EOY)
Section ID	VDOE: MSC Record D (Fall, EOY)
Serving Division	VDOE: MSC Record D (Fall, EOY)
Serving School	VDOE: MSC Record D (Fall, EOY)
Teacher/Administrator License Prefix	VDOE: MSC Record D (Fall, EOY)
Local Provider ID	VDOE: MSC Record D (Fall, EOY)
Highly Qualified Code (federal definition)	VDOE: MSC Record D (Fall, EOY)
Flexibility Criteria Flag (federal definition)	VDOE: MSC Record D (Fall, EOY)
Teacher gender	Divisions or VDOE
Teacher race/ethnicity	Divisions or VDOE
Teacher educational attainment (highest degree completed)	Divisions or VDOE
Virginia teaching license with an NK or PK endorsement	Divisions or VDOE
Indicator for VPI, new VPI+, improved VPI+, other	Divisions or VDOE
CLASS: Emotional support scores	Divisions or VDOE
CLASS: Classroom organization scores	Divisions or VDOE
CLASS: Instructional support scores	Divisions or VDOE
Child-to-staff ratio	Divisions or VDOE
Full day/half day	Divisions or VDOE
Curriculum used	Divisions or VDOE
Formative assessment used	Divisions or VDOE
<b>Program/School-Level Data</b>	
Program/school unique ID	Schools or Divisions
Number of ECE teachers	Schools or Divisions
Staff retention	Schools or Divisions
Public/private	Schools or Divisions
Total slots	Schools or Divisions
Slots available	Schools or Divisions
Number on waiting list	Schools or Divisions
Title I status	Schools or Divisions

<b>Variables</b>	<b>Anticipated Source of Data</b>
Head Start	Schools or Divisions
Full day/part day	Schools or Divisions
Staff compensation	Schools or Divisions
Other direct program costs	Schools or Divisions
Suspension/expulsion rates (program/schoolwide)	Schools or Divisions
Suspension/expulsion rates in ECE (PK and K classrooms)	Schools or Divisions
Program quality data (TQRIS)	Schools or Divisions
Comprehensive services provided (vision/hearing screenings, mental health, nutrition, adult ed, etc.)	Schools or Divisions
Administrator gender	Schools or Divisions
Administrator race/ethnicity	Schools or Divisions
Administrator educational attainment	Schools or Divisions
Administrator experience	Schools or Divisions
Administrator professional development participation	Schools or Divisions
Zip code of school	Schools or Divisions
Average income of school families	Schools or Divisions
Average cost of school services and supports	Schools or Divisions
Name of curriculum	Schools or Divisions
Test/assessment (in addition to PALS-PreK)	Schools or Divisions
<b>Division-Level Data</b>	
Variables listed at: <a href="http://www.doe.virginia.gov/administrators/superintendents_memos/2015/102-15a.pdf">http://www.doe.virginia.gov/administrators/superintendents_memos/2015/102-15a.pdf</a>	VPI Application in SSWS
Professional development and administrative costs for supporting VPI, new VPI+, and improved VPI+ classrooms	Divisions



**Attachment B****Response Template for Data Security****Include this attachment in Tab 5 of your proposal.**

Each Offeror must use this template to submit a plan that describes methods by which data collected, stored, and returned to authorized users. The complete plan shall include:

**1. A list of variables for years 2015–2019;**

<b>Variables</b>	<b>Anticipated Source of Data</b>
<b>Individual Student-Level Data</b>	
State Testing Identifier	VDOE: SRC (Fall, Spr, EOY, Dec1)
Unique Local Student Identifier	VDOE: SRC (Dec1)
Student first, middle, last name	Schools or Divisions
Serving Division Code	VDOE: SRC (Fall, Spr, EOY)
Serving School/Center Code	VDOE: SRC (Fall, Spr, EOY)
Active Status Code	VDOE: SRC (Fall, Spr, EOY)
Entry Date and Code	VDOE: SRC (Fall, Spr, EOY)
Exit Date and Code	VDOE: SRC (Fall, Spr, EOY)
Gender Code	VDOE: SRC (Fall, Spr, EOY)
DOB	VDOE: SRC (Fall, Spr, EOY)
Military Compact Statute Flag	VDOE: SRC (Fall, Spr, EOY)
Military Student Identifier	VDOE: SRC (Fall, Spr, EOY) [if added for the 2015-16 year]
Grade Level Code	VDOE: SRC (Fall, Spr, EOY)
Full-Day K Status (Kindergarten Half-Day Flag)	VDOE: SRC (Fall, Spr, EOY)
Ethnic Flag and Race Code	VDOE: SRC (Fall, Spr, EOY)
SPED Status (Primary Disability Code & Spec Ed Weekly Time %)	VDOE: SRC (Fall, Spr, EOY)
Inclusion (Special Ed in Regular Early Childhood Setting Flag)	VDOE: SRC (Dec1)
Disadvantaged Status Flag (FRPL, TANF, or Medicaid)	VDOE: SRC (Fall, Spr, EOY)
Home Language Code	VDOE: SRC (Fall, Spr, EOY)
ESL Service Code	VDOE: SRC (Fall, Spr, EOY)
Aggregate Days Present and Absent	VDOE: SRC (Fall, Spr, EOY)
Unexcused Absences	VDOE: SRC (EOY)
Kindergarten Readiness Assessment Flag (child administered readiness assessment prior to first day of kindergarten)	VDOE: SRC (Fall, Spr, EOY)
PK Experience Code	VDOE: SRC (Fall, Spr, EOY)
PK Weekly Time Code	VDOE: SRC (Fall, Spr, EOY)
PALS PreK and PALS K scores	Divisions or VDOE

<b>Variables</b>	<b>Anticipated Source of Data</b>
Physical and motor development assessment scores	Divisions or VDOE
REMA/TEAM Short Version scores (math assessment)	Evaluation team: direct assessment
Dimensional Change Card Sort score (cognition and executive functioning)	Evaluation team: direct assessment
Heads, Toes, Knees, Shoulders Task scores (approaches to learning and self-regulation)	Evaluation team: direct assessment
Teacher Child Rating Scale scores (approaches to learning and task persistence)	Evaluation team: direct assessment
<b>Teacher-Level Data</b>	
Local Provider ID	VDOE: MSC Record B (Fall, EOY)
First, Middle, Last Name	VDOE: MSC Record B (Fall, EOY)
FTE	VDOE: MSC Record B (Fall, EOY)
High-Quality Professional Development (Y/N)	VDOE: MSC Record B (Fall, EOY)
Section ID	VDOE: MSC Record D (Fall, EOY)
Serving Division	VDOE: MSC Record D (Fall, EOY)
Serving School	VDOE: MSC Record D (Fall, EOY)
Teacher/Administrator License Prefix	VDOE: MSC Record D (Fall, EOY)
Local Provider ID	VDOE: MSC Record D (Fall, EOY)
Highly Qualified Code (federal definition)	VDOE: MSC Record D (Fall, EOY)
Flexibility Criteria Flag (federal definition)	VDOE: MSC Record D (Fall, EOY)
Teacher gender	Divisions or VDOE
Teacher race/ethnicity	Divisions or VDOE
Teacher educational attainment (highest degree completed)	Divisions or VDOE
Virginia teaching license with an NK or PK endorsement	Divisions or VDOE
Indicator for VPI, new VPI+, improved VPI+, other	Divisions or VDOE
CLASS: Emotional support scores	Divisions or VDOE
CLASS: Classroom organization scores	Divisions or VDOE
CLASS: Instructional support scores	Divisions or VDOE
Child-to-staff ratio	Divisions or VDOE
Full day/half day	Divisions or VDOE
Curriculum used	Divisions or VDOE
Formative assessment used	Divisions or VDOE
<b>Program/School-Level Data</b>	
Program/school unique ID	Schools or Divisions
Number of ECE teachers	Schools or Divisions
Staff retention	Schools or Divisions
Public/private	Schools or Divisions

<b>Variables</b>	<b>Anticipated Source of Data</b>
Total slots	Schools or Divisions
Slots available	Schools or Divisions
Number on waiting list	Schools or Divisions
Title I status	Schools or Divisions
Head Start	Schools or Divisions
Full day/part day	Schools or Divisions
Staff compensation	Schools or Divisions
Other direct program costs	Schools or Divisions
Suspension/expulsion rates (program/schoolwide)	Schools or Divisions
Suspension/expulsion rates in ECE (PK and K classrooms)	Schools or Divisions
Program quality data (TQRIS)	Schools or Divisions
Comprehensive services provided (vision/hearing screenings, mental health, nutrition, adult ed, etc.)	Schools or Divisions
Administrator gender	Schools or Divisions
Administrator race/ethnicity	Schools or Divisions
Administrator educational attainment	Schools or Divisions
Administrator experience	Schools or Divisions
Administrator professional development participation	Schools or Divisions
Zip code of school	Schools or Divisions
Average income of school families	Schools or Divisions
Average cost of school services and supports	Schools or Divisions
Name of curriculum	Schools or Divisions
Test/assessment (in addition to PALS-PreK)	Schools or Divisions
<b>Division-Level Data</b>	
Variables listed at: <a href="http://www.doe.virginia.gov/administrators/superintendents_memos/2015/102-15a.pdf">http://www.doe.virginia.gov/administrators/superintendents_memos/2015/102-15a.pdf</a>	VPI Application in SSWS
Professional development and administrative costs for supporting VPI, new VPI+, and improved VPI+ classrooms	Divisions

## 2. Format(s) in which data will be provided;

SRI is able to receive data files in many formats (e.g., CSV, Excel, formats specific to analysis software). We are able to convert data into readable files for use with SAS for statistical analysis. Similarly, we can send data files in many formats.

**3. Methods used to ensure secure data transfer, including a method of protecting against unauthorized access to sensitive data;**

SRI routinely uses proven state-of-the art software solutions to manage and protect data. Accellion Secure File Transfer is the primary method by which SRI staff and clients/partners external to the SRI firewall routinely and securely exchange information. Accellion secure file transfer capabilities allow enterprise users to send files quickly, easily, and securely to internal and external recipients. With file tracking and reporting, Accellion provides the control necessary to meet industry and government regulations, such as the Family Educational Rights and Privacy Act (FERPA), Health Insurance Portability and Accountability Act (HIPAA), Gramm-Leach-Bliley Act (GLBA), and Sarbanes-Oxley Act (SOX) to ensure enterprise data security and compliance.

SRI staff are required to manage data as stated in the Personally Identifiable Information (PII) handbook, which includes specific recommended practices for handling and protecting sensitive PII.

**4. The number of data transfers and timeframe within which data can be made available to authorized personnel;**

***Data needed by SRI***

We will need to confirm whether the needed data reside at VDOE, division, or school level. Data requests will be made at least 4 weeks in advance of the date by which they are needed. In addition, an expected year-long schedule of data requests will be created to provide advance notice of the types and timing of requests. Below is an example:

- August: SRI obtains list of children in VPI+ and VPI classrooms and related program, child, and family characteristic data (including EL status, special education status, race/ethnicity, gender, student testing ID, military-connected families, and other demographics, if they are available).
- November: SRI obtains division/VDOE data on student attendance, student enrollment, student mobility, participation in special education, participation in various additional support services, grade retention, and teacher turnover.
- November and May: SRI obtains PALS PreK and K scores and physical and motor assessment data from divisions/VDOE.

***Data exports for VDOE***

SRI will work with VDOE to establish the best format for data exports. Data sets with child state testing ID and summative PreK and K assessment results will be available December 31 and June 30 each year.

**5. A method of protecting against unauthorized access to sensitive data; *Please explain here.***

SRI's published Identity and Access Management (IAM) Standard defines access control and management requirements for protecting critical information resources, including sensitive data. Personnel must be positively authenticated and authorized before being granted access to critical SRI information resources. Access to all information resources is controlled through a managed process that addresses authorizing, modifying, and revoking access, and periodic review of information system privileges. IAM provides a practical, structured, and

coherent approach to the management of SRI users' identities and their access to systems and data in line with business needs. This standard helps SRI achieve compliance with applicable requirements. The IAM standards are broadly classified in the following categories:

- General
- Identity Requirements
- Access Management Requirements
- IAM User Lifecycle Management

SRI staff are required to manage data as stated in the Personally Identifiable Information (PII) handbook, which includes specific recommended practices for handling and protecting sensitive PII.

**Network Security.** SRI servers are protected by firewalls that are closely monitored by our network security staff. All computers are password protected. Certificates are implemented to enable encryption of SRI email. Passwords must satisfy complexity requirements and be changed at specified intervals. Security updates are applied as soon as available for virus protection and operating systems.

**Confidentiality Procedures.** Within data files, data on respondents are kept separate from identifying information (e.g., participant name or address). A system of IDs is used to allow the necessary linkage between data files yet prevent showing personally identifiable information with data gathered for study purposes within any given single data source. Reports are produced in the form of aggregated data only; no individual identifiers are provided. When and if SRI staff must email confidential information, Accellion is used or the file is encrypted so that it cannot be viewed without a password.

**Procedures for Staff Departure.** When staff leave, there is a standard process in which the employee's access to data files is removed and hard-copy files returned to the supervisor. SRI employment contracts and confidentiality agreements stipulate strict regulations regarding maintaining confidentiality of data beyond institutional walls.

**Human Subject Protections.** The ethical practices in the collection and processing of data and the protection of human subjects are standard procedures at SRI. Confidentiality requirements are described in consent forms and all data collection protocols and coding manuals. All project team members, including on-site data collection staff, are required to sign a confidentiality agreement indicating that they understand and agree to protect the confidentiality of all data. Project directors and managers are required to complete the Collaborative Institutional Training Initiative (CITI) and program training on Human Subjects Research and to meet approval of the SRI Institutional Review Board's Human Subjects Committee before conducting any study involving human subjects.

6. **Weekly backups with incremental daily backups and a 48-hour recovery from the loss of a data center including the loss of only 2 hours of data;** *Please describe the disaster recovery plan here.*

A full backup is performed nightly using a leading backup software management solution. Regular scheduled off-site tape vaulting is performed through a third-party service provider, affording a comprehensive solution for transporting, storing, managing, and retrieving backup media securely. Through these processes, data can be recreated to prevent data loss.

Minus acts of God, data can be restored quickly from the previous night's backup. In the event of a major disaster at the SRI headquarters in Menlo Park, California, disaster recovery would be accomplished through a restoration of off-site vaulted backup media to a virtualized data access server at an unaffected SRI facility.

At this point, SRI could implement a 72-hour recovery with the loss of only 8 hours of data.

7. **A suitable hosting environment;** *Please describe the environment including primary site location(s) and disaster recovery location(s), internet connectivity, power management and site security and describe the relationship between the primary site(s) and recovery site(s) and any industry certifications that these facilities have achieved (e.g. Tier III/IV, SAS70, SOCI, SOC2, etc.).*

All project data will be stored on systems at SRI's headquarters in Menlo Park, California, with backup data stored in a remote location with a leading third party service provider.

Disaster recovery locations include physically separate buildings on SRI's 65-acre campus in Menlo Park, California. In addition, project data are maintained on SRI's Secure Data Transfer System for up to 1 year, which can be renewed annually.

SRI contracts separately with two leading Internet service providers for our Menlo Park campus for redundancy.

For power management, all systems used to manage project data are supported by smart UPS as well as redundant power feeds for our campus.

SRI maintains a dedicated physical security group with multiple layers of physical access control.

SRI has repeatedly received the Cogswell Award from the U.S. Defense Security Service for our corporate security program.

8. **Data archival policies and any data purge policies;** *Please describe here.*

After the end of the contract, project data and deliverables will be archived on SRI secure servers for the number of years specified in the contract. At the end of that time, data will be purged.

9. **A process for handling and notification of a breach of non-public data;** *Please describe here.*

SRI maintains dedicated corporate security, IT security, and legal functions that work together to respond in the event of a data breach. This includes execution of SRI's Cybersecurity Incident Response Plan and forensic investigation, as appropriate. Steps taken for notification of breach of non-public data ensure that affected parties are notified in a timely way.

In the event of a breach of data, SRI policy includes a procedure for minimizing access to data, which includes:

- Change of access credentials
- Revocation of access certificate

In the rare instance of a breach of non-public confidential data on study participants, SRI staff must inform our Human Subjects Internal Review Board (IRB) immediately. Once

notified, IRB staff quickly assess the situation and the steps that have already been taken to mitigate the breach. SRI also notifies the client as soon as possible and reviews what information was accessed, the steps taken in response, and any plans for additional steps to mitigate the situation.

**10. A process for the authorization of various roles associated with data access; *Please describe.***

The PI determines appropriate authorization for each project member; corresponding access permissions are configured by a dedicated system administrator. System and application managers are granted an appropriate level of access privileges required to perform their job functions and adhere to applicable procedures when working with critical information resources. Additionally, operational duties are segregated in accordance with privileged users' roles and responsibilities.

**11. A policy for only allowing remote access using industry standard network security processes; *Please describe the methods used for remote access.***

SRI supports remote access by maintaining a virtual private network solution in combination with rigorous identity and access management practices, including user authentication via a central directory.

**12. A process for ensuring security of data stored at the offeror's site as well as any server security policies; *Please describe and indicate whether the service periodic and ongoing vulnerability and penetration testing.***

Information resources have physical access controls in place to protect them from unauthorized physical access and are safeguarded against foreseeable environmental hazards. Critical information resources are monitored to detect system, security, and operational events. In addition, SRI performs weekly vulnerability scanning using a commercial tool. Also, SRI's IT Security function performs web application-level vulnerability scanning. SRI also contracts with a third party to perform periodic penetration testing.

**13. A process for identifying and remediating software defects; *Please describe.***

As appropriate, user and integration testing may be performed to identify and manage software defects in any applications developed by SRI.

**14. A process for incident management, change management, and release management; *Please describe.***

For incident management, SRI uses an IT service desk ticketing system to track and manage incidents. For major IT changes, an IT Change advisory board meets weekly to review and approve change requests, including deployment or release of new systems or software.

**15. A process for how school divisions will get their data back in a form that can be used in the event of contract termination or expiration or if the a different service is desired; *Please describe.***

SRI routinely delivers data in a client-specified format. VDOE would be responsible for specifying the format for the raw data (e.g., CSV, Excel, formats specific to analysis software). SRI would prepare the data and use secure data transfer. SRI could also prepare an aggregate-level report for each school division, if preferred.

**16. Network-layer vulnerability scans conducted regularly; *Please describe.***

Extensive network vulnerability testing is conducted using Tenable Security Center.

**17. Application-layer vulnerability scans conducted regularly; *Please describe.***

Periodic web application-level layer scanning is performed.

**18. Local operating system-layer vulnerability scans conducted regularly; *Please describe.***

Extensive operating system vulnerability testing is conducted using Tenable Security Center.

**19. File integrity (host) and network intrusion detection (IDS) tools that are implemented to help facilitate timely detection, investigation by root cause analysis and response to incident; *Please describe.***

Network intrusion detection and response are supported by a combination of tools, including logging, monitoring, and preemptive breach detection. SRI maintains a professionally trained IT staff with the ability to perform root vulnerability analysis.

**20. Regular penetration testing, vulnerability management, and intrusion prevention; *Please explain.***

SRI contracts with a third party to perform periodic penetration testing. Vulnerability management is supported by scanning and assessment (see above) and system configuration management, including weekly patching. Intrusion prevention is supported by a combination of preventive controls, including layered network firewalls.

**21. Network devices that are located in secure facilities and under controlled circumstances (e.g. ID cards, entry logs); *Please explain.***

The SRI facility is closed and requires access permissions. Particularly sensitive databases are isolated in locked rooms without Internet access. SRI protects internal networks by using leading firewall technology. SRI computing facilities are protected by multiple layers of physical control, including mandatory use of ID cards.

**22. A standard time frame regarding how quickly patches are applied from the time of supplier release; *Please explain.***

Software patches are tested as released and applied after they are verified.

**23. Background checks on your firm's personnel with physical and/or administrative access to network devices, servers, applications and customer data; *Please explain.***

SRI maintains a background check program to support our core values and to protect the integrity of our business and reputation, as well as to help provide a safe environment for our staff, customers, and assets. This program includes guidelines for conducting criminal background checks and evaluating data obtained during the background check process. This process assists SRI in determining the qualifications and suitability of an applicant or staff member for employment with SRI in a particular position or role. The policy applies to all new staff and to any current staff member in a role that requires an access-specific or role-specific background check.

**24. Processes for authenticating callers and resetting access controls, as well as establishing and deleting accounts; *Please explain.***

SRI provides internal users with a self-service tool for password management. A comprehensive ID management standard governs access control and account management. Access permissions are configured by a dedicated systems administrator. System and application managers are granted an appropriate level of access; operational duties are segregated in accordance with privileged users' roles and responsibilities. Access accounts are disabled immediately by a dedicated systems administrator upon notification of the need for a change in access.

**25. Protection against denial-of-service attack; *Please describe.***

SRI protects internal networks by using leading firewall technology in combination with 24/7 on-call network monitoring and response.

**26. Technical measures and techniques for detection and timely response to network-based attacks such as distributed denial-of-service (DDoS) attack; *Please explain.***

SRI protects internal networks using leading firewall technology in combination with 24/7 on-call network monitoring and response.

**27. A statement confirming that the offeror shall:**

- a. Comply with Virginia's Information Technology Security Policy and Standards (<http://www.vita.virginia.gov/library/default.aspx?id=537#securityPSGs>);
- b. Comply with the Family Educational Rights and Privacy Act (FERPA);
- c. Meet cloud security requirements by a certifying body such as Fed-RAMP (<http://cloud.cio.gov/fedramp>);
- d. Include a product support program for users and administrators;
- e. Be Section 508 compliant ([http://www.vita.virginia.gov/uploadedfiles/vita\\_main\\_public/unmanaged/library/continuingplanningguideline04\\_18\\_2007.pdf](http://www.vita.virginia.gov/uploadedfiles/vita_main_public/unmanaged/library/continuingplanningguideline04_18_2007.pdf));
- f. Include a backup and recovery plan that is tested at least annually;
- g. Include an outage plan. Users shall be notified of anticipated and unanticipated outages;
- h. Adhere to the Student Privacy Pledge, located in [http://studentprivacypledge.org/?page\\_id=45](http://studentprivacypledge.org/?page_id=45);
- i. Ensure that all data processed, stored, and maintained by the offeror shall NOT leave the borders of the United States (including all online storage as well as data backups and archived data);
- j. Include a process that allows the State to audit the physical environment where a service is hosted;
- k. Include a process for securing non-public data at rest and non-public data in motion;
- l. Allow access to incident data for investigative purposes;
- m. Allow access to system security and audit logs;
- n. Patch software vulnerabilities routinely or automatically on all servers; and
- o. Encrypt data at motion and at rest.

*Insert response here.*

- a. SRI can confirm this.
- b. SRI can confirm this.
- c. SRI does not utilize cloud services for storage of any data and does not plan to do so in the future. Therefore, we *cannot* confirm this but do not feel it is applicable.
- d. SRI does not believe that this is relevant to our proposed work because we are not creating a product. However, we will provide support necessary to use and access systems specific to this project.
- e. SRI can confirm this.
- f. SRI can confirm this (included in response to item 6 above).
- g. SRI can confirm this. Note: For planned site electrical shutdowns, emails are sent by the Facilities Desk to the Business Offices, Systems Administrators, EHS, ITS, and Security, and notifications are published on the Insider (SRI's internal information site) in advance of the planned shutdowns. In the event of unanticipated outages, the Security Department maintains a list of people to contact, which include Systems Administrators who have registered with the SRI Security Mass Notification System.
- h. SRI can confirm this. Note: SRI has policies for maintaining the privacy of student-level data that adhere to the Student Privacy Pledge. All project team members will sign a document with the "Student Privacy Pledge" before using any data.
- i. SRI can confirm this.
- j. SRI can confirm this. Note: Although we do not have a documented process, we would work with the State to coordinate any such audit.
- k. SRI can confirm this. Note: This is included in the Personally Identifiable Information (PII) handbook that can be provided at time of award.
- l. SRI can confirm this. Note: This applies only to appropriate authorized individuals.
- m. SRI can confirm this. Note: This applies only to appropriate authorized individuals.
- n. SRI can confirm this. Note: This applies only to servers used for the project.
- o. SRI can confirm this.

**Attachment C****Response Template for Implementation Plan****Include this attachment in Tab 5 of your proposal.**

Each Offeror must use this template to submit a plan to implement the proposed VPI+ Program Evaluation to meet the requirements detailed in Section IV., Statement of Needs.

**1. Describe the implementation process for the preschool program evaluation.*****Implementation Process and Tasks*****Task 1. Logic Model and Evaluation Design Refinement**

The logic model is useful only if the hypothesized relationships represent a consensus understanding of how the VPI+ program is expected to work. We propose to use the preliminary logic model as a starting point, anticipating refinements based on discussions with VDOE, the VPI+ implementation team, the evaluation advisory board, and other key stakeholders. These discussions will focus on identifying the group's overall theory and assumptions underlying the program, as well as assumptions about relationships between components of the program. This process will elucidate the elements of the logic model for which consensus exists, elements for which there is not consensus (such as variations across the divisions and additional distinctions that need to be made between new and improved classrooms), and missing elements that might need to be developed or articulated. Using the input received, evaluation staff will develop the next iteration of the logic model. The revised logic model will then be sent to the VPI+ implementation team for any additional feedback to ensure that the logic of the program has been accurately captured. The evaluation team will hold a conference call with the VPI+ implementation team to resolve any remaining issues and develop the final logic model that will guide both the formative and summative components of the evaluation.

**Task 2a. Develop Formative Data Collection Tools**

During months 2-4 of the project (September and October 2015), SRI will develop the coaching logs, teacher surveys, division coordinator interview and survey protocols, and any additional formative data collection tools needed. Data collection protocols will be shared with the VPI+ implementation team for review more than 15 days prior to implementing data collection to allow time to receive approval and feedback. Data collection tools will be submitted with the Institutional Review Board (IRB) materials before use. To further inform the evaluation design, we will reach out to a sample of staff from participating school divisions to discuss the feasibility of planned data collection approaches and anticipate possible challenges.

**Task 2b. Conduct Formative Data Collection**

- a. **CASTL coaching logs.** The evaluation team will work with CASTL staff members to develop a log of the PD and assistance sessions they offer to administrators, coaches, and teachers that captures dates, hours, and participant information. The evaluation team will collect copies of the logs from CASTL on a quarterly basis.
- b. **Local coaching logs.** The evaluation team will ask school division coaches to fill out a scannable or online coaching log throughout the school year. The log will capture content

- and intensity (hours) of coaching for individual VPI+ teachers and administrators. The evaluation team will collect copies of the logs from division coaches on a quarterly basis.
- c. **Observations of CASTL PD.** The evaluation team will also observe up to four CASTL PD sessions with coaches and administrators per year. We will request a list of planned PD sessions from CASTL to obtain a varied sample of PD formats and content.
  - d. **Teacher surveys.** The evaluation team will conduct an online survey with VPI+ (new and improved) and VPI teachers annually each spring (March-April) to learn about their backgrounds, experiences, and qualifications; participation in PD and coaching; perceived usefulness of PD and coaching; their classroom practices, including use of curricula, formative assessments to inform instruction, and selected family and community engagement activities; buy-in for new curriculum and formative assessment; and access to and use of comprehensive services by their students.
  - e. **Division administrator phone interviews and surveys.** To gather basic program information, the evaluation team will conduct semistructured interviews supplemented with brief surveys twice a year with the division administrators responsible for coordinating their VPI+ and VPI classrooms. The interviews will be used for more open-ended questions and the short surveys for more categorical and quantitative types of information, including data about program costs. The first round of interviews/surveys will gather information about the division's local experience implementing preschool programs; the leader's background, experiences, and qualifications; local choice of a curriculum and a formative assessment; and the characteristics of new and improved, and, if possible, BAU VPI programs (e.g., full-day, size, staffing, staff qualifications). Subsequent phone interviews/surveys will focus on accomplishments; the role and influence of CASTL's needs assessment; the types and usefulness of PD the administrators receive from CASTL; local program improvement activities; the structure and focus of teacher coaching; barriers and facilitators to the VPI+ work (e.g., availability of teachers and coaches who meet qualifications, availability of classroom space, buy-in to new formative assessment and curriculum, budget changes, and evaluation feedback); and updated staffing and budget information.
  - f. **Site visits.** In years 2-4, after the VPI+ programs have had an opportunity to initiate and implement the VPI+ classrooms and expectations from VDOE may be more clear, we will begin to visit all 11 school divisions annually (February-March) to interview a sample of VPI+ teachers, school/program administrators, and local coaches (two program administrators, two coaches, and six teachers per division). We will sample classrooms based on having a mix of high, medium, and low CLASS/ECERS ratings to understand whether coaching supports vary based on the needs of teachers (e.g., for struggling teachers versus those who have demonstrated stronger performance).
  - g. **Extant data analysis.** If possible, the evaluation will request access to CLASS and ECERS data collected on VPI+ classrooms in years 1 and 3 so that we can conduct exploratory analyses on how patterns of PD and coaching (type, intensity, and participation) are related to changes in CLASS/ECERS scores over time. We will also triangulate CLASS/ECERS scores with teacher reports of classroom practices to provide recommendations for future PD and coaching efforts. The evaluation will also request data on VPI and VPI+ program characteristics already captured in administrative databases by divisions or VDOE. The evaluation also will examine student

enrollment/mobility data and teacher retention data to determine whether enrollment targets are being met and whether high student mobility or teacher turnover rates may be barriers to implementation. Finally, the evaluation would be interested in analyzing student attendance data, if available, given that research has shown that lower attendance in preschool programs is related to poorer outcomes.

### **Task 3a. Conduct PreK and K Summative Data Collection**

- a. **Hire and train data collectors.** Because we will be using validated tests that require purchasing and use of copyrighted training manuals and testing materials, we will need to purchase the needed child direct assessment materials. The SRC team will be responsible for hiring and training the child assessment team to conduct the child assessments in preschool classrooms in years 1 and 2 and kindergarten classrooms in years 2 and 3. SRC will also identify one or two data collection supervisors for each region who will be responsible for scheduling, conducting fidelity checks, and managing the on-site process for gathering consent. Potential assessors will attend a 2-day training at the beginning of each assessment cycle. Assessors must achieve 80% reliability to be considered ready to go into the field. In addition, SRC data collection supervisors will observe new assessors their first few child assessments. Supervisors will perform ongoing reliability checks by double-scoring 10% of the assessments and conducting random fidelity checks throughout the data collection window.
- b. **Obtaining informed consent and identifying participating children.** Before the start of each school year, we will need to obtain lists of children attending VPI+ new and improved classrooms, their demographics, and their student testing ID, by class/teacher and program name/ID, from school divisions. We will work with schools and districts to include study information, FERPA requirements, and informed consent forms in enrollment packets for children enrolling in VPI+. Once the child lists are received, we will select a sample of children in VPI (business as usual) classrooms and partner with VDOE and regional teams to obtain consent from the parents of children in these classrooms. The same process will be followed for a sample of No PreK children in kindergarten. For children for our two comparison groups, members of our team may attend student/family orientations, especially in schools serving hard-to-reach populations, in order to engage with families and obtain informed consent. We will work with data collection supervisors and assessors to obtain consent forms, as needed, from designated school liaisons. When necessary, we will ensure that assessors go to the school to distribute consent forms to the teachers/students in the classroom or to parents picking their students up at the beginning or end of the school day. We may also work with school districts to include study information and consent forms in enrollment packets for VPI and/or kindergarten.
- c. **Conduct direct child assessments.** To support tracking of completed assessments, we will develop a tracking database for assessments that also indicates child's program/school, teacher/class, consent status, testing ID, language of assessment, and status of completion on each of the summative assessments. We will work with each division coordinator on how to schedule the assessments (e.g., whether to develop a master schedule with the division coordinator or whether to contact each school/program with a classroom participating in the study. We will schedule approximately 45 minutes per student to allow extra time for transitions. The trained data collectors will administer

three direct child assessments (WJIII Applied Problems, DCCS, and HTKS). We will conduct assessments beginning approximately week 3 of the children's preschool program through approximately week 10 in the fall. Each spring, starting in early April, the evaluation team will conduct post-test measures of the same direct summative assessments using an approach similar to that in the fall for scheduling, training, and quality assurance.

- d. **Collect teacher rating forms.** Each fall and spring, SRI will collect teacher ratings of children's social-emotional development on the Teacher-Child Rating Scale (T-CRS) through an online secure survey application. SRI has already used this measure for another preschool program evaluation, so the tool is already in a ready-to-use format.
- e. **Data entry.** As completed assessment forms are submitted to SRI/SRC, they will immediately be logged in and reviewed for quality assurance. Data collection supervisors working with the assessors will be notified immediately if any data issues are discovered.

### **Task 3b. Train PreK and K Teachers on Conducting Summative Assessments**

In the spring of year 2, the evaluation team will train the VPI+ preschool teachers to administer the direct child assessments. The teachers will already know how to complete the T-CRS. Training will be done through a train-the-trainer model. The SRI team will train school division staff, coaches, and teacher leaders, who will then learn how to train VPI+ preschool teachers who will be expected to administer these assessments in the fall and spring of years 3 and 4. The evaluation team will also create training resources that can be accessed on the Web, such as video examples of the assessments being conducted and recorded training sessions on the implementation of the assessments. A similar train-the-trainer model will be used to train new and additional division staff to help kindergarten teachers learn how to administer the summative assessments in year 4 (the evaluation team will conduct the kindergarten assessments in years 2 and 3). Teachers will be asked to enter the results into a secure online survey interface so that the evaluation team can analyze the data and provide the required reports and data set to the divisions and VDOE.

### **Task 4. Conduct Cost-Effectiveness Analysis**

The following tasks will be conducted as part of the cost-effectiveness analysis:

- a. **Literature review.** A comprehensive literature review will be conducted in year 1, with brief follow-up searches in successive years to capture new research.
- b. **Development of cost survey.** A program cost survey will be developed to capture direct and indirect costs, and repeated in each program year. The request for cost data will be coordinated with the formative data collection activities to reduce burden.
- c. **Collection of cost data.** Two types of costs will be identified for the program: direct program costs and indirect costs for administration, infrastructure, and other necessary system investments. Program costs will be identified by using administrative data collected from each of the school division coordinators for each of the preschool program groups, including data from each of the participating school divisions, as well as from VDOE, and a cost survey that captures information not included in the administrative data. These data will include total expenditures, as well as any data available on expenditures at the school, classroom, or child level. Indirect costs will be drawn from state and district administrative expenditures, as well as from data for related programs,

such as the TQRIS program. Per-child costs will be disaggregated on the basis of program type, district, and other program characteristics, such as teacher salary, staff-child ratios, and professional development expenditures. We will examine cost and outcome data separately for private and public providers.

- d. **Collection of benefits data.** Data will be collected to monetize benefits in year 1 and collected again in successive years, using the same data collection template. Data will be collected from state- and county-level administrative sources and other data sources, including census and Bureau of Labor Statistics data.
- e. **Cost-effectiveness analyses.** Analyses will be conducted to determine cost inputs, benefits, and return on investment ratios for various subgroups of children and program types.
- f. **Reporting.** Annual cost-effectiveness reports will be submitted on August 1 in years 1-3 and in the comprehensive final report in June of year 4. Results will be incorporated into an Excel calculator tool that VDOE and the VPI+ implementation team can use to explore the costs and benefits of changes to certain program supports.

#### **Task 5a. Data Products and Reporting: Rapid Summative Assessment Results**

The evaluation will produce several data products and reports as described below.

**Individualized assessment reports.** Each year, the evaluation team will provide divisions, teachers, VDOE, and the VPI+ implementation team with individualized summative assessment results to inform instruction and professional development supports (December and June). The first reporting period is expected to take 8 weeks after closure of the summative assessment window. Subsequent reporting periods are expected to be faster (e.g., take closer to 4 weeks) because of templates and procedures having been developed. To produce these reports rapidly, the evaluation team will carry out the following steps:

- Develop a template for providing individual student assessment results.
- Develop a template for providing school/program-level results.
- Develop a template for providing division-level results.
- Generate individualized assessment result reports.
- Develop secure links and passwords for school division coordinators and the VPI+ implementation team on SRI's web-based file exchange program (Accellion).
- Hold a meeting and/or webinars to introduce summative result reports and the system for retrieving reports specific to one's class, school, or division.

**Summative results data set.** The evaluation team will prepare a data set 12 weeks after the first data collection window containing individual records of the summative data results. Again, the time needed to prepare a data set will be less for subsequent data sets (e.g., 6 weeks) because of programming and templates already having been developed.

#### **Task 5b. Data Products and Reporting: Biannual Formative Feedback Reports**

The evaluation team will prepare separate formative feedback reports for the VPI+ implementation team and each of the 11 school divisions that will be delivered by December 31 and June 30 of each grant year.

**Task 5c. Data Products and Reporting: Quarterly Progress Reports**

SRI will submit quarterly progress reports to the VPI+ implementation team on evaluation activities by October 31, January 31, April 30, and July 31 of each grant year in years 1-3 and in year 4 on October 31, January 31, April 30, and June 30. The reports will include the following information: (a) financial update, (b) technical update, (c) problem identification and mitigation plan, and (d) other information. The evaluation leadership will hold a follow-up call with the contracting officer to answer questions within a week of the report submission, if desired.

**Task 5d. Data Products and Reporting: Annual Results Reports**

Interim results from the summative evaluation of VPI+ will be summarized in an annual report to be submitted to the VPI+ implementation team by August 1 in grant years 1-3.

**Task 5e. Data Products and Reporting: Annual Cost-Effectiveness Reports**

A cost-effectiveness report will be submitted August 1 of each of grant years 1-3. The report will include a detailed description of data analysis. Also, a cost-benefit calculator will be developed in Excel to allow users to modify assumptions, including costs, program characteristics, and effectiveness parameters, and view cost-benefit estimates.

**Task 5f. Data Products and Reporting: Final Comprehensive Evaluation Reports**

We propose to prepare 12 final comprehensive reports—1 state-level report and 11 division-level reports—by June 30, 2019.

**Task 6. Recruit and Convene Evaluation Advisory Board**

The evaluation advisory board (EAB) will play a vital role in providing advice and guidance to SRI during the project, bringing a rich, diverse set of perspectives that will enable us to design and implement an evaluation that best meets VDOE's needs. The Potential EAB members will be identified in consultation with the VPI+ implementation team, and members are likely to include national and Virginia-based experts, as described in Attachment A. The SRI team will discuss the list of potential EAB members at the kick-off meeting (Task 7).

The EAB will convene three times during the first year and annually in years 2-4. Before each EAG meeting, the SRI team will provide an agenda and background materials at least 5 days before each meeting. The SRI team will prepare a written summary detailing suggestions and recommendations of the EAG and proposed actions moving forward within 15 business days after each meeting. We envision that the first three meetings will focus on the three evaluation studies, such as:

- Year 1-Meeting 1 (August): Review of the summative study purpose, refinement of the summative evaluation questions and initial refinement of the logic model, and review and refinement of the summative study methods and measures.
- Year 1-Meeting 2 (November): Review of the formative study purpose, refinement of the formative evaluation questions, review of formative study methods, and review of the draft data collection protocols/topics.
- Year 1-Meeting 3 (April): Review of the cost-effectiveness study purpose, refinement of the cost-effectiveness evaluation questions, review of cost-effectiveness study methods,

and review of cost data elements being used to calculate costs and quantify and monetize outcomes.

- Year 2-Meeting 4 (September): Review findings from the first year's formative, summative, and cost-effectiveness findings and discuss implications for the program and evaluation.
- Year 3-Meeting 5 (September): Review findings from the second year's formative, summative, and cost-effectiveness findings and discuss implications for the program and evaluation.
- Year 4- Meeting 6 (September): Review findings from the third year's formative, summative, and cost-effectiveness findings and discuss implications for the program and evaluation.

### **Task 7. Advisory Services to VDOE and VPI+ Implementation Team**

**Kick-off meeting.** Within the first few weeks of the contract, the evaluation leadership team will hold a kick-off meeting with VDOE and/or VPI+ implementation team members who will oversee the evaluation contract. We would hope to schedule this meeting as early as possible in the project (e.g., late July 2015) at VDOE offices to clarify the objectives and timeline and, if necessary, modify the proposed work plan to ensure a high-quality and responsive evaluation design, and to ask for some initial feedback on the proposed evaluation logic model and design. We also will discuss potential members for the EAB and the communication protocols that will be used with EAB members and all the VPI+ divisions and programs. For example, we will consider the best ways to build relationships with contacts at the sites, perhaps by convening them at a meeting that many of them may already plan to attend (e.g., a VPI+ training).

**Participate in ongoing VPI+ implementation team and management meetings.** We will engage the VPI+ implementation team in reviewing the draft evaluation plan with research questions, data collection methods, recommended tools and data elements, analysis approaches, and reporting plans. At these meetings, we also will work with the VPI+ implementation team to develop materials for communicating with the school divisions and VPI+ program sites about the evaluation, such as summaries that provide an overview of evaluation objectives, benefits, data collection activities, responsibilities, and timelines. SRI project coordinators will continue to participate in all VPI+ implementation team meetings, and the co-PIs will attend meetings and sometimes bring other evaluation staff, depending on the topics of the meetings.

**Develop draft evaluation plan.** Within the first 3 weeks of the contract, we will prepare a draft evaluation plan document and presentation in which we will clearly lay out the purpose of the evaluation, the formative, summative, and cost-effectiveness research questions, the research methods (data collection and analysis), the data products (e.g., data sets) and reports, and a project timeline for all these activities. We also will include an appendix with the data collection requirements for VDOE, divisions, CASTL, and schools/programs.

**Provide consultation to VDOE on federal reports and VLDS.** The co-PIs and SRC's evaluation director will provide consultation to VDOE on new ways of using and reporting data and bring in other SRI and SRC experts as needed. Consultation topics will include:

- Ways to develop and report on performance measures and how to build the needed information into evaluation data collection activities and subgrantee progress reporting.

- Ways to strengthen the Virginia Longitudinal Data System (VLDS) content, data quality, and use, including how to integrate essential preschool program and child outcome data into VLDS.
- Ways to develop and use progress monitoring systems.
- Suggestions about the development of public-facing reports and reports and data sets that are for authorized use only.

### **Task 8. Data Collection and Analysis**

Data collection for the formative, summative, and cost-effectiveness evaluations is described in the tasks above. The evaluation team will engage in data analysis on the following timeline each year except where otherwise specified:

- Conduct analysis of summative assessments by types of preschool programs, student characteristics, and variations in services and supports (within 8 weeks of the completion of data summative data collection).
- Conduct analyses on other school outcome variables (e.g., participation in special education, additional support services, grade retention) (December).
- Conduct analysis of extant and administrative data (e.g., student enrollment, student mobility, student attendance, teacher turnover) (December).
- Conduct analysis of coaching logs (December and June).
- Conduct analysis of teacher surveys (May).
- Code and analyze division coordinator interview data, including holding cross-division interviewer debriefing meetings (November and May).
- Conduct analysis of site visit interviews, including holding cross-division site visit debriefing meetings (July-August in years 2-3, May-June in year 4).
- Conduct analysis of cost-effectiveness data and perform sensitivity analyses (June-July in years 1-3, May-June in year 4).

### **Task 9. Data Security and Sharing**

**Establish data sharing agreements.** In August 2015, we will work with VDOE on finalizing our data sharing agreement and data requests for the evaluation. We also will reach out to all 11 school divisions to establish data sharing agreements that include our data requests for the evaluation and to determine whether they will need a human subjects research application to allow our evaluation team to collect data from students, teachers, and administrators.

**Share data exports with VDOE.** We will request data exports from the school divisions twice a year just before our fall and spring child direct assessment data collection. We will submit a data export to VDOE each December and June containing individual records of the summative data results that include the state testing ID for each child.

**Obtain IRB approval.** We will obtain Institutional Review Board (IRB) approval through SRI's IRB by submitting an application to conduct human subjects research. In parallel, the team will develop procedures and processes for obtaining consent, collecting and storing data, and sharing data between the evaluation team and VDOE.

**Task 10. Compliance with Code of Virginia § 22.1-296.1.**

We will conduct annual criminal background checks each August or at the start of employment for all persons who will have direct contact with children to certify that they have not been convicted of a felony or any offense involving the sexual molestation or physical or sexual abuse or rape of a child.

**Task 11. Disaggregated Results for Different Groups within the Program**

The evaluation will examine whether costs and impacts on child outcomes vary by implementation (types, intensity, and participation), by program characteristics (e.g., public versus private), by location, and by student demographic characteristics (e.g., gender, race/ethnicity, ELL status, special education status, age, and any parent/family demographic information). When possible, findings will be presented by certain program characteristics (e.g., public and private programs) and certain student demographics (e.g., gender, race/ethnicity, ELL status, and special education status). Before committing to reporting results by subgroups, we will need to review the prevalence of specific groups of children to ensure that there are large enough numbers for meaningful results. Also, we will want to maintain confidentiality by not reporting out cell sizes less than 10, and the evaluation team will follow any additional guidance provided by VDOE, the VPI+ implementation team, and federal standards to ensure that participants' privacy is protected.

**Task 12. Implementation Plan**

We will refine this implementation plan in consultation with the VPI+ implementation team at the kick-off meeting.

**2. Provide a rubric that demonstrates how the data being collected are mapped to the evaluation components as provided in Section IV, Statement of Needs.**

In Exhibit C1, the various types of data being collected are mapped to the evaluation components identified within the formative, summative, and cost-effectiveness evaluations in Section IV, Statement of Needs.

**Exhibit C1. Map of Data Collection to Evaluation Components**

<b>Evaluation Components Listed in Section IV, Statement of Needs</b>	<b>Data Being Collected and Data Sources</b>
<b>2. Formative feedback on ways to strengthen the VPI+ support system and local implementation of a high quality preschool program that shall include the following:</b>	
○ The types and intensity of support that teachers receive from VPI+ coaches	✓ Coaching logs from local coaches

Evaluation Components Listed in Section IV, Statement of Needs	Data Being Collected and Data Sources
<ul style="list-style-type: none"> <li>○ The influence of teacher and administrator professional development activities, including variability in participation, activity types, and dosage</li> </ul>	<ul style="list-style-type: none"> <li>✓ Coaching logs from CASTL</li> <li>✓ Coaching logs from local coaches</li> <li>✓ Division coordinator phone and interview surveys</li> <li>✓ Teacher survey</li> <li>✓ Site visits to interview division coaches and teachers</li> <li>✓ Analysis of TQRIS data</li> </ul>
<ul style="list-style-type: none"> <li>○ The local selection of curriculum and formative assessment (VDOE-selected or other).</li> </ul>	<ul style="list-style-type: none"> <li>✓ Division coordinator phone and interview surveys</li> <li>✓ Teacher survey</li> </ul>
<ul style="list-style-type: none"> <li>○ Local experience implementing preschool programs;</li> </ul>	<ul style="list-style-type: none"> <li>✓ Division coordinator phone and interview surveys</li> <li>✓ Other administrative data (enrollment, slots, attendance, teacher turnover)</li> </ul>
<ul style="list-style-type: none"> <li>○ Teacher and leader background, experience, and other qualifications;</li> </ul>	<ul style="list-style-type: none"> <li>✓ Administrative data</li> <li>✓ Teacher surveys</li> </ul>
<ul style="list-style-type: none"> <li>○ The role and influence of the needs assessment process on local program improvement activities (needs assessment will include data from VSQI ratings in years 1 and 3 for new VPI+ classrooms)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Observations of CASTL-led PD</li> <li>✓ Site visits to interview division coaches and teachers</li> </ul>
<p><b>3. Summative evaluation of the impact of VPI+ on children’s school readiness</b></p>	
<ul style="list-style-type: none"> <li>○ The contractor must use the results of PALS in preschool (PALS preK) and in kindergarten (PALS K)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Analysis of PreK and K PALS</li> </ul>
<ul style="list-style-type: none"> <li>○ The contractor must administer additional summative assessments, as defined in Section III, (Definitions) #4, related to the Domains of School Readiness to all children in new VPI+ preschool</li> </ul>	<p>PreK and K assessments:</p> <ul style="list-style-type: none"> <li>✓ WJIII – Applied Problems subtest</li> </ul>

Evaluation Components Listed in Section IV, Statement of Needs	Data Being Collected and Data Sources
<p>classrooms (fall and spring) and to these same children in fall of their kindergarten year. Summative assessments must be administered to kindergarten students who participated in new VPI+ classrooms and then entered kindergarten in any of the school divisions implementing VPI+</p>	<ul style="list-style-type: none"> <li>✓ DCCS</li> <li>✓ HTKS</li> <li>✓ T-CRS</li> </ul>
<ul style="list-style-type: none"> <li>○ The contractor must use summative assessments that have norm referenced data available at the state or national level to permit the VPI+ team to determine the extent to which children in the program are meeting or exceeding normative averages</li> </ul>	<p>PreK and K assessments:</p> <ul style="list-style-type: none"> <li>✓ WJIII – Applied Problems subtest</li> <li>✓ DCCS</li> <li>✓ HTKS</li> <li>✓ T-CRS</li> </ul>
<ul style="list-style-type: none"> <li>○ The contractor must determine the extent to which different types of providers (e.g., public or private) influence student outcomes and program costs</li> </ul>	<ul style="list-style-type: none"> <li>✓ Administrative data on program characteristics including type, costs, and services offered</li> </ul>
<ul style="list-style-type: none"> <li>○ The contractor must use an approach that meets the most rigorous standards established for education research and evaluation and minimizes threats to internal validity</li> </ul>	<ul style="list-style-type: none"> <li>✓ QED using propensity score matching for identifying equivalent comparison groups</li> <li>✓ Validated measures</li> <li>✓ Independent, trained assessors</li> <li>✓ Repeated measures with baseline (fall PreK, spring PreK, and fall K)</li> </ul>
<p><b>4. A cost-effectiveness analysis of VPI+ which must include the components defined in Section III</b></p> <ul style="list-style-type: none"> <li>○ Setting the framework for the analysis;</li> <li>○ Deciding whose costs and benefits should be recognized;</li> <li>○ Identifying and categorizing costs and benefits;</li> <li>○ Projecting costs and benefits over the life of the</li> </ul>	<ul style="list-style-type: none"> <li>✓ Cost data from cost surveys and budgets, including salaries, professional development costs, administrative data, and non-personnel costs</li> <li>✓ Summative data to determine short-term child outcomes, including school readiness and</li> </ul>

<b>Evaluation Components Listed in Section IV, Statement of Needs</b>	<b>Data Being Collected and Data Sources</b>
<p>program, if applicable;</p> <ul style="list-style-type: none"> <li>○ Monetizing (placing a dollar value on) costs;</li> <li>○ Quantifying benefits in units of effectiveness;</li> <li>○ Discounting costs and benefits to obtain present values;</li> <li>○ Computing a cost-effectiveness ratio;</li> <li>○ Performing sensitivity analysis; and</li> <li>○ Making recommendations where appropriate.</li> </ul>	<p>cognitive assessment data</p> <ul style="list-style-type: none"> <li>✓ Data to monetize benefits, including district- and state-level expenditures, census, and Bureau of Labor Statistics data</li> </ul>
<p><b>11. Disaggregated results for different groups within the program.</b></p> <ul style="list-style-type: none"> <li>○ The contractor shall consider the extent to which it is practicable to provide valid results by school division (reference Section VIII), locale codes as defined by the National Center for Education Statistics (NCES), student or community race/ethnicity, English learner status, disability status, or other relevant factors that may be important for strengthening and sustaining the VPI+ program.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Student race/ethnicity, English learner status, disability status, military-family connectedness, age, gender, and program characteristics (urban/rural, public/private, VPI+/VPI)</li> <li>✓ Teacher characteristics</li> <li>✓ Program characteristics (types, costs, and services)</li> </ul>
<p>Part B: The contractor shall provide to the VDOE and the 11 participating school divisions a comprehensive program evaluation that includes the extent to which children’s participation in “improved” classrooms (as defined in Section III, (Definitions) #2) impacts child outcomes and program cost-effectiveness. The extent to which participating divisions use grant funds to improve existing classrooms will vary by school division. There is interest in understanding the extent to which these varied services and dosage impact student outcomes and costs.</p>	<ul style="list-style-type: none"> <li>✓ Improved classrooms are included in all the formative data collection activities</li> <li>✓ Improved classrooms are included in all the summative data collection activities</li> <li>✓ Improved classrooms are included in all the cost-effectiveness data collection activities</li> </ul>

**3. Provide an implementation plan that enumerates dates and milestones necessary to meet all the requirements in Section IV., Statement of Needs.**

Exhibit C2 presents our proposed implementation plan, including milestones and a proposed schedule for meeting all the requirements in Section IV., Statement of Needs.

**Exhibit C2. Implementation Plan**

<b>Requirements</b>	<b>Milestones</b>	<b>Dates</b>
1. Logic model	Kick-off meeting with VPI+ implementation team to get feedback	First 3 weeks
	Refine logic model based on VPI+ and feedback	10 weeks into contract
2. Conduct formative data collection	Develop formative data collection tools	First 8 weeks
	Collect CASTL coaching logs	Ongoing: Submit logs every Nov., Feb., May, Aug.
	Collect local coaching logs	Ongoing: Submit logs every Nov., Feb., May, Aug.
	Observations of CASTL PD	4 times a year
	Teacher surveys	March-April each year
	Division VPI+ coordinator interviews/surveys	October and April each year
	Site visits to divisions	Feb.-Mar. in years 2-4
	Obtain CLASS/ECERS scores	April in years 1 and 3
	Obtain division data on attendance, student enrollment, student mobility, and teacher turnover	November each year
	3. Conduct summative data collection	Obtain list of children in VPI+ and VPI classrooms and related program and child characteristic data
Obtain consent forms, if necessary		August each year
Conduct propensity score matching to identify matched comparison group of children		Sept. 7 each year
Build a tracking database for assessments		August 2015
Train new assessors		August and March in years 1 and 2, and August in year 3
Conduct preschool direct child assessments		Fall: Sept. 10–Oct. 31 Spring: Apr. 1–May 20
Collect T-CRS ratings from preschool teachers on participating children		Fall: Sept. 10–Oct. 31 Spring: Apr. 1–May 20
Conduct K direct child assessments	Fall: Sept. 10–Oct. 31 in years 2 and 3	

Requirements	Milestones	Dates
	Collect T-CRS ratings from kindergarten teachers on participating children	Fall: Sept. 10–Oct. 31 in years 2 and 3
	Collect PALS data from divisions/VDOE	November and May each year
	Collect physical and motor assessment data from divisions/VDOE	November and May each year
Train teachers on conducting summative assessments	Develop training materials and web-based instructional videos	May-July in year 2
	Hold train-the-trainer sessions for division coordinators, coaches, and lead teachers	August in year 3
	Support collection of results through online surveys	Fall: Sept. 10–Oct. 31 Spring: Apr. 1–May 20
4. Cost-effectiveness analysis	Conduct literature review	November 2015
	Develop program cost survey(s)	January 2016
	Gather cost data from various partners/budgets	Mar.-Apr. in years 1-3 February in year 4
	Quantify and monetize outcome data	June in years 1-3 March in year 4
	Analyze cost-effectiveness data and perform sensitivity analyses	July in years 1-3 April in year 4
5. Data products and reporting		
Rapid summative assessment results reports and data sets	Develop report templates	November 2015
	Generate individualized assessment result reports	December and June each year
	Post reports on secure website and establish individualized links and passwords to reports	December and June each year
	Hold a meeting to introduce reports to division staff	December 2015
	Prepare a summative results data set for VDOE	December and June each year
Biannual formative feedback reports	Prepare separate formative feedback reports for the VPI+ implementation team and each of the 11 school divisions	December 31 and June 30 each year

<b>Requirements</b>	<b>Milestones</b>	<b>Dates</b>
Quarterly Progress Reports	Submit quarterly progress reports to the VPI+ implementation team	Years 1-3: October 31, January 31, April 30, and July 31 Year 4: October 31, January 31, April 30, and June 30
Annual results reports	Submit interim annual reports to the VPI+ Implementation team	August 1 in years 1-3
Annual cost-effectiveness reports	Submit annual cost effectiveness reports to the VPI+ implementation team	August 1 in years 1-3
Final comprehensive evaluation reports	Prepare separate comprehensive final reports for the VPI+ implementation team and each of the 11 school divisions	June 30, 2019
6. Evaluation advisory board	Identify EAB members with VPI+ implementation team	First 3 weeks
	Recruit EAB members	First 6 weeks
	Convene EAB meetings	Year 1: Sept. 2015, Dec. 2015, and May 2016 Year 2: Sept. 2016 Year 3: Sept. 2017 Year 4: Sept. 2018
	Summarize meeting notes and recommendations	Within 3 weeks of EAB meeting
7. Advisory services to VDOE and VPI+ implementation team	Kick-off meeting	First 3 weeks
	Attend all VPI+ implementation team meetings	Ongoing
	Develop draft evaluation plan for a rigorous comprehensive program evaluation	First month
	Share draft evaluation plan with VPI+ implementation team	First 6 weeks
	Finalize evaluation plan	10 weeks into contract
	Share evaluation plan with school divisions	10 weeks into contract
	Provide consultation on federal reports, other public and non-public reports, and VLDS	Ongoing
8. Data collection and analysis (collection described above)	Analyze summative assessments by types of preschool programs, student characteristics, and variations in services and supports	December and June in years 1-3 May in year 4

Requirements	Milestones	Dates
	Analyze other school outcome variables (e.g., participation in special education, additional support services, grade retention)	December
	Analyze extant and administrative data (e.g., student enrollment, student mobility, attendance, teacher turnover)	December
	Analyze coaching log data	December and June
	Analyze teacher survey data	May
	Analyze division coordinator interview data, including holding cross-division interviewer debriefing meetings	November and May
	Analyze site visit interviews, including holding cross-division site visit debriefing meetings	July-August
9. Data security and sharing	Obtain student testing IDs to attach to all summative data with lists of students in VPI+ and VPI study classrooms and students in participating K classrooms	August each year
	Agree to terms and conditions of a completed VDOE-provided Restricted-Use Data Agreement and finalize agreement with needed data elements	August 2015
	Obtain Institutional Review Board approval	10 weeks into contract
10. Compliance with Code of Virginia § 22.1-296.1.	Conduct criminal background checks for convictions and provide certification that all persons who will have direct contact with children have not been convicted of a felony or any offense involving the sexual molestation or physical or sexual abuse or rape of a child	Annual checks each August
11. Disaggregated results for different groups within the program	Ensure that data in cells with fewer than 10 respondents are not shown in public reports to protect the identity of individuals	Ongoing
	Consult with VPI+ on the ways data can be disaggregated and still have enough respondents to be reliable and meaningful	Ongoing
12. Implementation plan	Refine this implementation plan in consultation with the VPI+ implementation team at the kick-off meeting	First 3 weeks

**Attachment D****Cover Sheet for Writing Samples****Include this attachment and the required writing samples in Tab 5 of your proposal.**

Provide four writing samples of previous work that demonstrate your team's ability to prepare each of the following documents for a multi-site, multi-method program evaluation:

- a. A final report (include no more than 10 pages of text; provide the most relevant 10 pages if necessary).
- b. Project summary, including results (no more than 2 pages)
- c. Communication to a non-technical audience (no more than 5 pages; provide the most relevant 5 pages if necessary)
- d. Results of a cost-effectiveness analysis (include no more than 10 pages of text; provide the most relevant 10 pages if necessary).

Insert a brief description here of the writing samples and include this page as the cover page.

- a. **Final report.** Two sections from the final evaluation report *Saint Paul Early Childhood Scholarship evaluation: Final evaluation report—2008-2011* are provided on **pages 5D-2–5D-11**. This final report was prepared for the Minnesota Early Learning Foundation summarizing a 4-year summative and formative evaluation of a scholarship model to provide high-quality preschool programs to children from low-income families in Minnesota. The report and findings were used to successfully lobby the state legislature for increased funding for preschool programs across the state.
- b. **Project summary.** The Executive Summary from the report *Preschool teachers can use a media-rich curriculum to prepare low-income children for school success: Results of a randomized controlled trial* is provided on **pages 5D-12–5D-13**. This report was prepared as part of the Ready to Learn Summative Evaluation, a study that was commissioned by the Corporation for Public Broadcasting to evaluate video and interactive games from Super Why!, Between the Lions, and Sesame Street, which are produced for PBS as part of the Ready to Learn Initiative.
- c. **Communication to a non-technical audience.** As part of an evaluation of the McKnight Foundation's Education & Learning Program, a brief on teacher practices was prepared (*Education & Learning Program: PreK-3 Teacher Instructional Practices*) and is provided on **pages 5D-14–5D-17**. The purpose of the brief was to provide study results to school leaders and to use the results to provide recommendations on how they could support the improvement of teacher literacy instructional practices.
- d. **Results of a cost-effectiveness analysis.** Three excerpts from the report *New York State Early Childhood Cost Estimation Model: Technical manual* are provided on **pages 5D-18–5D-25**. This report was prepared for the New York State Early Childhood Advisory Council Finance Work Group to document the data and methodology used to project the fiscal implications of improvements to New York's early childhood system. In this document, the methodology used in the cost model and the findings of the cost analyses are described.

## Overview of the Saint Paul Early Childhood Scholarship Program Model



### Model Description

The purpose of this evaluation was to test the effectiveness of a market-oriented early childhood scholarship model outlined by Rolnick and Grunewald (Grunewald & Rolnick, 2006; Rolnick & Grunewald, 2003). This model, which views early childhood education as a wise investment in economic development terms, was built on the ever-growing early childhood research literature demonstrating the short- and long-term benefits of high-quality early education programs, particularly for children from low-income families, who often lack access to high-quality early education programs.

The developers (Rolnick and Grunewald) and individuals representing the Minnesota Early Learning Foundation (MELF) were asked about the impetus for the pilot of the Scholarship Program and their vision of it addressing early childhood education issues. These respondents articulated key features of the model, including the following:

- The model rests on the assumption that in a market-driven system, people behave in their best interests (i.e., parents are invested in the best interests of their children; the child care workforce and early education program administrators want to make a living).
- In designing the scholarship model, the developers kept in mind three guiding principles:
  - **Provision of financial resources to families.** Parents from low-income families must be given the financial resources that will enable them to access high-quality early childhood education (ECE) programs for their children; if incentives to programs are increased, the market will respond.
  - **Increased accountability.** Early education programs must be held accountable for producing positive results (e.g., getting children ready to be successful in school); programs that produce positive results will be eligible to receive higher payments, in the form of scholarships for the children they serve, thus incentivizing ongoing performance. If programs are provided with incentives to produce positive results, they will respond to produce positive results.
  - **Parent empowerment.** Parents benefit from an array of information that can help them make good choices about how best to support their children's early learning and school readiness. If parents who are low-income are given the information about the characteristics and benefits of high-quality ECE programs for their children's learning and school readiness and the monetary resources needed to access these programs, their empowerment will create demand, which in turn will promote long-term sustainability of the supply of high-quality early education programs.

In short, the model contends that the market must provide incentives for early childhood education programs to achieve high quality, programs must be accountable to parents and the public (who fund programs) for achieving positive child outcomes, and parent empowerment is predicted to drive demand for high-quality early education programs as well as promote sustainability. An additional principle is that the model should be cost-effective at a systems level; that is, the market will support those programs that achieve positive results, but those programs that do not will not be sustained or, at the very least, will not participate in a market-driven approach (i.e., not solicit scholarship funds because they do not meet high-quality standards).

Figure 1 shows the logic model of the Scholarship Program designed by its developers. The model has three major interventions, shown as Program Inputs that map on to the three principles described above.

- **Parent Mentoring**<sup>5</sup> through home visiting to provide parents with information about the characteristics and benefits of high-quality ECE programs
  - Mentoring leads to parent empowerment. Low-income parents are given information that can help them make good choices about how best to support their children’s early learning and school readiness.
- **Scholarships** for low-income families to use to pay for high-quality ECE programs for their preschool children
  - Scholarships lead to access to markets. Low-income families are given the financial resources to enable them to access high-quality ECE programs for their children.
  - If incentives to programs are increased, the market will respond (i.e., with increases in program supply and quality).
- Implementation of an ECE **program quality rating system**, Parent Aware,<sup>6</sup> to rate and monitor ECE program quality
  - A rating system leads to increased accountability. ECE programs are accountable for producing positive results (e.g., getting children ready to be successful in school).

---

<sup>5</sup> Parent mentoring services ended June 30, 2009, due to budget constraints.

<sup>6</sup> For detailed information about Parent Aware, go to its website at <http://www.parentawareratings.org/>.

## Evaluation

### Evaluation Questions

The findings to be presented draw on this logic model to show how the scholarship model worked and what was learned about its components. The qualitative and quantitative data presented in this report address key questions about the logic model.

- How were the three Scholarship Program interventions shown as Program Inputs implemented (i.e., parent mentoring, receipt of scholarship funds and attendance in high-quality ECE programs, and program participation in the Parent Aware program rating system)?<sup>7</sup>
  - Who were the children, families, and programs that participated in the Scholarship Program? What were the demographic and baseline developmental characteristics of children and families (ethnicity, income/SES, mobility, language, employment, etc.)? What factors did families identify that facilitate enrollment and participation in the Scholarship Program? What factors did families identify that serve as barriers to enrollment and participation in the Scholarship Program? How many programs did children attend for how many months? Did they attend part-time or full-time?
  - Who participated in the parent mentoring component of the Scholarship Program? How many visits did children and families receive? What activities occurred during the visits and what topics were discussed?<sup>8</sup>
  - Which types of ECE programs responded to the Scholarship Program by participating in Parent Aware and by enrolling children with scholarship funds? How many high-quality ECE programs and slots were available in and near the pilot area for families to choose for their children to use their scholarship funds? How did the supply of ECE programs and slots change over the first three years of implementation? Did new programs enter the market in and near the pilot area?

In addition to general participation data, we asked the following outcome evaluation questions.

- How did the development of scholarship participants compare to expected development for children their age?
  - What gains occurred in children’s development after two years of participating in the Scholarship Program and attending a high-quality ECE program?
  - Did children who participated in the Scholarship Program enter kindergarten better prepared to be successful in school?
  - Did more children experience improved development, competencies, and skills in dimensions identified by the National Education Goals Panel (NEGP) and how did their outcomes compare with outcomes for a comparison group of kindergarten children? These school readiness dimensions include the following:

<sup>7</sup> These questions also provide initial data on the Short-Term Outcomes components of the logic model (e.g., children participating in high-quality programs, improved program quality, and increased supply of high-quality programs).

<sup>8</sup> This report does not include information on the parent mentoring. All findings related to parent mentoring were included in the Year 2 Annual Report. Refer to Parent Mentoring report on [www.co.ramsey.mn.us/ph](http://www.co.ramsey.mn.us/ph)

- Health and physical development
- Emotional well-being and social competence
- Approaches to learning
- Communication skills (including vocabulary)
- Cognition and general knowledge (including early literacy and math)

In addition, this report summarizes data from the RAND Cost Study and SRI's ECE Program Survey, two studies that were conducted in 2010. These studies answered the following questions:

- What were the costs associated with providing a high-quality early education experience to young children?
- How did the programs that were receiving scholarship funds use the funds?

Four earlier implementation reports in September 2008, September 2009, September 2010 and September 2011 are available on the MELF website ([www.melf.us](http://www.melf.us)). Through site visit interviews with the scholarship implementation team and key stakeholders as well as focus groups with parents, we described in the previous reports the successes and challenges of the Scholarship Program implementation during the first four years. This report summarizes information previously reported about the following process evaluation questions:

- How did the market forces component of the scholarship logic model work?
- How did scholarship-eligible families choose ECE programs for their children? Were parents using Parent Aware to inform their decisionmaking in selecting an ECE program for their child?

### Sources of Data

The evaluation design included collection of data from multiple sources.

- **Monthly exports.** Resources for Child Caring (RCC) sent monthly or quarterly exports of the status of all children deemed eligible and with consent to participate in the evaluation. The exports included data from the application form and information about the selected ECE program, the ECE start dates, and the child's ECE program attendance.
- **Parent phone interview.** Parents of children participating in the Scholarship Program were interviewed in Fall 2008, Fall 2009, and Fall 2010. For this report, we used only the baseline interview completed by parents to provide information about the background of children, parents, and families prior to their participation in the Scholarship Program.<sup>9</sup>
- **Direct assessments and teacher completed checklists.** Children were assessed at their selected ECE programs either in the fall of 2008 (when Cohort 2 children were 3 years old) or the fall of 2009 (when Cohort 3 children were 3 years old). These data provide a baseline for children's development prior to enrolling in a high-quality ECE program. Children were then assessed one year later at their ECE program (fall of 2009 for Cohort 2 and fall of 2010 for Cohort 3), and these data provided an assessment of children's developmental progress following one year of enrollment in a high-quality

<sup>9</sup> That is, for some children (Cohort 2), data from 2008 were baseline data, while for others (Cohort 3) data from 2009 were baseline data.

ECE program. Finally, children were assessed two years later when they were in kindergarten (fall of 2010 for Cohort 2 and fall of 2011 for Cohort 3). In addition to assessments of scholarship children, a comparison group of kindergarten children were assessed in fall of 2010 and fall of 2011 using the same battery of assessments.

- **NACCRRAware.** Data were also collected from NACCRRAware, a web-based public-use dataset available from the National Association of Child Care Resource and Referral Agencies that provided information about ECE programs and from the **Parent Aware rating website**<sup>10</sup> that documented the changes in program quality and participation in the pilot areas over time.

**Table 1. Scholarship Program Evaluation Questions and Data Sources**

Evaluation Questions	Source
1. Who were the children, families, and programs participating in the Scholarship Program? What were the demographic and baseline developmental characteristics of children and families? How many programs did children attend for how many months? Were they attending part-time or full-time?	Application forms Parent phone interviews RCC monthly export
2. Which types of ECE programs responded to the Scholarship Program by participating in Parent Aware and by enrolling children with scholarship funds? How many high-quality ECE programs and slots were available in and near the pilot area for families to choose for their children to use their scholarship funds? How did the supply of ECE programs and slots change over the first three years of implementation?	NACCRAware Parent Aware website
3. How did the development of scholarship participants compare to expected development for children their age? Did children who participated in the Scholarship Program enter kindergarten better prepared to be successful in school?	Direct child assessments Parent phone interviews Teacher checklists
4. What were the costs associated with providing a high-quality early education experience for young children?	RAND Cost Study
5. How did the programs that were receiving scholarship funds use the funds?	ECE Program Survey

<sup>10</sup> For more information, go to <http://www.parentawareratings.org/>.

## Summary and Implications



The data in this final report about the evaluation of the pilot of the Saint Paul Early Childhood Scholarship Program describe how the scholarship model was implemented and what was learned about its effects on children, families, early childhood education programs, and the targeted community (i.e., the targeted pilot areas in Saint Paul, Minnesota). A major focus of this report was the kindergarten outcomes, both within the scholarship participants and comparing scholarship children to children who did not receive a scholarship, but who were low-income and who were entering kindergarten at the same time as the scholarship children (i.e., 2010 or 2011).

### Summary of Major Evaluation Findings

**Implementation.** With regard to implementation, the programs and agencies administering and participating in the Saint Paul Early Childhood Scholarship Program worked hard for the past four years to implement the program model with fidelity for five cohorts of children. All three interventions in the scholarship model (i.e., parent mentoring, distribution and use of scholarship funds to attend high-quality ECE programs, and the Parent Aware ECE program rating system) evolved over the past three years and through unanticipated budget crises and implementation challenges. The continuing implementation and evaluation of the Saint Paul Scholarship Program model in the pilot community in 2011, the final year of the program, yielded additional and new information about how the model operated and the impacts it had for children, families, programs, and the pilot community.

Implementation data collected across the four years of the evaluation, including in the final year, showed that the Scholarship Program participants (e.g., funders, administrators, ECE program directors, parent mentors, and parents) had positive experiences and reported many types of positive outcomes from the Scholarship Program's implementation in their community. For example, from implementation briefs from the evaluation showed:

- ECE program directors in the pilot community reported that more children from low-income families were able to enroll in high-quality ECE programs due to the availability of scholarship funds.
- The scholarship implementation reported that flexibility in outreach activities and use of trusted community members to enroll families into the Scholarship Program allowed them to be successful in reaching different populations of eligible families (e.g., new immigrant groups) who may not typically enroll their children in ECE programs.
- Recruitment challenges arose in the early years of the implementation which led to a recommendation for any future replications that additional time for planning and start up is needed in order to understand the community and identify and implement successful strategies to engage families and recruit them to participate in the Scholarship Program.

- The family support and other activities of the parent mentors were highly valued and had strong support from all participants in the Scholarship Program, especially from the parents.
- Starting in Year 2, most respondents who were interviewed stated that they believed that parents were positively influenced by being empowered to make different choices than they would have without the scholarship funds (mentioned by both implementers and parents).
- Also starting in Year 2, most respondents who were interviewed mentioned that the Scholarship Program increased community and legislative awareness about the importance and complexity of early childhood.
- In the pilot, the distribution of scholarships and the implementation of the Parent Aware quality rating system occurred simultaneously. This resulted in an early shortage in the number of high-quality ECE program slots available for children with scholarship. A recommendation for future replications was that the quality rating system should be implemented at least one year prior to beginning the distribution of scholarships to allow the rating process to begin and the supply of high-quality programs to be sufficient.
- The scholarship model worked well across a variety of ECE program types (e.g., for-profit and nonprofit community-based ECE programs, Head Start and school-based ECE programs, family child care programs). However, future replications should consider more explicitly how the market-driven scholarship model can be best used by nontuition programs such as Head Start and school-based programs and how strategies to increase participation of family-based programs can be better implemented.

Focus groups conducted with participating parents in Years 2, 3, and 4 yielded rich data to demonstrate that parents were greatly appreciative and strongly supportive of the Scholarship Program, valuing its positive impacts on their children and on themselves.

- For the most part, parents chose to participate in the Scholarship Program because it allowed them to enroll their children in higher quality early care and education (ECE) programs than they could have afforded otherwise.
- Compared to Minnesota's Child Care Assistance Program (CCAP), parents described the Scholarship Program as simple to use: simple to apply for; having broader eligibility criteria; requiring less ongoing paperwork to maintain their child's eligibility status; and, as a result, providing more consistent and stable care for their child.
- Many parents commented that the scholarship funds allowed them to access a full-day rather than a half-day high-quality program for their child.
- All parents described benefits of participation in the program for their children, including exposure to school readiness skills such as reading, writing, counting, identifying colors and shapes, and learning manners and how to follow rules, as well as how to interact with other adults and children and how to behave in social situations.
- Across all four years, few parents had heard of Parent Aware, and only a few of them had used the website.
- While the number of home visits by parent mentors and how they helped families varied considerably, the majority of parents reported that they had worked with a parent mentor

at least once, and most parents expressed strong positive opinions about the parent mentors.

- Parents had strong positive impressions of the quality of the ECE program their children attended, mentioning four major features almost universally:
  - Curriculum and early learning environments that promote children’s school readiness skills;
  - Caring, compassionate, and high-quality teachers and staff who their children liked;
  - Strong parent involvement activities; and
  - Safety, location, hours of operation, and extra services (e.g., dental services, speech therapy).
- Parents universally expressed gratitude for the Scholarship Program and understood the importance of high-quality ECE programs in supporting their children’s learning and development (both pre-academic and social) and school readiness.
- Parents also expressed strong support for continuing the Scholarship Program for other families.

Data about the impact of the implementation of the ECE program quality rating system, Parent Aware, to rate and monitor ECE program supply and quality showed positive changes over the four-year pilot program in the availability of ECE programs in and near the pilot community in Saint Paul and participation in, and improved ratings from, the Parent Aware rating system.

- The number of high-quality programs (3- and 4-star rated programs) in and near the pilot area increased more than 86%, from 22 programs to 41. The additional programs included 9 center-based programs (3 nonprofit, 2 for-profit, 3 school-based and 1 Head Start site) and 10 family child care programs.
- The total capacity of high-quality programs in and near the pilot area increased 116% (from 1,011 slots to 2,182 slots) between 2008 and 2011. Changes in capacity varied by the type of ECE program.
- The number of programs participating in Parent Aware in and near the pilot area, including those listed as being in the process of obtaining their rating, increased 40% between 2008 and 2011, from 35 to 49 programs.
- The proportion of programs receiving a rating of 3 or 4, indicating high quality, increased from 85% (22 of 26 programs) in 2008 to 91% (41 of 49 programs in 2011).

A cost study conducted by RAND in Year 3 yielded important data showing variations in cost per child across different program types.

- The cost for serving each child ranged from \$7,010 to \$25,603 per year (based on full-time enrollment, which varied in definition based on each site’s hours of operation). Hourly per child costs ranged from \$3.47 to \$19.06 per hour.
- Family child care programs and for-profit center-based programs had the lowest costs, and nonprofit center-based programs, Head Start, and public school-based programs had the highest costs, with half-day Head Start centers and half-day public school-based programs having the highest per hour per child costs.

- The majority of cost differences between family child care programs and for-profit center-based programs, and nonprofit center-based programs, Head Start, and public school-based programs, respectively, were attributable to differences in the number of nonclassroom staff employed at each site. The Head Start, public school programs, and nonprofit centers were more likely to provide a wide range of services such as parent coaches, parent coordinators, or other services, resulting in higher per child costs.

Additional survey data were collected from ECE programs showed the following main findings about how programs used scholarship funds.

- 78% of the programs used scholarship funds to enroll children from low-income households.
- 74% of the programs used scholarship funds to support quality improvements.
- 63% of the programs used scholarship funds to serve more children.
- 56% of the programs used scholarship funds to serve children with different demographic characteristics (e.g., children whose families had recently immigrated) than they had previously served.
- 48% of the programs used scholarship funds to increase the number of hours children could attend.
- 26% of programs noted in an open-ended comment section of the survey that the scholarship funds supported children being able to stay enrolled in high-quality programs even as family circumstances or income changed.

Survey data also showed the primary ways in which the scholarship funds were used.

- 55% used the scholarship funds primarily to enroll children from low-income households who would not have otherwise been able to enroll in their program.
- 27% used the funds primarily to increase the number of hours children attended.
- 18% used the funds primarily to support quality improvement efforts.

**Child Outcomes for Scholarship Group Children.** Results from analyses of a variety of school readiness outcomes showed that children in the Scholarship Program made significant gains and improvements in their skills from entry into their high-quality ECE programs at age 3 (baseline) to one year later and again to two years later when they entered kindergarten.

- Significant improvements were found for the kindergarten child outcomes for the scholarship children for seven of nine school readiness outcomes. There were significant improvements from baseline to kindergarten entry for receptive and expressive language (both  $p < .0001$ ), early literacy ( $p < .0001$  and  $= .008$ ), early math ( $p = .04$ ), social competence ( $p = .02$ ), and attention skills ( $p = .04$ ) measures.
  - For the PPVT language measure, the gain of 5 points in scores after one year of ECE participation is equivalent to an effect size of .33, considered to be a moderate effect size, and the gain of 9 points across two years is equivalent to an effect size of .59, which is a large gain.
  - For the Picture Naming expressive language measure, the gain of 11 points across two years is equivalent to an effect size of 1.2, which is a very large gain.

- For the Print Knowledge measure, the gain of nearly 9 points across two years is equivalent to an effect size of .49, which is a moderate to large gain.
- For the Phonological Awareness measure, the gain of about 5 points across two years is equivalent to an effect size of .32, which is a moderate gain.
- For the Applied Problems early math measure, the gain of about 3 points across two years is equivalent to an effect size of .23, which is a small gain.
- For the Social Competence measure, the gain of almost 4 points across two years is equivalent to an effect size of .27, which is a small gain.
- For the Attention measure, the gain of 1 point in scores across two years is equivalent to an effect size of .07, which is a very small gain.
- The percentage of scholarship children with problematic scores<sup>73</sup> decreased between baseline at age 3 and kindergarten entry for four of the nine measures.
  - For the PPVT language measure, the percentage of scholarship children with low scores decreased from 56% at baseline to 37% at kindergarten entry ( $p < .0001$ ).
  - For the IGDI-Picture Naming measure, the percentage of scholarship children with low scores decreased from about one-third at baseline to 21% at kindergarten entry ( $p < .001$ ).
  - For the Print Knowledge measure, the percentage of scholarship children with low scores decreased from 30% at baseline to 18% at kindergarten entry ( $p < .009$ ).
  - For the Applied Problems early math measure, the percentage of scholarship children with low scores decreased from 22% at baseline to 8% at kindergarten entry ( $p < .001$ ).
- For three of the remaining measures, the percentage of scholarship children with problematic scores remained similar between baseline at age 3 and kindergarten entry for three scores. For one measure, girls, but not boys, showed significant increases in the number with problematic scores.
  - For the Phonological Awareness measure, the percentage of scholarship children with low scores remained similar from 35% at baseline to 34% at kindergarten entry.
  - For the Social Competence measure, the percentage of scholarship children with low scores remained similar for both boys (24% to 33%) and girls (23% to 29%) from baseline to kindergarten entry.
  - For the Anger-Aggression measure, the percentage of scholarship children with high scores remained similar for boys (9% to 12%), but was significantly increased for girls (6% to 15%) at baseline to 18% at kindergarten entry.
  - For the Anxiety-Withdrawal measure, the percentage of scholarship children with high scores remained similar for both boys (12% to 8%) and girls (5% to 10%) from baseline to kindergarten entry.
  - For the Attention measure, the percentage of scholarship children with low scores remained similar from 23% at baseline to 26% at kindergarten entry.

---

<sup>73</sup> Scores that were one standard deviation or more from the mean in a problematic direction (e.g., lower language or social competence skills, higher anger-aggression or anxiety-withdrawal scores).



## Executive Summary

Preschool children who participated in a media-rich curriculum incorporating public television video and games into classroom instruction develop the early literacy skills critical for success in school, according to a new study. These foundational skills — being able to name letters, knowing the sounds associated with those letters, and understanding basic concepts about stories and print — all increased among the 4- and 5-year-olds in the study. These preschoolers were from traditionally economically disadvantaged communities where children are often far less prepared for school than their more affluent peers. The study was conducted between January and June 2009 by researchers at Education Development Center, Inc. and SRI International with a grant from the Corporation for Public Broadcasting and the U.S. Department of Education.

These gains among 4- and 5-year-olds are significant. Although a number of studies have shown that digital technologies are promising for improving learning in K-12 schools, technology use in *preschool* has been controversial. Critics argue that television and computers have no role in an active preschool classroom in which teachers seek to create a learning environment that promotes interaction among them and the children. The teachers who participated in this study were asked to engage their children in a range of media-rich literacy activities, from active video viewing to hands-on play with letters, sounds and books.

This study reports that preschool teachers who implement a curriculum that integrates video content with teacher-led activities can improve their students' early literacy skills. Given training and support in classroom activities to reinforce the skills presented in the videos, the teachers were able to conduct the curriculum successfully and help their students learn. This is noteworthy because the teachers in the study were similar to many preschool teachers serving low-income communities: They had little prior training in literacy instruction and worked in schools with limited access to curriculum materials of proven effectiveness.

The study was commissioned by the Corporation for Public Broadcasting to evaluate video and interactive games from *Super Why!*, *Between the Lions* and *Sesame Street*, which are produced for PBS as part of the *Ready to Learn Initiative*. To measure the impact of the study's curriculum, the researchers conducted a randomized controlled trial with 398 low-

income children from 80 preschool classrooms. The preschool teachers were randomly assigned to implement either a 10-week technology-supported literacy curriculum or a 10-week technology-supported science (comparison) curriculum. The researchers tested children in both sets of classrooms before and after implementation and provided both initial training and ongoing coaching for the teachers in both curricula.

Children who participated in the literacy curriculum outscored children in the comparison curriculum on all five measures of early literacy used in the study; four of the five differences were statistically significant. The posttest results were as follows.

- *Naming letters:* Children in the early literacy curriculum classrooms knew an average of 21.2 letters compared with 16.8 letters for children in the comparison classrooms.
- *Knowing the sounds of letters:* Children in the early literacy curriculum classrooms knew an average of 10 letter sounds compared with 6.3 for children in the comparison classrooms.
- *Knowing concepts of story and print:* Children in the early literacy curriculum classrooms earned 10.8 points on average on the test of story and print concepts, whereas children in the comparison classrooms scored an average of 9.5 points.
- *Recognizing letters in child's own name:* Children in the early literacy curriculum classrooms knew an average of 2.7 letters in their names, whereas children in the comparison classrooms knew 2.5.

Also of note was that every teacher who began the study remained in it and was able to carry out the curriculum as designed by the research team. With the help of training and coaching visits to classrooms, the preschool teachers delivered the curriculum with a high degree of fidelity and in ways that supported the active engagement of children. Teachers showed the children videos an average of nearly two times per week, almost exactly as the curriculum intended.

These results show that a media-rich curriculum with integrated professional development for teachers can prepare low-income children for school success. The results also provide evidence of the success for the Corporation for Public Broadcasting in its *Ready to Learn Initiative*, which promotes literacy using multiple forms of media to deliver educational programming in a variety of settings, including preschools.

The next steps are to test this curriculum in other settings and with other subjects.

## Education & Learning Program:

# PreK–3 Teacher Instructional Practices

AUGUST 2014

**A key component of the McKnight Foundation’s Education and Learning (E&L) Program is supporting PreK–3 teachers to improve their literacy instruction in order to develop proficient readers.** This brief describes the ways in which teachers in the E&L schools changed their instructional practices in the 2013–14 school year, facilitators and challenges to changes in practices, and recommendations for the future.

The findings are from 91 interviews conducted in fall 2013 and spring 2014 with district and school administrators, PreK–3 teachers (including dual language and English language teachers), and literacy coaches in the three districts and five schools with an E&L Program implementation grant<sup>1</sup> and with six Urban Education Institute (UEI) staff responsible for teacher training and leadership coaching. The perspectives of the interviewees may not represent the full population of the staff in these schools or at UEI.

### Key Practices and Levers for Change

The E&L Program aims to develop teacher knowledge and practices in several key areas. It seeks to increase teacher knowledge about literacy development, promote the use of common language about literacy to support alignment and collaboration across grades, enhance teacher use of data to inform instruction, advance the use of evidence-based instructional strategies, and boost teacher expectations for student learning. The levers the E&L Program has used to promote changes in practice include the STEP<sup>2</sup> literacy assessment and resulting diagnostic data (and special analysis of assessment data used in SPPS), professional development from UEI and school literacy coaches, literacy-focused professional learning communities (PLCs), and coaching for school leaders on how to support changes in teachers’ practice.

<sup>1</sup> E&L Program schools with implementation grants are Earle Brown Elementary School, Brooklyn Center Community Schools (BCCS); Wellstone Elementary School and Saint Paul Music Academy, Saint Paul Public Schools (SPPS); Jefferson Community School and Andersen United Community School, Minneapolis Public Schools (MPS).

<sup>2</sup> STEP—the Strategic Teaching and Evaluation of Progress—is a developmental literacy assessment for grades PreK–3.

### Changes in Teacher Practice

School and UEI staff described changes to teachers’ practice in the areas of overall understanding of developmentally appropriate literacy instruction, data-based decisionmaking, expectations for student learning, and specific instructional strategies.

**Teachers developed a shared understanding of literacy development and instructional practices.** Across the E&L schools, teachers reported that the E&L Program gave them a common language for and understanding of literacy development and good literacy practice. A BCCS teacher described how STEP has given teachers a common understanding and language that promotes cross-teacher discussions of students’ literacy development:

*The best lever for our school has been the implementation of the STEP assessment. We truly had as a building no understanding of how readers develop on a continuum. The STEP assessment has created a common language around milestones for readers within the component that readers need to demonstrate skill.*

Both teachers and coaches in MPS said STEP has increased teachers’ understanding of the progression of literacy skills and how to identify gaps in those skills. A teacher said, “I think as a whole...we’ve definitely grown in learning more about the developmental trajectory of literacy and reading.”

**Teachers improved their use of data to inform and individualize instruction.** With the availability of detailed assessment data and professional development on how to use those data to inform instruction, teachers reported becoming more playful about learning goals for their lessons and narrowing the focus of lessons to the skills they identified in the data as needing attention. Teachers also reported becoming more adept at using data to individualize lessons for guided reading groups and small group instruction. Teachers in MPS and BCCS reported using STEP data to inform text selection and guide the questions they asked students about the text. A MPS teacher described the process of using data to

determine how to support guided reading groups:

*The guided reading groups are more focused now in terms of what the child needs in order to move. Some students need comprehension so I put them in a group for comprehension. Others need word solving. And I'm seeing gains and that's been exciting.*

According to one SPPS administrator, UEI professional development was a “wake-up call” for some teachers, helping them to understand the importance of focusing their instruction on students’ needs and not just the district curriculum.

**Teachers had higher expectations for students and offered more rigorous instruction.** Across all districts, administrators, coaches, and teachers reported that teachers raised their expectations for students. In BCCS and SPPS, the E&L Program changed teacher expectations for PreK students in particular. A BCCS district administrator said, “We never thought preschoolers were capable of doing what they’re doing now. If someone 5 years ago would have said you’re going to do guided reading with four year olds, I would have said they were crazy.” Similarly, in SPPS PreK teachers increased expectations for oral fluency and required students to form full sentences more frequently instead of giving short one-word answers. Teachers in other grades also mentioned developing an increased awareness of how much their students could actually do and that this knowledge increased their expectations for students.

As a result of the higher expectations, teachers said they ask students to engage in more rigorous work. MPS teachers described focusing more on higher level questioning and critical thinking. One teacher explained that she made more effort to get the students “to understand that reading at this level, once they’re in third grade, is about thinking. And not just about looking at words.”

**Teachers described using new instructional practices to promote specific skills.** When asked how their practice changed, teachers provided specific examples of strategies learned through the E&L professional development. Strategies included use of turn and talk, in which students reflect, evaluate, and share ideas with a partner, and sentence starters and sentence stems to foster oral language development; use of inference and critical thinking questions and visualization tools (e.g., anchor charts)

to promote comprehension; focus on word solving skills to improve vocabulary; and use of dots under words to support reading. A SPPS PreK teacher described strategies UEI coaches encouraged her to use with her ELL students:

*...Instead of emphasizing certain words, have them repeat back to you a full sentence when we're doing journals. Instead of saying "Flower" say, "You are making a flower, can you say 'I am making a flower?'" It has made such a difference on their language skills. ... This year, we've talked a lot about vocabulary and putting it in context...Taking the time to get them to recognize not only the vocabulary but also the structure of conversations.*

---

### Variation in Changes to Teachers' Practice

---

While many teachers reported changing their practice because of the E&L Program, the extent of change varied widely across teachers. Challenges with the implementation of E&L Program change levers and situational factors sometimes inhibited change in teachers’ practices. In addition, district and coaching staff found that teachers who did not buy in to the E&L Program tended to not change their practices.

**The availability of diagnostic data was critical for restructuring teachers’ practices but not all teachers had the same access to this information.**

For many teachers, just having data to diagnose student needs and skills gaps made the biggest difference in their teaching. BCCS and MPS teachers had STEP data, and SPPS teachers received a special analysis conducted by UEI of their Mondo and Concepts About Print assessment data. While STEP data tended to provide more diagnostic information than Mondo data, both sets of data informed teacher practice. However, not all teachers had access to the same kind of data. For example, dual immersion teachers in SPPS did not have access to the same assessments or their results as English instruction teachers. Similarly, English Learner teachers in BCCS did not have direct access to STEP results.

**UEI professional development provided most teachers with support for using data to inform instruction and new instructional strategies, but some teachers felt it did not meet their particular needs for changing their instruction.** Teachers reported that the professional development helped them learn how to use STEP and Mondo data to identify gaps in students’ learning and focus their

instruction. They reported that it also provided teachers with specific strategies they could try in their classrooms. However, several MPS teachers did not think the professional development impacted their teaching because the content was not differentiated for their needs. For example, teachers wanted professional development on text selection to be tailored to their grade level. Similarly, Spanish-language teachers in MPS thought the professional development was less applicable to them:

*We have different needs and then sometimes it's English versus Spanish. [UEI trainers] were talking a lot this year about, if you go at this place on their website you can find these strategies for this STEP and some things just don't work in Spanish that way. There's not a resource for the Spanish teachers, so I tuned out or looked at other things that felt more relevant.*

**Without sustained training, some teachers reported not being able to maintain or further improve changes in their practice.** Teachers reported that they were able to continue to improve their practices over time when they received ongoing support. However, instructional change stalled when support waned. In MPS, a few teachers reported that in the second year of the E&L program they received less support so that trainers could focus on new teachers. As one teacher reported, “I haven’t found it as helpful.... Teachers who are new at STEP versus teachers who are in their second year of it, we have different needs... We’re doing some of the same stuff we did last year.” In SPPS, the training emphasis moved from PreK and kindergarten teachers to first grade teachers because of the staged nature of how grades were brought into the E&L Program work.

In BCCS, coaching and administrative staff reported needing to “reboot” their understanding of the criteria for each STEP level after noticing some students moved backward when the next year’s teacher scored STEP differently and determined a lower level of proficiency. BCCS staff at all levels noted the importance of continuing to work on refining the new teaching strategies they learned, such as guided reading groups, learning centers, and whole group instruction, so that they could continue to improve the quality of previously learned strategies while learning new strategies around phonics and writing instruction.

**Literacy coaches supported changes in teachers’ practice when they worked with teachers on a consistent basis and teachers were expected to work with their coaches, but often coaches did not have such access to teachers.** Staff at all levels noted that coaches had a greater impact when they met regularly with teachers and the teachers were open to feedback. However, expectations around whether teachers must work individually with a coach impacted coaches’ access to teachers. District and school administrators and coaches reported that teachers who were not identified for coaching support or who refused coaching help were less likely to change their practice. In SPPS, the focus of coaching moved from PreK and kindergarten in 2012–13 to first grade in 2013–14. PreK and kindergarten teachers reported missing that support. In some schools, teachers could choose whether to work with a coach, and many teachers opted not to engage with their coaches. Teachers in BCCS mentioned multiple reasons for not working with their coaches, including the feeling that the coaches did not have time for them, the coaches not sticking to the allowable minute allocation when modeling lessons, and the amount of time it took to be observed by a coach because of pre- and post-conferences. A coach in one of the MPS schools explained her understanding of why teachers did not welcome the coaches in their classrooms:

*I'd say maybe 75% of them value us. It's for various reasons that they don't want to [work with us], like they are stuck in, 'this is the way I've always done it and you can't make me change.' Or they're afraid of having another person in the room.*

In addition to individual coaching, literacy coaches in BCCS served as facilitators of PLCs, which increased the amount of time teachers spent discussing ways to provide instruction that responded to assessment data. However, mid-year in 2013–14, BCCS moved back to a teacher-led PLC driven by teacher needs, resulting in less time being spent on analyzing literacy data and reviewing literacy practices during PLC meetings. In SPPS, kindergarten teachers did not have PLCs in 2013–14 and literacy coaches were not always available for PLCs in the higher grades because they split their time with other schools. Therefore, PLCs were not a venue for coaching teachers in SPPS.

**Principals at the E&L schools varied in their involvement and roles in promoting change in teacher practice. Some school leaders held teachers accountable for instructional change while others just encouraged it.** The principals at both MPS schools, with support from UEI leadership coaches, identified key instructional priorities for the school year that were clearly communicated to teachers and part of their regular classroom observation protocols and feedback. One of the SPPS principals also noted monitoring teacher practice and holding teachers accountable for making instructional changes with training from the UEI leadership coach.

In contrast, school leadership in BCCS promoted changes in teacher practice through encouragement at staff meetings and through the availability of professional development tools, resources, and coaches. According to a few BCCS staff members, implementation of new practices was not consistent because the school leaders did not monitor teachers. One BCCS staff member felt this approach resulted in an uneven uptake of the new practices across the school, “Because it was choice, I would say we have some pockets of huge growth in teacher understanding and practice.”

Despite school leaders’ involvement, several teachers did not buy into some of the instructional changes promoted through the E&L Program.

**Teacher buy-in about literacy approaches and the appropriateness of STEP influenced whether teachers changed their practices.** Teachers who believed in the literacy practices promoted by the E&L Program and who felt sufficiently prepared were more likely to engage in new instructional practices. However, not all teachers were convinced the new practices being introduced were better than their current practices or felt they had the resources needed to adopt new practices. When BCCS teachers were told they had to adopt a balanced literacy framework and address all the components of that framework, a large minority of the teachers felt that they could not implement the new framework because they lacked a scope and sequence and sufficient training to make such a transition. This has created a set of teachers on the staff who are less open to changing their practices. One MPS district respondent described levels of change in teachers as green, yellow, and red, where the green teachers are completely onboard and the red teachers have not changed their practice and are “sitting there waiting for the 3 years to run out.” In SPPS, teacher buy-in

was more uniform; however, fewer teachers were involved and the practices being changed were less disruptive.

---

### Recommendations

---

Some important teacher practices improved because of supports and resources from the E&L Program. However, further work by UEI, the districts, and the schools is needed to refine and spread these practices. Teachers and other school staff identified actions to support their continued improvement in literacy instruction practices.

- UEI and coaches need to continue to provide training to staff for multiple years tailored to their stage of implementation so they can review and refine new strategies.
- Schools need to use a literacy assessment, such as STEP, that provides sufficient information to make good instructional decisions.
- Principals can promote the greater reach of coaches by requiring all PreK–3 teachers to work individually with coaches on certain practices.
- Schools can designate some PLC meetings for discussions of literacy data and strategies led by coaches and other PLC meetings for teachers to engage in their own planning.
- Schools need more bilingual materials and resources to support Spanish instruction based on STEP results.
- School leaders can continue to work with their staff on monitoring and supporting the use of new instructional practices.

The E&L Program will continue to help teachers refine and expand their teaching practices and to sustain these improvements. It will be important to keep monitoring the efforts to improve practice and their impact on student learning.

## Introduction

The New York State Early Childhood Cost Estimation Model was created by the Early Childhood Advisory Council (ECAC) to map existing federal and state public funding for New York's early childhood system, and to allow users to project the fiscal implications of improvements to the system. The model encompasses a range of programs for pregnant mothers and children ages birth through 5. This document details the data and methodology used in the cost model.

For more information about the ECAC or general questions about the Cost Model, please consult the accompanying User Guide or contact Stephanie Woodard of the New York Council for Children and Families at [Stephanie.woodard@ccf.ny.gov](mailto:Stephanie.woodard@ccf.ny.gov). For more information about data and methodology used in the model, please contact Andrew Brodsky at [andrew@brodskyresearch.com](mailto:andrew@brodskyresearch.com) or Simon Workman at [sjw@apaconsulting.net](mailto:sjw@apaconsulting.net).

## Project Overview and Methodology

The cost model was developed by Augenblick, Palaich, and Associates (APA) for the New York State Early Childhood Advisory Council (ECAC). The project team included APA staff Andrew Brodsky, Justin Silverstein, Simon Workman and Bob Palaich; Anne Mitchell, President of Early Childhood Policy Research; and Stephanie Woodard, New York State Council on Children and Family Services.

In the first phase of the project, the APA team met with the ECAC's Finance Work Group members to help frame the model and clarify goals. In the model's next phase, APA created a comprehensive data map in consultation with the ECAC, who consulted early childhood stakeholders in the state. This data map served as a guide to data collection, and included program names and descriptions, current funding disaggregated by funding source, current enrollment disaggregated by age and income, and current costs per child.

In the third phase, APA built an interactive web-based modeling tool based on data collected. This tool allows users to adjust components of the system, either on a program-by-program basis or by system domains, and view the current funding and projected funding gap for the system.

## Development of Program List

The first step in collecting data for the model was to identify a list of programs to include in the model. As the building of the model progressed, the program list was modified. The final lists of programs included in the model are as follows:

- American Indian Health Program
- American Indian Health Program – Clinics
- Campus Based Child Care Centers
- Child And Adult Care Food Program (CACFP)
- Child and Family Clinic
- Child Care Resource and Referral (CCR&R)
- Child Care Res. & Referral Centers - Infant/Toddler
- Child Care Resource & Referral Legally Exempt Registration
- Child Care Subsidy Training

## List of Programs, Descriptions, and Data Sources

This section lists current funding, descriptions, and sources for each of the programs in the model. Appendix B presents a tabular list of each program, current funding disaggregated by source, current enrollment, and estimated cost per child.

### A

**Program Name:** American Indian Health Program

**Description:** The American Indian Health Program (AIHP) provides access to primary medical care, dental care and preventive health services for Native Americans living in reservation communities. Health care is provided to enrolled members of nine recognized American Indian Nations in New York State through contracts with four hospitals. The program covers payments for prescription drugs, durable medical equipment, laboratory services and contracts with the American Indian Nations that provide on-site primary care services.

**Current Funding:** The total state expenditure between July 1, 2012 and June 30, 2013 was \$19,227,300.

**Current Enrollment:** The total enrollment between July 1, 2012 and June 30, 2013 was 917. Note: Since the American Indian Health Program does not receive data regarding health care services provided at the nation run clinics, and six of the nine nations do not access the AIHP Pharmacy Program, the data reflects an estimated number of active pharmacy cards used to receive services.

**Cost Per Child:** The cost per enrollee between July 1, 2012 and June 30, 2013 was \$20,968

**Data Source:** New York State Department of Health

**Program Name:** American Indian Health Program (AIHP) Clinics

**Description:** The American Indian Health Program (AIHP) Clinics provides access to primary medical care, dental care and preventive health services for Native Americans living in reservation communities such as: medical care, including prenatal care, pediatrics; dental and foot care; diabetes education; mental health counseling; and Enrollment services for Child Health Plus (CHP), Family Health Plus (FHP), Women, Infants, Children (WIC).

**Current Funding:** The total state expenditure between July 1, 2012 and June 30, 2013 was \$3,531,903.

**Total Number of Clinics:** The total of American Indian Health Program Clinics between July 1, 2012 and June 30, 2013 was 9

**Cost Per Clinic:** The average cost per clinic between July 1, 2012 and June 30, 2013 was \$392,434.

**Data Source:** New York State Department of Health.

### C

## Child Care Cost of Quality Methodology

The following section details the methodology used to estimate the cost of quality child care and was developed by Anne Mitchell for both Centers and Homes. A table presenting the hourly costs of child care by age, setting, and quality level is presented in Appendix B.

### Overview

One aspect of the system cost model is direct early care and learning services for children of various ages up to five years, at quality levels that correspond to the five levels of QUALITYstarsNY. For more information see [www.qualitystarsny.org](http://www.qualitystarsny.org). The costs of early care and learning in either centers or homes are calculated using model budgets that reflect statewide average costs; the resulting costs per hour are included in the system cost model.

These model budgets include all possible revenue streams available in New York to support center or home operations. The primary purpose of these models is to calculate the cost of quality at different levels for different ages of children. Another purpose is to illustrate how regulated programs financially support their operations and whether current funding sources are adequate. Another is to illustrate the gap between the cost of producing quality and the revenue sources available to support that cost. This information can inform the design of financial awards to maintain quality at each level.

### Methodology

Budgets were constructed for three different levels of quality. The basic quality level is a program that meets the state of New York's child care regulations (Star 1 in QUALITYstarsNY). Levels of quality above that are exemplified by Star 3 (acceptably good) and Star 5 (excellent) in QUALITYstarsNY. The costs for Star 2 and Star 4 are calculated by taking the median value between the adjacent Star levels.

### Expenses

In general, expenses in centers and homes are influenced by two major factors:

- 1) Structure: class sizes and staff:child ratios in centers and the number and ages of children permitted in homes,
- 2) Staff qualifications: the levels of credentials of teaching and administrative staff and compensation to match those credentials.

In the case of New York, class sizes and ratios at the basic regulated level (QUALITYstarsNY Star 1) are well within the range of best practice and QUALITYstarsNY standards do not include additional criteria on class size or ratio.

In general, QRIS standards call for more qualified staff as quality increases and more staff time as expectations increase for assessment, family activities and conferences, curriculum planning, staff meetings etc.

Specifically the QUALITYstarsNY standards affect expenses for staff qualifications and associated compensation and less significantly in a few other ways that increase staff time. These cost drivers include:

1. increased qualifications of staff to reach higher Stars
2. additional training in curriculum and associated assessments (*for child care these are likely to be in addition to the training hours on 8 mandated topics, since curriculum and assessment are not among those topics*)

3. increased number of parent conferences (one is required in regulation) and parent engagement activities
4. curriculum and child assessment implementation (conduct assessment, recordkeeping and reporting)
5. paid planning time and monthly staff meetings (in centers)
6. program annual self-assessment and improvement planning

To model the QUALITYstarsNY point system as accurately as possible, two hypotheticals were constructed using criteria in all four categories of the QUALITYstarsNY standards. One is a program solidly earning enough points for Star 3 and one is a program solidly earning enough points to reach Star 5.

The Quality Scholars program is available to support professional development and coursework and a small grants program is assumed to be able to help with the cost of any necessary equipment a program may need to move up in QUALITYstarsNY. These costs are properly captured as system costs, rather than ongoing program costs.

Program budgets do reflect costs of annual training required by regulation and needed for curriculum and assessment implementation and refresher courses. Having more parent-teacher conferences and family activities requires a modest amount of extra staff time. Curriculum and assessment implementation requires staff time upfront for training, while the observation and reporting functions will require modest amounts of staff time ongoing. These requirements, from a cost perspective, translate into the need for more teaching staff time as quality increases and higher compensation to match the higher required staff qualifications. The model budgets increase the amount of teacher aides to cover time teachers need to do assessments, and time the teaching team needs for planning and parent activities. For homes, the budgets increase the time of the provider.

**Staff Qualifications.** New York regulations recognize 2 sizes of family child care homes: small (up to 8 children) and 'group' (up to 16 children, with an assistant). The regulations recognize 3 sizes of center (a 'small center' is essentially a family child care home that is not in the residence of the provider). Centers can enroll children according to the group sizes and ratios; a center under 45 children does not need a full-time administrative director but does need a program supervisor on site at all times; this person can also teach. To model this, the director is set to be ½ time until the enrollment exceeds 45 and is assumed to teach ½ time in a classroom. The mix of qualifications of teaching staff varies, increasing by Star levels.

**Staff Compensation.** Compensation is the combination of wages and benefits. Benefits include those that are mandatory (e.g., Social Security and Medicare, Unemployment Insurance, Disability Insurance and Workers' Compensation) and those that are discretionary. NYS law requires 3 paid days off per year after one year of employment.<sup>1</sup> All the budgets assume 5 paid holidays. Typical discretionary benefits include more paid time off (e.g., paid holidays, sick leave, bereavement leave, vacation); 5 paid days of combined leave (sick vacation and personal) is offered at Star 1; Star 3 offers 7 days paid leave and Star 5 offers 10 days paid leave. Additional benefits that may be offered are access to group health and/or dental insurance, retirement plans, or life insurance at employee expense. Employers may provide flexible spending accounts and dependent care accounts; these allow employees to set aside part of their wages and are not a cost to the employer. Mandatory benefits are the same in all budgets; additional benefits added as the program quality level increases are more paid days off.

---

<sup>1</sup> <http://www.labor.ny.gov> Facts for Employers, page 1.

To estimate the wages for the different types of staff, we use the most recently available data (2012) from the US Bureau of Labor Statistics (BLS) for New York.<sup>2</sup> The key occupations are: Education Administrators, Preschool and Child Care Center/Program, and Child Care Worker. If desired, other occupations from the BLS and other wage data sources could be used; the spreadsheets contain the BLS as well as data from a national study of pre-K teachers' wages by education level. Wages are increased as the staff qualifications are increased by Star levels.

### Revenue Sources

All of the budgets assume basic revenue comes from either Child Care Subsidy or parent tuition charged at the same rate. New York is one of a very few states that set subsidy ceiling rates at the 75<sup>th</sup>ile of recent market rates; those rates are used in the Star 3 and Star 5 budgets. To reflect the fact that a basic legal center or home probably is not charging tuition at ceiling rates, the Star 1 budget discounts those rates by 10%. To simplify the calculations and represent an average center, the ceiling rates are averaged across the 5 clusters of counties; these averages are used in the budgets. The Star 3 and Star 5 budgets assume that parent tuition equals the market ceiling, that is, parent tuition does not increase with Star levels beyond the 75<sup>th</sup>ile tuition rates in the market.

All of the budgets assume the center or home is participating in the Child and Adult Care Food Program (CACFP). Star 4 and Star 5 centers are assumed to be eligible for Universal Prekindergarten (UPK) funds for the 4-year-olds who are eligible for free and reduced lunch, and that those children are enrolled for the full-day year-round. Since UPK is 2 ½ hour per day, the UPK funds are in addition to the full-time rate for subsidy (or parent tuition).

To make modeling policy changes easier, the quality achievement awards proposed in the state's Race to the Top Early Learning Challenge application are modeled as a separate revenue source in these budgets; the quality awards vary by Star level 3-5 and size of enrollment. High-need percentage is defined as the combined free and reduced lunch percentage.

Annual Achievement Awards		Star 3	Star 4	Star 5
Children w/High-Needs enrollment:	<b>26% and above</b>			
Homes	Small home	\$500	\$1,000	\$1,500
	Large home	\$1,000	\$2,000	\$3,000
Centers (enrollment):	Small center <45	\$2,000	\$4,000	\$6,000
	Medium 46-99	\$4,000	\$7,000	\$10,000
	Large 100-150	\$6,000	\$10,000	\$14,000
	Very large 151 and >	\$8,000	\$13,000	\$18,000

<sup>2</sup> [http://www.bls.gov/oes/current/oes\\_ny.htm](http://www.bls.gov/oes/current/oes_ny.htm)

## Specific Budget Information

All of these budgets include a line-item called “non-personnel” which is an inclusive category for equipment, food, supplies, basic in-service training, occupancy, maintenance, audit, insurance, phone and other miscellaneous expenses. The amounts per year are based on the average expenditure for these items across many sizes and types of programs (centers and homes) in several states, collected over many years, and have been vetted by administrators from several states and communities. The non-personnel items are in three categories: those that vary by the number of children (e.g., classroom materials, food); those that are related to the number of classrooms (e.g., occupancy costs including rent, utilities and maintenance); and those that are program-wide (e.g., audit, permits/fees). These non-personnel items are calculated in each scenario based on the number of classrooms and/or number of children or program-wide. For homes, costs are calculated based on the number of children or overall.

All of these budgets assume that children with disabilities would be integrated into any classroom and that the costs of their additional special education are paid by early intervention/preschool special education funding sources that follow the child and do not pass through the center. Thus these additional costs do not appear in these budgets.

Every classroom has at least one teacher and one assistant. For ease of calculation, all of the expense budgets have full-time staff (no part-timers except for aides at Star 1). Each center has one director. If there are fewer than 30 children, the administrative assistant/office manager is half-time (increasing to full-time if more than 30 children are enrolled); if there are more than 125 children, an education coordinator is added. When infants or toddlers are enrolled, a health consultant is included, as required by licensing.

In each budget, the maximum potential revenue from all sources is calculated and then reduced by a reasonable percentage to model the fact that 100% enrollment (and 100% revenue receipt) is not achievable. In practice, this *efficiency factor* depends on a center’s ability to quickly fill vacancies and to collect full payment from all payers. The enrollment efficiency factor is set initially at 85% in all budgets and can be varied by the user. To account for the variations in programs’ absence, holiday and vacation polices, these budgets assume payment is collected for 50, rather than 52, weeks in a year.

**Regulated Center (Star 1)** meets regulated classroom sizes and regulated ratios. Each classroom has a lead teacher and an assistant teacher. In the regulated center budget, the number of additional staff (aides) to meet ratio throughout the day is set at the rate of 25% of the number of classrooms to cover staff break times and the opening/closing hours of a 10 hour center that extend beyond the 8-hour work day of teaching staff. Staff are paid slightly less than the average wage for child care workers in NY. The director is paid 90% of the mean wage for ‘preschool/child care administrator’. The lead teachers are at 90% of the mean wage for ‘child care workers’ (\$22,293) and assistant teachers are at 80% (\$19,816). Substitutes and aides are paid minimum wage (\$8/hour).

Staff are paid for 15 hours of training annually. Benefits are the mandatory ones plus 10 days of paid leave (5 days of sick, personal, and vacation leave plus 5 paid holidays). Sub coverage is only included for the non-holidays and for coverage of staff attending training. No employer contribution toward health insurance is included, which assumes the employee is not covered, or pays the full cost of coverage or is covered by another family members’ health insurance policy.

Family child care providers are both teaching and running a business, so BLS wages preschool/child care administrator are used. Using a % of that wage, varied by Star level plus the direct expenses approximates total cost for family child care.

## QUALITYstarsNY budgets

The Star 3 expense budget begins to modestly increase compensation. The director is paid the mean wage for 'preschool/child care administrator'. The lead teacher average pay is 110% of the mean wage for 'child care workers' (\$27,247) and assistant teachers average pay is at 90% (\$22,293). Substitutes and aides are paid minimum wage (\$8/hour). Staff are paid for 5 more training hours and have 2 more paid leave days.

At Star 5, the budget increases compensation to reflect the higher required qualifications. The lead teacher average pay is 150% of the mean wage for 'child care workers' (\$37,155) and assistant teachers average pay is at 100% (\$27,770). Substitutes and aides are paid 10% above minimum wage (\$8.80/hour). Staff are paid for 5 more training hours and 3 more paid leave days. To cover the additional time for planning, child observation and reporting and additional parent conferences that teaching staff must complete as the Star level rises, we increase the number of aides to cover classrooms. At Star 3, this is 35%; at Star 5, it is 45%.

## Key findings about cost of quality per hour

Each hypothetical budget was set to have only children of one age cohort (infants, ones, twos, threes, fours or fives). The number of classrooms was manipulated to get as close to 70-75 total children as possible. Enrollment of 70-75 is the average center size in NY. For homes, the maximum number of children by age was used. In reality, no center or home would serve only one age group but this was the simplest approach to cost of quality per hour per age of child. The length of day was assumed to be 8 hours, as that is likely the average duration of a child's day in a full-time, year-round program. The program was assumed to operate 250 days per year. The hourly costs for Star 1, 3 and 5 were calculated using the model budgets. The costs for Star 2 and Star 4 were calculated by taking the median value between the adjacent Star levels. The results are summarized in the following charts:

### QUALITYstarsNY: Cost of quality per hour by age Centers

	<i>Star 1</i>	<i>Star 2</i>	<i>Star 3</i>	<i>Star 4</i>	<i>Star 5</i>
Infants	\$7.55	\$8.02	\$8.49	\$9.01	\$9.53
Ones	\$6.79	\$7.22	\$7.64	\$8.11	\$8.58
Twos	\$6.04	\$6.41	\$6.79	\$7.21	\$7.63
Threes	\$4.31	\$4.58	\$4.85	\$5.15	\$5.45
Fours	\$3.77	\$4.01	\$4.24	\$4.50	\$4.77
Fives	\$3.36	\$3.56	\$3.77	\$4.00	\$4.24

**QUALITYstarsNY: Cost of quality per hour by age Family Child Care Homes**

	<i>Star 1</i>		<i>Star 2</i>		<i>Star 3</i>		<i>Star 4</i>		<i>Star 5</i>	
	<b>FCC</b>	<b>G-FCC</b>								
Infants	\$16.16	\$13.05	\$17.92	\$14.59	\$19.78	\$15.54	\$21.62	\$16.50	\$23.43	\$17.43
Ones	\$16.16	\$13.05	\$17.92	\$14.59	\$19.78	\$15.54	\$21.62	\$16.50	\$23.43	\$17.43
Twos	\$8.08	\$6.53	\$8.96	\$7.29	\$9.89	\$7.77	\$10.81	\$8.25	\$11.72	\$8.71
Threes	\$8.08	\$6.53	\$8.96	\$7.29	\$9.89	\$7.77	\$10.81	\$8.25	\$11.72	\$8.71
Fours	\$8.08	\$6.53	\$8.96	\$7.29	\$9.89	\$7.77	\$10.81	\$8.25	\$11.72	\$8.71
Fives	\$8.08	\$6.53	\$8.96	\$7.29	\$9.89	\$7.77	\$10.81	\$8.25	\$11.72	\$8.71



**Tab 6**

**Attachment E—Response Template for Offeror Capacity**



**Attachment E****Response Template for Offeror Capacity****Include this attachment in Tab 6 of your proposal.**

Provide information that demonstrates the evaluation team's experience and expertise in multi-site, multi-method preschool program evaluation, including expertise in formative, impact, and cost-effectiveness evaluation.

**1. Describe the corporate experience of your organization in conducting multi-site, multi-method evaluation; preschool evaluation; formative evaluation; impact evaluation; and cost-effectiveness studies in a preschool and elementary school settings.**

SRI International and its small business partner, School Readiness Consulting (SRC), are poised to support the Virginia Department of Education (VDOE) in the expansion and implementation of its high-quality preschool program, Virginia's Preschool Expansion Grant (VPI+), by providing multi-site, multi-method formative and summative evaluations and cost-effectiveness studies via a variety of data collection methods and by using existing data, including data from Virginia's Longitudinal Data System, and doing so in the most efficient manner possible (i.e., cost-effectively). The combined experience of SRI and SRC in conducting early childhood research and evaluation projects includes generating formative feedback for sustainable change, generating and analyzing results to answer pressing questions, and effectively communicating results with a variety of stakeholders.

SRI International (SRI) is one of the world's largest, most innovative, and most respected not-for-profit research and consulting organizations, with work ranging from basic science and engineering to applied evaluation and research in education. Founded in 1946 and originally affiliated with Stanford University, SRI has been an independent corporation, chartered by the State of California and with its own full-time staff and facilities, since 1970. SRI is proud of its culture, where all individuals are expected to treat each other with respect and dignity. The organization strives to maintain a professional atmosphere in which diversity is embraced, equal opportunity is promoted, and discriminatory practices are prohibited.

The facilities and resources of SRI are abundant, and SRI's staff totals nearly 2,500 people. Our Menlo Park headquarters has more than one million square feet of office and laboratory space with state-of-the-art data processing and communication capabilities and local network systems that run in secure, environmentally controlled facilities with routine backup and security audits. Our in-house programmers and analysts are experts in operating systems, networking, data system development, and data analysis. In addition, SRI has advanced teleconferencing facilities, graphics and editing resources, and research information services.

The proposed evaluation team is based in SRI Education, a division of SRI. SRI Education has a large Early Learning program dedicated to promoting equitable access to high-quality early learning experiences for all children, particularly those at risk for poor outcomes. The SRI Education staff has extensive experience and expertise in the following:

- Early childhood development and education, including early literacy, math, and science; social-emotional development; school readiness; family partnership and support services; and teacher professional development.
- Administration and analysis of teacher-child, parent-child, and classroom assessments, including authentic assessment measures (e.g., TS-GOLD, DRDP), environmental quality measures (e.g., ECERS, CLASS), and academic (e.g., WJIII-R, PALS, DIBELS) and social-emotional measures (e.g., ASQ, DECA, TCRS).
- Design of collaborative cross-site and longitudinal evaluation studies (using descriptive, randomized experimental, quasi-experimental, and mixed methods).
- Linguistically, culturally, and socioeconomically diverse populations, including dual-language learners and children with disabilities and other special needs.
- Provision of responsive technical assistance (TA) on research and evaluation methods, logic model development, and the use of evaluation data for program improvement.

To implement a rigorous evaluation successfully, SRI brings a variety of resources and supports for this project.

**Quantitative and qualitative data analysis qualifications and resources.** SRI staff have access to a multifaceted analytic tool kit to identify the most accurate, culturally competent, and useful techniques relevant to the populations served and the program strategies used. SRI employs statisticians and quantitative analysts who are well versed in a wide variety of data analysis methods, from descriptive univariate to the most sophisticated statistical multivariate techniques, including hierarchical linear modeling, multivariate analysis of variance, factor analysis, propensity scoring, regression discontinuity, and principal components analysis, with access to software packages needed for each of these approaches. In addition to these analytic methods, we are experienced at sampling and weighting data for generalizability back to specific populations, imputing missing data, and controlling for confounding variables by using covariates and other methods. Finally, we have used quantitative analysis to describe subpopulations, examine subgroup differences to identify disparities, determine program effects, explain linkages between program activities and effects, predict program outcomes for nonparticipants, estimate potential cost savings, and compare the efficacy of intervention programs with that of other similar programs.

To analyze qualitative data (e.g., answers to open-ended questions from semistructured interviews), we organize qualitative information by evaluation question, develop a coding system, and apply codes. Coders are trained and monitored to ensure reliable coding across all interviews. We anticipate that codes will be needed to categorize a variety of implementation experiences, including achievements, challenges faced, strategies used, lessons learned, and the contextual factors that influenced experiences and approaches at each site. Coded information will be examined for common themes and key differences both within and across each of the school divisions.

**Online survey capabilities.** To collect online surveys, SRI uses Snap Surveys, which is a powerful software package employed for the design and implementation of surveys on the Internet. It allows for the creation of fully personalized and customizable online forms. Through programming, the survey is made to adapt and change structure in real time based on answers provided by the respondent. This results in highly accurate data by allowing only questions pertinent to the individual to be asked. All data collected from these surveys are stored internally

on a secure SRI web host server, and are exported to end data files for analysis by SRI programming staff.

**Database to support evaluation activities.** A web-based database will be developed for project use. This database will allow real-time access to information about consented research participants, the status of their data collection, and summary reports about data collection progress relative to timelines identified in the workplan. This database will support communication across VDOE and the school divisions and between SRI and SRC and local staff hired to collect evaluation data. Database design will carefully safeguard access to confidential information so that it is limited by site and role within the research project, providing access to all appropriate end users while limiting access to only those individuals who need it. The database will meet rigorous SRI standards for protecting data through use of secure server locations, firewalls, and password protocols and comply with standards required by the state of Virginia. The database will permit all sites with easy access to ongoing information about recruitment data, including updated numbers of participants in programs and their characteristics that support formative evaluation efforts. (See additional information in Attachment B.)

**Availability of Institutional Review Board (IRB).** SRI maintains strict procedures to protect clients' rights, welfare, privacy, and confidentiality. SRI staff members are required to register every project with our internal Institutional Review Board, which has the primary responsibility for the oversight of the protection of human subjects. We will use SRI's IRB to review all data collection activities and provide consultation on how to meet any Family Educational Rights and Privacy Act (FERPA) requirements and other state and federal laws that apply. We will also work with Virginia's Department of Education and local school divisions to ensure compliance with requirements to conduct research with their educational staff, students, and families. SRI's involvement in human subjects research comes under the terms of a formal assurance with the Office for Human Research Protections of the Department of Health and Human Services (DHHS). All SRI staff who conduct, support, or review research involving human subjects must comply with the regulations identified in that assurance and applicable state and institutional policies and standards of professional conduct and practice. In doing so, SRI strictly adheres to the Federal Policy for the Protection of Human Subjects, or the "Common Rule" as codified in separate regulations by 15 Federal departments and agencies, including DHHS (45 CFR part 46) and the Department of Defense (32 CFR part 219). (See additional information in Attachment B.)

**Dissemination and reporting supports.** The SRI co-PIs will work with VDOE to finalize a workplan that delineates the timeline for all required reports specified in the RFP. SRI has experience producing products that are accessible to different stakeholders, including more traditional formats such as technical reports and issue briefs and peer-reviewed journal articles or newer formats such as webinars, blogs, and podcasts. Major products will be reviewed by the project's senior staff in draft and final form. SRI has in-house graphic designers who can work with the evaluation team to make products visually appealing and accessible to all kinds of audiences. An SRI in-house technical editor will edit written materials for clarity, accuracy, and format before the review draft is sent to VDOE. Revisions will be made and the product edited again before the final version is sent to VDOE. Senior evaluation staff will review all reports and other dissemination products before submitting drafts to VDOE.

School Readiness Consulting further strengthens SRI's expertise and capacity, particularly in the areas of cost-effectiveness analysis and formative evaluations of early learning workforce

development. SRC is a woman-owned small business with early childhood policy analysis, program assessment, evaluation, and technical assistance experience. SRC is involved as a lead or partner on the evaluation of pre-kindergarten in the District of Columbia and the Quality Rating and Improvement System Validation Study in Maryland, and brings a deep knowledge of the early learning context in the region, along with a national perspective on all early childhood practice, evaluation, and policy issues. In addition, SRC's evaluation director has led or co-led early childhood cost-estimation projects for clients including the Children's Services Council of Palm Beach County, the New York Early Childhood Advisory Council, the Colorado Early Childhood Leadership Commission, and the Minnesota Department of Education. These projects incorporated costing exercises for a range of early childhood programs, accounting for enrollment, program quality, and geographic variations. Each model also estimated the cost-effectiveness and return on investment of each program, based on student outcomes, local costs, and parameters for program effectiveness based on research literature.

SRI and SRC will draw on our resources and expertise in evaluating statewide preschool improvement and expansion programs. Examples of our relevant projects in preschool and elementary settings are provided below and are summarized by types of studies (e.g., PreK program evaluations; large, rigorous evaluations; multi-site, multi-method, formative, impact, and cost-effectiveness evaluations) in Exhibit E1 for SRI and Exhibit E2 for SRC. Exhibits E1 and E-2 also show relevant technical expertise for these projects with regard to quantitative and qualitative analysis, survey design and data collection, interviews and focus group design and data collection, recruiting sites/schools and participants, reports and presentations for various audiences, work with state agency and implementation teams, and work with advisory groups. These charts are followed by brief project descriptions. The expertise and experience for the proposed SRI and SRC staff are described in other sections below.

**Exhibit E1. Relevant Project Experience and Qualifications of SRI International**

Number on SRI List	SRI Projects/Experience and Qualifications	Qualifications & Technical Expertise													
		PreK program evaluations with child assessments	Large, rigorous evaluations	Multi-site evaluations	Summative (impact) evaluations	Formative evaluations	Cost-effectiveness studies	Quantitative data analysis	Qualitative data analysis	Survey design and data collection	Interviews and focus group design and data collection	Recruiting sites/schools and participants	Reports and presentations for various audiences	Work with state agency and implementation teams	Convene advisory groups
1	Case Studies of the Implementation and Use of Kindergarten Entry Assessments			✓		✓			✓		✓	✓	✓	✓	✓
2	Bridges Community Impact Evaluation		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
3	Center for IDEA Early Childhood Data Systems (DaSy Center)					✓		✓	✓	✓	✓	✓	✓	✓	✓
4	Evaluation of MN Race to the Top–Early Learning Challenge (RTT-ELC)	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
5	Evaluation of the Florida Master Teacher Initiative		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		
6	Evaluation of McKnight Foundation Education & Learning Program	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓		✓
7	Model Demonstration Coordination Center (MDCC) Evaluation			✓	✓	✓		✓	✓	✓	✓		✓		✓
8	First 5 San Mateo County Comprehensive Evaluation Services			✓	✓	✓		✓	✓	✓	✓	✓	✓		
9	Evaluation of the Midwest Expansion of the Child-Parent Center (CPC) Education Program	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	
10	Evaluation of Achieving High Standards for P-K-Grade 3 Mathematics	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	
11	ENHANCE – Validating the Child Outcomes Summary Process			✓	✓	✓		✓	✓	✓		✓	✓	✓	✓

**Exhibit E1. Relevant Project Experience and Qualifications of SRI International (Concluded)**

Number on SRI List	SRI Projects/Experience and Qualifications	Qualifications & Technical Expertise													
		PreK program evaluations with child assessments	Large, rigorous evaluations	Multi-site evaluations	Summative (impact) evaluations	Formative evaluations	Cost-effectiveness studies	Quantitative data analysis	Qualitative data analysis	Survey design and data collection	Interviews and focus group design and data collection	Recruiting sites/schools and participants	Reports and presentations for various audiences	Work with state agency and implementation teams	Convene advisory groups
12	Early Childhood Outcomes (ECO) Center							✓	✓	✓	✓	✓	✓	✓	✓
13	Connecticut Preschool Standards Alignment				✓	✓			✓				✓		
14	Evaluation of Illinois Early Childhood Block Grant Program	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
15	Early Childhood Development Scholarship Model Evaluation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16	Secondary Analysis of Child Care Data: Transition to Kindergarten			✓	✓			✓					✓		
17	Evaluation of Ready Schools Florida			✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
18	Washington State Kindergarten Readiness Assessment Planning			✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
19	Evaluation of FIRST 5 Santa Clara County			✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
20	Washington, DEL Parent Needs Assessment		✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
21	Statewide Data Collection and Evaluation of First 5 California Funded Programs	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
22	National Early Intervention Longitudinal Study (NEILS)		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	
23	Parents as Teachers (PAT) Multisite Randomized Evaluation		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	

***Descriptions of Selected Early Childhood Projects (PreK-3rd Grade):  
SRI International***

**1. Case Studies of the Implementation and Use of Kindergarten Entry Assessments  
(December 2013–February 2016)**

SRI International is leading Task Order 17 for the Policy and Program Studies Service to study the implementation of Kindergarten Entry Assessments (KEAs) in four states. The purpose of the KEA implementation case studies is to document the processes, accomplishments, challenges, and solutions of four states at the forefront of KEA implementation and to share what they have learned with federal and state policymakers and the field, especially what is working well in these states. This information is needed to support the technical assistance efforts of the U.S. Department of Education and to inform KEA efforts across the nation. For this study, data collection is occurring in the 4 states and in 12 districts and 24 schools nested within those states. The study team is reviewing state and local documents, observing professional development sessions on how to administer the KEA and how to use the resulting data, conducting phone interviews with state education agency (SEA) and local education agency (district) staff involved in supporting the implementation of KEAs, and conducting in-person interviews with school-level administrators and teachers. Findings will be summarized in two types of reports: four state-level summaries for the U.S. Department of Education's internal use and a final report for policy audiences, practitioners, and the general public that captures lessons learned about key considerations in KEA adoption, the implementation process, and use of results.

**2. Bridges Community Impact Evaluation  
(October 2011–September 2013)**

This project evaluated the Children's Services Council (CSC) of Palm Beach County's Bridges project of place-based initiatives that connect families to community resources so more children attain their full potential. SRI created profiles of each Bridges community. Profiles provided snapshots of the well-being of children and families and of the conditions in Bridges communities, and described changes that occurred over the course of the project. Profiles presented information in a clear, concise, and engaging way to allow readers to easily examine the conditions in each of the 10 Bridges communities and how Bridges communities have changed over time in terms of assets, strengths, and key indicators.

SRI (in collaboration with the University of Florida's Survey Research Center) conducted a door-to-door survey of parents of children birth to eight years old in the 10 Bridges communities. The survey collected information about community members' engagement with and perceptions of Bridges and CSC's mission, as well as information related to each of the steps in the Bridges Conceptual Framework so that the pathways to desired outcomes can be examined. We used census data to determine the number of families for each community census tract so that the total sample was representative of families with young children across the 10 neighborhoods (e.g., every third residence or every fifth residence in less populated areas were randomly selected). Approximately 300 parents were interviewed during the survey.

**3. Center for IDEA Early Childhood Data Systems (DaSy Center)  
(December 2012–November 2017)**

SRI is leading an Office of Special Education Programs (OSEP) funded 5-year collaboration with subcontractors Frank Porter Graham (FPG) Child Development Institute at the University of

North Carolina at Chapel Hill, Applied Engineering Management (AEM) Corporation, Westat, and Center for Technology in Education (CTE) at Johns Hopkins University to provide technical assistance (TA) and resources to state agencies to assist with the development or enhancement of data systems for early intervention and early childhood special education programs supported through the Individuals with Disabilities Education Act (IDEA). The DaSy Center works with states to enhance IDEA data systems and to assist states in developing systems that are coordinated with other early childhood data systems and have longitudinal linkages to data systems for older children.

The DaSy Center conducts activities in three major areas:

1. **Knowledge Development.** The DaSy Center works with early intervention and preschool special education state agencies to identify the status of their efforts to develop high-quality coordinated longitudinal data systems.
2. **TA and Dissemination.** The DaSy Center provides a continuum of general, intensive, and targeted TA and dissemination activities. TA activities include convening national meetings; conducting topical meetings or Think Tanks on data system topics; forming and supporting a variety of communities of practice; holding national teleconferences and webinars; and developing online, print, and video training materials. Dissemination includes sharing information through presentations at national meetings, e-mail lists, and the DaSy Center's website.
3. **Leadership and Coordination.** The DaSy Center seeks guidance from a diverse group of stakeholders to ensure that the work of the Center is addressing critical needs in the field. The DaSy Center communicates and collaborates with other TA projects funded by the Office of Special Education Programs in the U.S. Department of Education.

**4. Evaluation of Minnesota's Race to the Top–Early Learning Challenge (October 2012–June 2016)**

SRI International, with a subcontract to Child Trends, is evaluating the Minnesota Department of Education's (MDE) Race to the Top–Early Learning Challenge (RTT-ELC) Funds to Promote Access to High-Quality Programs for children with high needs. The evaluation is being conducted in four Transformation Zones identified by the MDE and includes formative and summative evaluations of two projects within Minnesota's RTT-ELC grant: Early Learning Scholarships and Title I-PreK Incentives. The goals of the evaluation are to describe and analyze the effectiveness of the implementation of the scholarships and the Title I-PreK incentives, describe how the funds are used to increase access and meet the needs of families, examine the extent to which access for children with high needs to high-quality early learning programs has increased, describe family engagement in the early childhood (EC) programs, and examine the impact of EC program participation on children's outcomes and school readiness.

**5. Evaluation of The Florida Master Teacher Initiative (October 1, 2010–September 30, 2014)**

SRI is conducting an independent evaluation of the Florida Master Teacher Initiative, which is being implemented under an Investing in Innovation (i3) Fund development grant by Miami-Dade County Public Schools, the University of Florida, and the W. K. Kellogg Foundation. SRI is using a randomized controlled trial to determine the initiative's impact on prekindergarten

through third-grade teachers and their students and to test how teacher characteristics and participation levels influence outcomes.

The Florida initiative is creating master teachers through a job-embedded master's degree program with an early childhood education specialization, creating community and shared leadership through the Teacher Fellows program, and improving administration and leadership strategies through the Principal Fellows program. SRI will conduct teacher surveys, classroom observations, and analysis of student standardized test performance data in 40 Title 1 elementary schools in Miami-Dade County Public Schools randomly assigned to either the treatment or control condition. The evaluation also will include collection of formative data through interviews with teachers, principals, and professors-in-residence from the master's degree program and administrative data.

#### **6. Evaluation of the McKnight Foundation Education & Learning Program (September 2011–February 2016)**

The McKnight Foundation's Education & Learning (E&L) program is an effort to improve the literacy achievement of students in the Twin Cities through pathways that integrate and enhance pre-kindergarten through third grade literacy education. The evaluation is being conducted by SRI and the Center for Applied Research and Educational Improvement (CAREI) at the University of Minnesota. It is a multi-year study that seeks to (1) document baseline conditions to understand the current strengths and needs in the partner districts, (2) formatively support the development and refinement of the E&L program, and (3) measure the E&L program's effectiveness in developing proficient third-grade readers. To answer the formative research questions, we are using a multimethod approach that involves case studies, teacher observations, and teacher logs. Additional formative data will come from early literacy assessment data collected for the summative evaluation. To investigate the program's impact on student achievement, we are conducting a longitudinal quasi-experimental study that compares literacy skill growth from preschool to second grade between students who stay in pathway schools and matched students who attend other elementary schools. We also are assessing impact on literacy skills through a cross-sectional study that examines third-grade reading test scores in pathway schools compared with matched nonpathway schools.

#### **7. Model Demonstration Coordination Center (MDCC) (October 2005–September 2015)**

SRI has been funded by the U.S. Department of Education, Office of Special Education Programs (OSEP), to establish a Model Demonstration Coordination Center (MDCC). MDCC is working closely with OSEP and several cohorts of model demonstration project (MDP) grantees as they develop and assess promising practices in a range of topic areas, which include progress monitoring, tertiary interventions for children with challenging behaviors, and others. The purpose of the Model Demonstration grant program and the aim of the MDCC are to help OSEP achieve the mission of its Research to Practice Division (RTP), which "provides leadership and oversees the implementation of knowledge development, transfer, and use to improve educational results for infants, toddlers, children, and youth with disabilities." To assist the MDPs in contributing to that mission, the MDCC is documenting promising practices in the topic areas in which each cohort of MDPs focuses, as well as providing information to help OSEP bridge the chasm that can exist between identifying evidence-based practices and achieving their widespread use. Specifically, the MDCC is addressing questions related to the

efficacy of particular research-to-practice models—how well they achieve specified outcomes, for whom, and in what contexts. The MDCC also is addressing the kinds of questions that will be on the minds of potential adopters of those models, such as district administrators, principals, and teachers: what it takes to implement a new program or practice and what the implications of adopting a model are for their districts, schools, and classrooms.

#### **8. First 5 San Mateo County Comprehensive Evaluation Services (May 2009–October 2015)**

In 2009, SRI began the design and implementation of an evaluation framework for First 5 San Mateo County (F5SMC) funded programs and services. This is a multifaceted evaluation that will provide both detailed information about the effectiveness of key programs (i.e., in-depth program evaluation) and evidence of the impact of F5SMC investments across all funded programs (i.e., integrated outcome evaluation). The goal of the integrated outcome evaluation is to provide a full picture of F5SMC funded strategies—their collective impact on children, families, providers, and the system of care, as well as progress toward achieving desired outcomes. The outcome evaluation entails reviewing and prioritizing outcomes and indicators in F5SMC’s strategic plans, identifying appropriate instruments and measurement strategies, and building the capacity of funded programs to collect evaluation data. The goal of the in-depth program evaluation is to supplement data gathered through the integrated outcome evaluation and provide more detailed assessment of F5SMC investments in specific programs. The in-depth design will include techniques enabling development of rich descriptions of selected programs and of the linkages among participants, services, and outcomes and will identify program successes and areas for improvement.

#### **9. Evaluation of the Midwest Expansion of the Child-Parent Center Education Program (January 2012–December 2015)**

As a subcontractor to the University of Minnesota, SRI is conducting an evaluation of the Midwest Expansion of the Child-Parent Center (CPC) Education Program. Implemented in 1967 in response to poor attendance, low achievement, and parent disengagement with schools, the CPC Education Program provides comprehensive education and family support services from preschool to third grade (PreK–3) that aims to improve school readiness skills and early school achievement and increase parent education and home support for learning.

Funded through a 4-year Investing in Innovation (i3) validation grant from the U.S. Department of Education, the evaluation involves more than 2,000 children, their parents, and schools in Illinois, Wisconsin, and Minnesota to determine whether the CPC Education Program leads to improved student and parent outcomes. The evaluation is addressing three major questions: (1) Are the CPC intervention components well implemented? (2) Do students in the CPC Education Program make greater gains in school readiness skills than students in the comparison group? (3) Compared with parents of children in the comparison group, do intervention parents show greater involvement in their children’s school and support their early learning?

### **10. Evaluation of the Achieving High Standards for Pre-K–Grade 3 Mathematics: A Whole Teacher Approach to Professional Development in the Chicago Public Schools (October 2010–September 2015)**

Under a subcontract from Erikson Institute, SRI is conducting an independent evaluation of the Achieving High Standards for Pre-K–Grade 3 Mathematics: A Whole Teacher Approach to Professional Development project, a 4-year Investing in Innovation (i3) grant from the U.S. Department of Education.

Erikson Institute is implementing a professional development (PD) intervention in early mathematics with 80 pre-kindergarten through third-grade teachers in the Chicago Public Schools. SRI designed and is conducting a quasi-experimental study of the project that includes a matched comparison group of schools and teachers to determine the impact of teachers' participation in the PD program on children's learning and school readiness outcomes, particularly their mathematics skills. Baseline and outcome data are being collected on teachers' attitudes and knowledge about and classroom teaching in early mathematics and children's early math and early literacy skills. Data on fidelity of program implementation also are being collected throughout the 5 years of the project.

Because the intervention is implemented schoolwide, trends in schoolwide mathematics achievement scores of third-graders for the intervention and comparison group schools will be tracked for changes over time for 5 years before and during the 5 years of the implementation of the intervention.

### **11. ENHANCE - Validating the Child Outcomes Summary Process for Use in Accountability Systems for Programs Serving Young Children with Disabilities (July 2009–December 2014)**

Funded by the U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, ENHANCE consisted of four studies to examine the quality of the data being collected through the Child Outcomes Summary (COS) process. An urgent need exists to understand the conditions under which the COS process produces valid and reliable data because the majority of states are using it to generate data for federal accountability reporting for Part C and Part B Preschool services under the Individuals with Disabilities Education Act (IDEA). Furthermore, many states want to use their data for program improvement, so they need valid information about child outcomes to identify program strengths and weaknesses.

The Early Childhood Outcomes (ECO) Center developed the COS process to address states' needs to build measurement systems for child outcome data that would reflect multiple sources of information on child functioning. In the COS process, members of local teams (e.g., early interventionists, therapists, teachers, and parents) synthesize multiple sources of information on child functioning on each of three child outcomes and convert that information into a single rating on a seven-point scale. The COS process supports multidisciplinary best practices in early childhood assessment and is consistent with approaches numerous professional organizations promote.

The four ENHANCE studies addressed the following: how teams decide COS ratings; how consistent COS ratings are with information from other assessments; COS users' perceptions of their experiences with the COS process, including their impressions of the COS tool, the process,

and the training and support they have received; and patterns and trends in state-level COS data. Methods included coding videotaped team meetings where COS team ratings were decided, a longitudinal study involving direct child assessment and team COS ratings of children, and an online provider survey. These studies were being conducted in local programs from 8 different states. The final study involved gathering and analyzing extant statewide data from 18 state programs.

## **12. Early Childhood Outcomes (ECO) Center (October 2003–September 2014)**

Over a 10 year period, SRI provided national leadership on measuring the outcomes of programs serving young children with delays and disabilities through the Early Childhood Outcomes (ECO) Center for the U.S. Office of Special Education Programs. Joining SRI in this collaborative center were the University of North Carolina’s Frank Porter Graham Child Development Institute, RTI International, and the University of Connecticut.

The ECO Center assisted state agencies in building measurement systems for programs serving infants, toddlers, and preschoolers with disabilities and their families. The center provided technical assistance to support states in developing high-quality child and family outcome measurement systems. The ECO Center’s work focused on three key areas:

- **Knowledge development.** The ECO Center partnered with seven states to develop a framework and self-assessment for states to use in building and strengthening their early childhood outcome measurement systems. The self-assessment specifies the components necessary for a high-quality measurement system for child outcomes and provides a structure for states to track their progress over time toward fully developed systems. It also provides guidance for states to address areas in need of improvement. A second self-assessment was developed for systems for measuring family experiences and outcomes.
- **Technical assistance and dissemination.** The ECO Center conducted a variety of group and individual activities designed to support states in building outcome measurement systems. Activities included hosting an annual national outcomes meeting; convening national conference calls; maintaining a website; forming and supporting communities of practice; developing a cadre of experts from other projects to provide states with outcomes-related technical assistance; and developing online, print, and video training materials. Individualized technical assistance designed for specific states also was provided.
- **Leadership and coordination.** The ECO Center worked with a diverse group of individuals representing a variety of perspectives to inform the work of the center through its Advisory Board and Work Groups. The center also regularly coordinated with other projects and organizations working on issues related to measurement of early childhood outcomes.

## **13. Connecticut Preschool Standards Alignment (February 15, 2012–June 30, 2012)**

For the EASTCONN Regional Educational Service Center on behalf of the state of Connecticut Early Childhood Cabinet, SRI conducted data collection and analyses addressing the alignment of various sets of early learning standards. The project addressed key questions regarding content alignment and articulation across ages and grades—horizontal and vertical

alignment from infancy to kindergarten. Activities included adapting a coding scheme and developing training materials for an alignment institute, convening a group of subject matter experts, facilitating a consensus discussion at the alignment institute, analyzing the resulting data, and preparing a report to summarize the overall results of the alignment study.

#### **14. Evaluation of Illinois Early Childhood Block Grant Program (April 2008–September 2011)**

As the subcontractor to Erikson Institute, SRI collaboratively designed and conducted a statewide evaluation of the Illinois Early Childhood Block Grant (ECBG) program for the Illinois State Board of Education (state-funded preschool and home visiting programs). The evaluation addressed questions about the children and families participating in the program and the quality and outcomes of the program (formative and summative evaluation). The ECBG program includes a wide variety of early childhood programs for children from birth to 5 years old and their parents (home visiting, parenting education, preschool programs) that aim to improve children's school readiness and other outcomes, support at-risk families, and provide quality early childhood services. Erikson Institute and the SRI team worked closely with key stakeholders across the state of Illinois who comprised an advisory committee to review the evaluation plan and the resulting data. SRI had major responsibility for the evaluation of the 3–5 Preschool For All (PFA) program involving collection and analysis of data for a statewide sample of children, families, and preschool programs, including kindergarten entry assessments of over 600 children who attended PFA programs. The results showed positive impacts of the PFA program on children's school readiness skills, including for those across income and risk subgroups. The project had a variety of dissemination reports and brief fact sheets for the Illinois State Board of Education that were shared with the legislature and other key audiences and were used to make decisions about policy and practice to improve program quality and child outcomes.

#### **15. Early Childhood Development Scholarship Model Evaluation (March 2007–December 2011)**

For the Minnesota Early Learning Foundation (MELF), SRI developed and conducted a 4-year process and outcome evaluation of an early childhood scholarship model in Saint Paul. MELF had sponsored the pilot project to test the scholarship model as a way to increase the access to and quality of preschool and child care programs for children living in low-income neighborhoods. The model encompassed (1) mentoring to enhance parents' knowledge about the characteristics and benefits of high-quality early education and care programs, (2) scholarships to pay for children to enroll in such programs, and (3) quality standards for participating programs. Through a collaborative planning process with MELF staff and the Center for Early Education and Development (CEED) at the University of Minnesota, SRI developed the evaluation plan in 2007 and conducted the evaluation in 2008 through 2011 that included formative, summative, and cost studies. Longitudinal data on children, families, programs, and neighborhoods were collected to see how the model related to children's development and school readiness, family outcomes, and the supply and quality of early childhood education programs.

The evaluation included 257 of the 449 children with scholarships. The children in the evaluation sample attended 2 years of a high-quality early childhood education program, entered kindergarten in 2010 or 2011, and had consent to participate in the evaluation. Multiple reports and briefs on implementation and outcome data were prepared, including a final report in

December 2011. Overall, the data from the evaluation suggested that the scholarship model was implemented successfully in the pilot Saint Paul community, that it was successful in increasing the school readiness of the participating children from low-income families, and that it could be replicated in other communities. Data are being used by Minnesota's policymakers to improve the state's early learning system, advocate for additional state funding for preschool programs, and support the state's successful application for a Race to the Top-Early Learning Challenge grant.

### **16. Secondary Analyses of Data on Child Care: Transition to Kindergarten (September 2009–May 2011)**

SRI received a 1-year research grant from the Department of Health and Human Services, Office of Planning, Research, and Evaluation, Administration for Children and Families, to conduct secondary analyses with the Early Childhood Longitudinal Study-Birth Cohort (ECLS-B) data set. This study addressed gaps in the research literature and unanswered questions about ways to improve children's transition to kindergarten and school readiness, especially children most at risk for experiencing negative outcomes. Using secondary analyses with the ECLS-B data set, the study team identified practices that early care and education (ECE) programs can adopt to promote successful transition to kindergarten for children served by the Child Care and Development Fund.

The study addressed three primary research questions: (1) What transition practices are used in ECE programs? (2) How do ECE and kindergarten transition practices and alignment of ECE and kindergarten teachers' expectations about school readiness affect transition and school readiness outcomes? (3) What transition practices and outcomes are experienced by children in low-income families, dual-language learners, and children at risk of academic failure because of lower social and academic skills at age 4?

The ECLS-B was well suited for the analyses because it is the only nationally representative and longitudinal data set that captures ECE transition activities, transition and school readiness outcomes, and critical child, family, ECE program, and school characteristics.

The analyses demonstrated that successful school transition was the product of many different factors, most of which were those that high-quality ECE programs do try to promote, such as parental self-sufficiency through education and income, parents reading to their children, and stronger developmental skills during preschool. Yet collaboration between ECE programs and school districts remains key because, for many children, it was the intensity of transition activities within the kindergarten that was critical to effective adjustment. Moreover, the kinds of transition activities families experienced appeared to vary widely because of the stratification of types and quality of ECE programs across different subgroups of children.

### **17. Evaluation of Ready Schools Florida (November 2007–September 2011)**

SRI conducted a 3-year evaluation of Ready Schools Florida (RSF). Led by the Early Childhood Initiative Foundation and the University of Florida Lastinger Center for Learning, RSF is one of the W.K. Kellogg Foundation's strategic investments to connect the public school system with early learning centers, families, and community-based organizations for improved child well-being and increased student academic achievement. The evaluation had four strands: (1) conducting a case study to articulate the logic model behind RSF and to develop a deep

understanding of the systems change efforts as RSF unfolds over time, (2) conducting site visits to early care and education programs and elementary schools, (3) collecting and analyzing key implementation and outcome data gathered by RSF partners, and (4) sharing findings about effective strategies and lessons with local and national audiences interested in developing and expanding PreK–5 systems that improve children’s outcomes.

Reports and brief fact sheets from the evaluation contained information on strategies and outcomes that is being used to scale up the RSF initiative across Florida and that is informing national conversations on how best to promote children’s school readiness and long-term academic success.

### **18. State of Washington, DEL Kindergarten Readiness Assessment Planning (September–December 2008)**

The Washington State Legislature asked the State Department of Early Learning (DEL) and the Office of Superintendent of Public Instruction (OSPI), in collaboration with Thrive by Five Washington, to research and make recommendations to it on a statewide kindergarten assessment process. DEL contracted with SRI to assist in the planning process. SRI reviewed the literature on best practices for the assessment of young children and synthesized information and reports available on the Web about kindergarten assessment processes being used by other states and countries. SRI also worked with OSPI to develop and implement an online survey that asked schools statewide about their current kindergarten assessment processes and conducted telephone interviews with representatives from six Washington State school districts about their local assessment processes. In addition, SRI gathered input from a variety of stakeholder groups about their agreement with and priorities for a statewide kindergarten assessment process, using an online survey, holding focus groups by phone, and listening to Washington Indian Tribes discuss their perspectives at a Washington State Tribal Leaders Congress on Education meeting. Finally, SRI prepared a clear and concise report summarizing the findings on best and current practices and stakeholder priorities, provided recommendations and considerations for next steps in developing a kindergarten assessment process, and suggested an implementation plan.

### **19. Evaluation of FIRST 5 Santa Clara County (July 2006–June 2011)**

SRI conducted the evaluation for FIRST 5 Santa Clara County funded programs and services. The project was completed in two phases. Phase I consisted of developing baseline measures and both process and outcome evaluation. Phase II was the implementation of a longitudinal study and continued process and outcome evaluation. The evaluation documented the impact of FIRST 5 funded programs on children, families, providers, and the community; collected, analyzed, and disseminated important data and information to stakeholders and the community at large and included outcomes that reflect community priorities; promoted the use of data to inform program quality improvement; and included the perspectives of providers and participants in all phases of the evaluation.

### **20. State of Washington, DEL Parent Needs Assessment (November 2007–June 2008)**

SRI conducted a parent needs assessment to guide the future work of the Washington State Department of Early Learning (DEL) at improving early learning opportunities and systems for families in the state of Washington. The parent needs assessment consisted of a statewide parent

survey of more than 800 parents of children ages 0–5 and a set of eight special population focus groups. This work reflects and was coordinated with other relevant needs assessment work in Washington state. The survey and focus group data provided important information about parents' ideas and preferences about early learning programs, services, information, and supports and identified any differences in ideas and preferences among parents with children of different ages, participating in different early childhood programs, and belonging to different subpopulations (e.g., new immigrants or teen parents). This information assisted DEL in setting priorities and allocating future resources in the ways most likely to support parents and families effectively, and in helping to provide families with the information, skills, and services they desire as they nurture and educate their young children.

### **21. Statewide Data Collection and Evaluation of First 5 California Funded Programs (May 2002–February 2007)**

SRI led the statewide evaluation of First 5 funded programs, and the First 5 California School Readiness Initiative and Special Needs Project (2004–2007), funded by the First 5 California Children and Families Commission. On the basis of the original 2002 RFP, SRI developed an evaluation infrastructure that involved monitoring service delivery, child and family outcomes, and systems change at the state and county levels. The evaluation supported accountability to the public and the state legislature, encouraged the continuous improvement of local and state activities related to young children and their families, and was inclusive and reflective of the diversity of California's communities.

SRI developed a wide range of data collection tools and processes to systematically collect:

- Participant and service data from First 5 funded programs statewide
- Information from intensively served participants on a set of indicators known to be critical to child development
- Population-based data on community-level outcomes
- Systems change surveys of funded programs and participants
- Qualitative case study information on promising programs
- Trends in school readiness among entering kindergartners.

To support County Commissions and programs in their collection and use of data, SRI, in partnership with CS&O, developed the web-based Proposition 10 Evaluation Data System (PEDS). PEDS stored aggregate and individual-level data on participants, services, and outcomes, and produced a variety of reports that summarized and disaggregated the data in useful ways. SRI and CS&O trained a cadre of technical assistance coaches and data technicians to support County Commissions and funded programs in collecting, reporting, and using evaluation data.

SRI presented findings from the statewide evaluation of First 5 California in annual reports to the California Legislature, policy briefs, media releases, fact sheets, technical reports, and presentations at national and state conferences. The annual reports provided detailed information on First 5 investments, funded programs, activities, participants, and progress toward the desired results of First 5 California.

## **22. National Early Intervention Longitudinal Study of Infants, Toddlers, and Their Families (NEILS) (January 1996–January 2007)**

From 1996 through 2007, SRI conducted NEILS for the U.S. Department of Education's Office of Special Education Programs (OSEP). NEILS was the first national study of Part C of the Individuals with Disabilities Education Act (IDEA) early intervention program for infants and toddlers with disabilities or at risk for developmental delay, and their families. The study included a nationally representative sample of 3,338 infants and toddlers and their families. NEILS was longitudinal, with children followed from entry into the early intervention service system until kindergarten. SRI developed a comprehensive conceptual framework for the study that involved data collection about children, families, programs, service providers, and communities to address research questions about the characteristics of those who are served in early intervention programs, the services that are received, and the outcomes experienced by children and families. SRI designed and collected annual parent telephone interviews with the sample (children ages 0–5). Special attention was paid to gathering data about indicators of children's school readiness from a broad perspective (including social development, behavioral engagement, and health, as well as language and cognitive skills). Numerous reports and presentations have been made about these data, including reports for OSEP that were included in Annual Reports to the U.S. Congress.

## **23. Parents as Teachers (PAT) Multisite Randomized Evaluation (September 1996–August 2001)**

The PAT Multisite Randomized Evaluation was a randomized study of PAT with 667 young children in low-income families (predominantly Latino or African-American) from three PAT programs in Texas, North Carolina, and Delaware. SRI received funding from the U.S. Department of Education, the Smith Richardson and Robert Wood Johnson Foundations, and Carnegie Corporation of New York for the study, which documented child and family outcomes and included both quantitative and qualitative methods (i.e., direct in-home child and family outcome assessments, interviews, focus groups, observations with program staff and parents). Children were assessed by using the Developmental Profile II and parent report data, and teaching style data were collected by using the Nursing Child Assessment Satellite Training (NCAST) teaching scale and the Adaptive Social Behavior Inventory (ASBI). Analyses examined predictors of outcomes, including dosage effects as defined by the number of intended home visits received through PAT, subgroup analyses focused especially on effects of income level.

**Exhibit E2. Relevant Project Experience and Qualifications of School Readiness Consulting (SRC)**

Number on SRI List	SRI Projects/Experience and Qualifications	Qualifications & Technical Expertise													
		PreK program evaluations with child assessments	Large, rigorous evaluations	Multi-site evaluations	Summative (impact) evaluations	Formative evaluations	Cost-effectiveness studies	Quantitative data analysis	Qualitative data analysis	Survey design and data collection	Interviews and focus group design and data collection	Recruiting sites/schools and participants	Reports and presentations for various audiences	Work with state agency and implementation teams	Convene advisory groups
1	District of Columbia Pre-k Quality Evaluation		✓	✓	✓			✓		✓	✓	✓	✓	✓	
2	MD EXCELS Validation Study		✓	✓				✓		✓					
3	Children's Literacy Initiative: i3 Validation	✓	✓	✓	✓			✓		✓	✓	✓	✓		
4	District of Columbia Public Schools Program Evaluation		✓		✓	✓				✓					✓
5	DC Pre-kindergarten Capacity Audit							✓		✓			✓	✓	
6	Early Childhood Educator Professional Development: Excellence-in-Teaching Implementation Evaluation	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
7	Early Childhood Technical Assistance Center Program Evaluation	✓		✓	✓	✓		✓	✓	✓	✓	✓			
8	Children's Services Council of Palm Beach County Cost-Benefit Model				✓		✓	✓					✓	✓	✓
9	Colorado Early Childhood Investment Model				✓		✓	✓			✓		✓	✓	✓
10	New York Early Childhood Return on Investment Model				✓		✓	✓			✓		✓	✓	✓
11	Special Olympics International Field Test and Implementation Evaluation			✓		✓		✓	✓	✓	✓	✓	✓		

***Descriptions of Selected Early Childhood Projects (PreK-3rd Grade):  
School Readiness Consulting (SRC)***

**1. District of Columbia Pre-k Quality Evaluation  
(2013–2015)**

The Office of the State Superintendent of Education (OSSE) of Washington, DC, partnered with School Readiness Consulting (SRC) to implement a systemwide, pre-kindergarten quality evaluation. SRC was contracted to design a quality evaluation that included identifying research questions, determining the sample and data collection plan, collection and management of all data, and the development and execution of an analysis plan and final report. This evaluation describes the quality of experiences of the nearly 7,365 (3- and 4-year-old) children in participating classrooms across all sectors. SRC recently completed the second year of the evaluation, which included classroom observations in over 450 PreK classrooms in the District in community-based organizations and public charter schools, using the CLASS™. SRC was also responsible for developing implications for state-level investments in professional development, policy, and future evaluation.

**2. MD EXCELS Validation Study  
(2014–2015)**

SRC partnered with the Johns Hopkins University/Center for Technology in Education to conduct a study to validate Maryland's child care quality rating and improvement system (QRIS), MD EXCELS. The findings of the study will provide information regarding how well the completion of the EXCELS rating process yields a meaningful and accurate quality level rating. Study data will guide future development of the EXCELS system to ensure that quality ratings are valid and reliable for all participants. In this partnership, SRC collaborates with JHU on study design and implementation and is also responsible for data collection, observing more than 1,200 classrooms, using the CLASS™, in three cycles throughout 2015.

**3. Investing in Innovation Validation: Children's Literacy Initiative  
(2013–2014)**

In June 2014, SRC completed an 18-month partnership with American Institutes for Research (AIR) as the independent evaluator for a multi-state Investing in Innovation (i3) Validation grant for the Children's Literacy Initiative (CLI). SRC employed a field effort of 75 data collectors in four cities (Philadelphia, Camden, Newark, and Chicago) across two academic years. From SY12-13 through SY13-14, School Readiness Consulting assessed nearly 10,000 children in 75 schools to measure the impact of CLI across the United States. During this project, SRC created innovative systems for data collection and management to ensure the highest quality of data integrity possible. SRC conducted high-quality assessments informed by knowledge of classroom content.

**4. District of Columbia Public Schools Program Evaluation  
(2011–2012)**

SRC co-led, in partnership with Child Trends, the Harvard Graduate School of Education, and the Center for Advanced Study of Teaching and Learning at the University of Virginia Curry School of Education, an evaluation of the pre-kindergarten program in the District of Columbia Public Schools (DCPS) for the 2011-2012 school year. The goals of the study included a

comparison of schools that were participating in the Tools of the Mind pilot expansion and those using other curricula, validation of data from the Teaching Strategies GOLD child assessment system and provision of comparison data with IMPACT evaluation system data, and an implementation evaluation of the Tools of the Mind curriculum pilot expansion. The evaluation of quality of the DCPS Early Childhood Programs included classroom observations in all classrooms and direct child assessments on a sample of children. Child assessments of 540 children in these classrooms were also conducted in the fall and spring using the Woodcock Johnson II-Letter Word Identification and Applied Problems subtests, the Pencil Tap Test, Backward Digit Span, Challenging Situations Task, and the Pre-School Self-Regulation Assessment (PSRA). Classroom observations were conducted using the Classroom Assessment Scoring System (CLASS™). Two hundred eighty-six classrooms were observed. SRC was responsible for the development of the child assessment and fielding protocols and fidelity checklists, and provided ongoing training, technical assistance, fidelity checks, and data management and coordination of SRC and Child Trends staff.

#### **5. District of Columbia Pre-kindergarten Capacity Audit (2010–2011)**

SRC partnered with Child Trends in 2011 to conduct an audit of the pre-kindergarten programs in the District of Columbia for the 2010-2011 school year. The audit was designed to determine the capacity of existing pre-kindergarten programs in the District of Columbia, and to examine how Head Start programs are incorporated into the early care and education delivery system. Data were collected from 86 public schools, 56 public charter schools with pre-kindergarten programs, and 16 Pre-Kindergarten Enhancement Programs. SRC conducted a count of all 3- to 5-year-old children in each pre-kindergarten classroom and conducted telephone interviews with the principal/director of each program.

#### **6. Early Childhood Educator Professional Development: Excellence-in-Teaching Implementation Evaluation (2009–2012)**

SRC led the fielding of the evaluation of a U.S. Department of Education Early Childhood Educator Professional Development (ECEPD) grant from 2009 to 2012 (Excellence-in-Teaching, Ramey and Ramey, Principal Investigators). Classroom assessment measures (ELLCO and CLASS™) were used, and SRC provided recruitment and hiring, training, management and supervision, and report writing for the evaluation through a subcontract with Child Trends. In addition, the SRC Executive Director was a lead author on the implementation study, and SRC was responsible for leading the design and delivery of all implementation evaluation activities, including surveys, interviews, document reviews, coaching observations, and implementation report writing.

#### **7. Early Childhood Technical Assistance Center Program Evaluation (2011–2015)**

SRC has conducted biannual classroom-level and child-level assessments to inform work with partner schools through SRC's Early Childhood Technical Assistance (ECTA) Center. Classroom assessment measures used include ELLCO, CLASS, ERS, and TPOT. Child assessment measures used include PALS, Lap-3, Challenging Situations Task, and TEMA-3.

### **8. Children's Services Council of Palm Beach County Cost-Benefit Model (2013–2014)**

Andrew Brodsky led the development of an interactive decision tool to map the Children's Services Council's \$100 million investment in early childhood and estimate the cost-benefit of its programs and infrastructure supports, in partnership with APA Consulting. Dr. Brodsky led all aspects of model design, data collection, methodology development, and data analysis. The project also involved assessing the literature base on cost-effectiveness associated with the CSC's programs and determining appropriate cost-benefit parameters when they were not available based on primary research. Results were used to help inform the CSC's decision-making and investment process.

### **9. Colorado Early Childhood Investment Model (2010–2014)**

Andrew Brodsky led a project for the Colorado Early Childhood Leadership Commission, in partnership with APA Consulting. The project mapped the costs, enrollment, and return-on-investment of dozens of publicly funded programs in the state. Dr. Brodsky's role included meeting with the Leadership Commission and advisory committees, leading data collection and analysis activities, and overseeing methodology decisions. The project incorporated extensive data collection from a range of agencies and non-profits throughout the state. The project also involved determining detailed cost estimates for child care based on various levels of quality, age, and other characteristics.

### **10. New York Early Childhood Return-on-Investment Model (2011–2014)**

Andrew Brodsky co-led the development of an interactive model to map New York State's investment in early childhood programs for the New York Early Childhood Advisory Council (ECAC). Working with a team from APA Consulting, he oversaw development of methodology, consulted on data collection with the ECAC, led development of the interactive tool, and presented to the ECAC and related committees on model results and recommendations. Cost-effectiveness estimates were derived by assessing detailed data on programmatic costs, derived costs for high-quality service delivery, current and projected enrollment estimates, geographic cost differentiators, and administrative cost data from the K-12 system.

### **11. Special Olympics International Field Test and Implementation Evaluation (2012–2013)**

School Readiness Consulting was engaged by Special Olympics International (SOI) in 2012-2013 to conduct and field test an implementation evaluation of SOI's evidence-based Young Athletes curriculum in Virginia, Colorado, and Nebraska. The SRC team provided evaluation technical expertise, developed tools and measures, and facilitated the overall field test and evaluation to determine replicability opportunities and issues for consideration.

SRC also has experience with providing technical assistance on topics relevant to this evaluation, but the projects below are not included in the evaluation capacity table above.

- Target Community Relations Literacy Funding Evaluation (2013–2015)

SRC has been engaged by the Target Community Relations team (the philanthropic arm of the Target Corporation) to spearhead a literacy evaluation project to improve the accuracy and outcomes of grant-making. SRC has developed rubrics to evaluate the literacy applications received and to assess the quality of the impact studies being implemented by grantees. SRC also wrote a literature review, methodology guide, and assessment “at a glance” fact sheets to build Target’s internal capacity for application review and grantee management. To assist Target with reviewing 75 applications from literacy projects, and subsequently 40 grantee projects, SRC trained data collectors and used the rubrics to measure and quantify the strength of applications and impact studies.

- BUILD Initiative Teacher Training on K-3 Assessment (2014-2015)

As part of the BUILD Initiative’s work with the Enhanced Assessment Grant Consortium, SRC has been engaged to develop training materials for teachers, administrators, and families around the K-3 formative assessment process. These training tools will be piloted in several states and will serve to ensure that teachers and administrators utilize best practices when assessing young children.

- District of Columbia Public Schools Curriculum, Instruction and Assessment Advisor (2009-2015)

SRC serves as the senior advisor on curriculum, instruction, and assessment for the District of Columbia Public Schools Office of Early Childhood. In this role, SRC has been responsible for the design and implementation of several initiatives, including the early childhood instructional coaching model, standards alignment, the development of the pre-kindergarten report card, and training for teachers and administrators on best practices in early childhood teaching and learning (including best practices in assessment). SRC has trained coaches and administrators in a training-of-trainers model around the process of assessing pre-kindergarten children.

- Citywide Early Learning Plan: Mayor’s Fund for Philadelphia (2014-2015)

SRC partnered with several consultants to complete a strategic planning process and report for the early learning system within the city of Philadelphia. This project required a significant stakeholder engagement effort, translating vast amounts of complex data collected around the early learning context for stakeholder consumption and input.

- DC Office of the State Superintendent of Education (2013-2015)

As the evaluation partner for the District of Columbia Division of Early Learning, SRC has been contracted to provide professional development to thousands of pre-kindergarten teachers throughout the District on best practices in early childhood education. This work merges SRC’s role as evaluators and practitioners to assist teachers and administrators in unpacking and using the data collected on the quality of their classrooms and programs to inform ongoing professional development.

- 2. Describe the financial and management expertise and capacity of your organization, including the ability to invoice each of the 11 participating school divisions that will pay for this project.**

### ***Financial Management***

At SRI, control of labor and other expenditures on each project and specific tasks and subcontracts and other expenses is supported by SRI's Project Status Reporting (PSR) system, which provides weekly itemized reports of labor hours by person, travel expenses, communication expenses, report charges, and other materials and services for SRI employees. The system also maintains detailed reports on subcontractor billing. Thus, the SRI management team can verify that only allowable items are being allocated to the project and that the tasks are on track with respect to expenditure of funds and completion of work. The co-PIs, supported by one of the project coordinators, will review project charges weekly, identify potential problems quickly, and determine where resources can be shifted to support critical tasks, if necessary. Appropriate methods of budget monitoring will be negotiated with the SRC subcontractor, based on that organization's business practices and routines, and will be monitored regularly by an SRI contracts administrator. The Principal Directors and the project coordinator will be responsible for overall monitoring of expenditures and will review project expenditures at regular intervals with the leadership team.

SRI has experience in invoicing multiple school districts needed for this evaluation. For example, SRI invoiced more than 10 districts for technical assistance with the Montana Department of Education's Response to Intervention work. SRI has also used this approach in California with tens of districts that joined the Healthy Start School-Linked Initiative in years 2 and 3 of the initiative.

School Readiness Consulting (SRC) also has the capability to effectively manage invoicing required for this project. SRC uses QuickBooks to manage its finances and adheres to Generally Accepted Accounting Principles. SRC's finance and operations manager oversees day-to-day functions, including general accounting, payroll, accounts payable, accounts receivable, and cash management. She is responsible for SRC's compliance with internal policies, GAAP standards, contract requirements, and federal laws and regulations. SRC employs an outside accounting firm to oversee our finances and audit our processes and reporting. SRC will invoice SRI on a schedule that complies with the requirements of the contract.

### ***Management Expertise***

Both SRI and SRC have excellent reputations for managing successful evaluations due to our use of high-quality staff, development and maintenance of good working relationships with funders and grantees, ability to produce informative and rigorous findings in compelling and accessible ways, and adherence to timelines and monitoring of expenses. Our team is committed to improving the academic success of all children, and we bring this commitment to the project.

The SRI and SRC team has the experience and expertise necessary for the success of the proposed evaluation. We understand the importance of relationships and historical knowledge that staff build on projects and strive to ensure continuity of key staff for a project's duration. SRI has an excellent reputation for managing large-scale, complex projects with multiple collaborating organizations and expert consultants and advisory groups. Key to the successful management of large, multi-site evaluations with staff in multiple sites and organizations are

precise articulation of the project tasks; the development and communication of clear roles and responsibilities; designation of teaming structures to pull the most relevant expertise together to address project activities; and regular, purposeful communication across teams and individuals and with the clients. Below in section E6 we describe the organization, leadership, coordination, and work planning process, and how SRI as the lead organization, along with its partner SRC, will effectively and efficiently coordinate all project activities on time, within budget, and with attention to high standards of quality. We also describe processes to obtain feedback and continuous quality improvement, as well as the organizational resources and supports available for managing the project and conducting the various evaluation activities.

**3. Describe the organization's office locations and accessibility of staff to the VPI+ Implementation Team.**

SRI has headquarters located in Menlo Park, California and maintains a large office of 120 staff in Arlington, Virginia. The latter facility includes a conference center equipped with video telecommunicating (VTC) equipment and other amenities to meet clients' conference needs. The two VPI+ evaluation Project Coordinators, Drs. Megan Siebert and Sara Thayer, are conveniently located in the Arlington office, as well as several early childhood research assistants who can support the work of the project. Drs. Siebert and Thayer will be available to conduct in-person meetings and quickly respond to client needs. The proposed project Principal Investigators, Drs. Gaylor and Golan, located in SRI's Menlo Park office, regularly work from the Arlington office and are adept at working with colleagues and clients at different locations using state-of-the art audiovisual technology, including VTC capabilities; remote conferencing applications for sharing and recording meetings, such as WebEx, Adobe Connect, and Zoom; and use of collaborative project management platforms, such as Asana, Basecamp, SharePoint, and Costpoint.

School Readiness Consulting is headquartered in Silver Spring, Maryland. From this location just outside the District of Columbia, SRC staff will have easy access to Virginia schools and will be able to closely monitor every part of the data collection process, as well as to participate in any in-person meetings that are needed. In addition to SRC's large team of data collectors in Virginia and the D.C. area, SRC has an extensive network throughout Virginia that will allow it to hire additional data collectors in order to staff the project with experienced, and dedicated early childhood professionals.

**4. Describe the qualifications of key staff members working on this project, including qualifications of project leadership (e.g., program director, project director, principal investigator, and co-principal investigator; statistical or methodological lead) and project staff who are assigned to specific roles (e.g., overseeing primary data collection; training data collectors; carrying out the analysis; preparing and disseminating reports).**

Proposed SRI and SRC staff have abundant relevant expertise and experience to manage and carry out all of the required activities for this evaluation, as evidenced by the project work described above in section E.1. These individuals have designed and managed large multi-site evaluations with both formative and summative as well as cost-effectiveness components that have included oversight of primary data collection with young children and their parents, preschool program personnel at all levels, and state administrators; hiring, training, and

managing the work of data collectors; conducting formative and summative data analyses; and preparing a variety of dissemination reports, briefs, and other products and presentations.

***SRI International Key Staff***

**Erika Gaylor, Ph.D. (Co-Principal Investigator).** Dr. Erika Gaylor, Senior Early Childhood Researcher in SRI's Center for Education and Human Services in the Education Division, will serve as co-principal investigator and leader of the summative evaluation, bringing more than 15 years of experience in research and evaluation of early childhood preschool programs and interventions. Dr. Gaylor has conducted numerous evaluations of early learning interventions in schools and community-based preschool programs, using a variety of experimental designs. She has designed and led large multi-site, multi-method evaluations, including managing statewide, multi-site data collection activities used for measuring classroom and instructional quality, teacher experience and education, parent involvement and family engagement, and children's early literacy and math skills, as well as school readiness more broadly using both direct assessments and teacher-reported measures. Currently, Dr. Gaylor is the principal investigator of two Department of Education Investing in Innovation (i3) grant evaluations: a PreK-3rd grade math professional development intervention project and the Child-Parent Center P-3 Midwest expansion project. She co-led a statewide evaluation of the Illinois statewide preschool program (Preschool For All) and was co-principal investigator of the evaluation of the Saint Paul Early Childhood Scholarship Pilot Program, which was an innovative model to increase access to high-quality early learning programs for low-income children in Minnesota. Dr. Gaylor also previously worked on the Statewide Evaluation of First 5 California Programs, assisting California's counties in collecting and using data to understand the impact of a range of early childhood services on children's school readiness and health. She also serves as a reviewer on the What Works Clearinghouse project, demonstrating her expertise and knowledge about rigorous research and evaluation methodology. Dr. Gaylor has a Ph.D. in Human Development from the University of California, Davis.

**Shari Golan, Ph.D. (Co-Principal Investigator).** Dr. Shari Golan, Director of SRI's Center for Education and Human Services in the Education Division, will serve as co-principal investigator with Dr. Gaylor, and she will lead the formative evaluation, bringing more than 25 years of research and evaluation experience helping improve education, social, and health programs and policies for young children and their families. Her expertise includes working with policymakers, funders, and program leaders to identify desired outcomes, strategies to achieve them, and ways to collect and use high-quality data to monitor progress. Her research has addressed school readiness, early childhood education program quality and improvement, parent support and education programs, and the building of comprehensive and integrated systems for children and families. Dr. Golan has evaluated early learning systems in Florida, Washington, Minnesota, and California, using administrative data, community indicators, surveys, and direct assessments. For Ready Schools Miami (Florida), she facilitated the development of an early childhood system logic model that was evaluated through case studies and analysis of school and agency data to guide program planning and accountability. In Minnesota she is using extant educational data together with teacher observations and direct assessments of children in PreK. For the Washington State Department of Early Learning, she conducted statewide surveys and a set of focus groups with diverse stakeholders and communities. In California, she directed a 5-year evaluation of First 5 California that included reporting on outcome data on children and families; development of a web-based data system; development of a summary report of key

educational, health, and social population-based indicators; and the creation of attractive fact sheets, policy and practitioner briefs, and annual reports for the California Legislature and the public. Dr. Golan has a Ph.D. in Education from the University of California, Los Angeles.

**Megan Siebert, Ph.D.**, Early Childhood Researcher in SRI's Center for Education and Human Services in the Education Division, will serve as one of two SRI Project Coordinators in SRI's Arlington, Virginia, office and oversee and manage communication with six of the participating school divisions. Dr. Siebert is an experienced early childhood researcher with a specialty in evaluation and assessment research, particularly with early childhood programs serving low-income students, observation-based assessment, and classroom quality and effective teaching. Dr. Siebert helped develop and manage a large-scale, longitudinal program evaluation of an early childhood program for the District of Columbia Public Schools and worked closely with district and school staff to help implement policy changes based on outcomes of that work. While at SRI, Dr. Siebert has helped to lead teacher professional development efforts and assessment enhancement as part of a 10-state consortium tasked with developing a formative assessment spanning kindergarten through third grade. Dr. Siebert has a Ph.D. in Applied Developmental Psychology from Fordham University.

**Sara Kalb Thayer, Ph.D.**, Early Childhood Researcher in SRI's Center for Education and Human Services in the Education Division, will serve as one of two SRI Project Coordinators in SRI's Arlington, Virginia, office and oversee and manage communication with five of the participating school divisions. Dr. Thayer has experience designing and providing educational activities for infants, toddlers, and preschoolers with disabilities, and evaluating interventions for early elementary school-age children. She has experience formulating questions and using data to address those questions, having conducted research on assessment, special education, social-emotional development, literacy, and mathematics. She has conducted more than 40 reviews for IES's What Works Clearinghouse, including reviews in the areas of early childhood education and early childhood education interventions for children with a disability, and she worked on several summary intervention reports. She is also familiar with assessments for children with disabilities through her work on the National Study on Alternate Assessments, which examined special education teacher assessment practices and quality in three states. Currently, she serves as a Technical Assistance Specialist for the OSEP-funded Center for IDEA Early Childhood Data Systems, providing data analysis, dissemination, and research and evaluation assistance to state staff across the country. Dr. Thayer has a Ph.D. in Psychology from George Mason University.

**Dr. Xin Wei, Ph.D.**, a statistician and Senior Researcher in the Center for Education and Human Services in the Education Division, will serve as the quantitative data analyst specialist. Dr. Wei has extensive expertise in statistical modeling, measurement, and research designs. She is currently directing the design and quantitative analysis on three large evaluation studies funded by the U.S. Department of Education's Investing in Innovation program—the Midwest expansion of the Child-Parent Center Education Program, the Collaborative Strategic Reading Colorado (CSR-CO), and the Study of the Rio Grande Valley Center for Teaching and Leading Excellence. Dr. Wei is also a co-PI and the lead statistician for projects funded by the Institute of Education Sciences, the National Science Foundation, and the Department of Education. These projects require the analysis of numerous nationwide, statewide, and districtwide administrative student data sets. Her work using hierarchical linear modeling, propensity score methods, randomized controlled trial design, regression discontinuity design, structural equation modeling,

and other advanced statistical techniques has been published in various journals, such as *Journal of Research on Educational Effectiveness*, *Exceptional Children*, *Journal of Autism and Developmental Disorders*, *Journal of Special Education*, *Maternal and Child Health Journal*, and others. Dr. Wei has a Ph.D. in Educational Psychology and an M.A. in Statistics from Stanford University.

**Cyndi Williamson, B.S.**, a Senior Statistical Programmer in SRI's Center for Education and Human Services, will serve as the lead programmer for the quantitative evaluation activities and oversee the production of the student, school, and division summative assessment results reports and data set for VDOE. She has used SAS for data management and statistical analysis since 1988. Ms. Williamson is lead programmer on the Evaluation of the Midwest Expansion of the Chicago Child-Parent Center (CPC) Program, which is funded by the U.S. Department of Education's Investing in Innovation (i3) grant program. In addition, she provides programming support on the Evaluation of the McKnight Foundation's Education & Learning Program and the Evaluation of the Florida Teacher Master Initiative. These projects all involve collection, cleaning, merging, and analysis of data at multiple levels—students, teachers/providers, and schools. Ms. Williamson was responsible for working with staff at districts or schools to request periodic data exports, for cleaning and merging the data, for clarifying any questions about the data, for preparing and reviewing descriptive statistical analyses, and for preparing reports of results, overall and for each school/district. In addition, Ms. Williamson researched, downloaded, and included available data files from each state's department of education website reports. She provided programming support for numerous other projects, including the ENHANCE evaluation and the Secondary Analysis of Head Start Data. Through decades of work with data, Ms. Williamson has deep experience with complex data from a multitude of sources (e.g., surveys, assessments, files from state departments of education). She has also worked on many projects using complex analyses, including propensity scoring. She holds a B.S. in Statistics from California State University, Hayward.

**Donna Spiker, Ph.D.**, will serve as Senior Technical Advisor. Dr. Spiker is Program Manager of the Early Childhood Program in SRI's Center for Education and Human Services in the Education Division. She is a nationally known developmental psychologist with extensive experience designing and conducting research and evaluations on early childhood programs and services designed to improve the development and school readiness of young children, particularly those at risk and with disabilities. She has led many state and national studies about preschool and home visiting programs and early intervention and special education services. Currently, with Dr. Gaylor, she serves as Senior Technical Consultant on two Department of Education Investing in Innovation (i3) grant evaluations: a PreK-3rd grade math professional development intervention project and the Child-Parent Center P-3 Midwest Expansion Project. She also co-led a statewide evaluation of the Illinois statewide preschool program (Preschool For All) and was co-principal investigator of the evaluation of the Saint Paul Early Childhood Scholarship Pilot Program; she now leads the statewide evaluation of Minnesota's Race to the Top—Early Learning Challenge grant evaluation. Dr. Spiker also currently co-directs the national TA center for the Office of Special Education, the Center for IDEA Early Childhood Data Systems, and she previously co-directed OSEP's national TA center, the Early Childhood Outcomes (ECO) Center. Dr. Spiker has a Ph.D. in Child Development from the University of Minnesota.

**Wei-Bing Chen, Ph.D.**, will provide support to the formative evaluation team with design, data collection, analysis, and reporting. Dr. Chen has experience in evaluating preschool and other early learning programs using both quantitative and qualitative methods. Her other current projects are an evaluation of an early learning and literacy initiative funded by The McKnight Foundation in Minnesota and an evaluation of the implementation and effectiveness of two of Minnesota's Race to the Top–Early Learning Challenge programs.

### ***School Readiness Consulting Key Staff***

**Lindsey Allard Agnamba, Ed.D.**, who leads School Readiness Consulting, will serve as Senior Technical Advisor and also participate in the summative and cost-effectiveness evaluation activities. She works extensively with school, program, and district leaders to design and implement instructional initiatives, including building teacher and school leader effectiveness; improving the quality and measurement of early childhood curriculum, instruction, and assessment; integrating pre-K into K-12 systems; building capacity for early childhood leadership in schools; and evaluation of education initiatives.

Dr. Agnamba is the principal investigator on the District of Columbia Pre-K Quality Evaluation study and the lead investigator on the Target Early Reading Outcomes Study, and advises multiple foundations and Promise Neighborhood Initiatives on evaluation strategy. She leads SRC's team in its partnership with the Johns Hopkins University Quality Rating and Improvement System (QRIS) Validation Study in Maryland. She led the evaluation team in SRC's partnership with American Institutes for Research to evaluate the Children's Literacy Initiative through an Investing in Innovation Validation grant. She is a member of the Implementation Science Workgroup, sponsored by the Office of Planning, Research & Evaluation (OPRE) at the U.S. Department of Health and Human Services. In August 2014, she was asked to present her research to the full working group on the topic of "Validating Fidelity Measures: Approaches to Understanding Fidelity" and presented a unique set of processes she developed to approach an early childhood implementation study. Dr. Agnamba holds a Doctorate in Educational Leadership from the University of Pennsylvania, an M.Ed. in Education Policy from the Harvard Graduate School of Education, and a B.S. in Human Development and Early Childhood Education from Wheelock College.

**Andrew Brodsky, Ph.D.**, who leads evaluation initiatives at School Readiness Consulting, will serve as the lead for the cost-effectiveness evaluation and also as the SRC Evaluation Director to collaborate with the SRI PIs leading the overall project (see E.3 below). Dr. Brodsky has spent the last 15 years working to help build high-quality systems for at-risk children. He has led large-scale research projects for dozens of clients, including the U.S. Office of Child Care, numerous U.S. states, and many foundations, school districts, and other organizations. His areas of expertise include early childhood costing and return on investment analysis, child care policy analysis, QRIS and quality improvement research and evaluation, program evaluation, educational assessment, and quantitative methods. Dr. Brodsky's passion is to help to build better outcomes for children by helping drive policy change through rigorous, evidence-based research and evaluation approaches. He also specializes in developing interactive web-based decision tools and has presented to national and international audiences on early childhood effectiveness issues. Dr. Brodsky holds a Ph.D. in Educational Research and Evaluation Methods from the University of Colorado, Boulder.

**Dori Mornan, M.S.**, works on evaluation initiatives at School Readiness Consulting and is a leader in managing data collection processes and systems. She will participate on the team working on the summative and cost-effectiveness evaluations. Ms. Mornan currently manages a systemwide pre-kindergarten quality evaluation for the Office of the State Superintendent of Education in more than 800 classrooms and family child care homes in Washington, D.C. She is also responsible for a large-scale evaluation of Maryland's Quality Rating and Improvement System, managing the data collection of observing more than 1,200 classrooms in three cycles throughout 2015.

Ms. Mornan has supported SRC research and development for multiple projects, including research for the REL Northeast and Islands' Early Childhood Education Research Alliance around research, policymaking, and practitioner perspectives on early childhood assessments. Ms. Mornan has a broad range of policy and evaluation expertise in the field of early childhood, most specifically related to workforce issues. Ms. Mornan began her career as a legislative assistant working for a Congressman on the Education and Workforce Committee. She then served as a Policy Associate at a non-profit organization advocating for educational and economic equity for single parents, displaced homemakers, and individuals in transition. Combining her passions for education and labor, Ms. Mornan spent 7 years at the American Federation of Teachers and the Center for the Child Care Workforce. In this position, she developed, coordinated, and implemented the organization's early childhood programmatic activities, including public policy and research to promote high-quality early childhood education and to improve early childhood workforce conditions. Ms. Mornan received her Bachelor's and Master's degrees from the State University of New York at Albany, concentrating in Education Policy and Administration.

**Sherylls Valladares Kahn, M.S.**, supports evaluation and policy initiatives for the School Readiness Consulting team. She will participate on the team working on the summative and cost-effectiveness evaluations. She currently serves as senior data coordinator for a systemwide pre-kindergarten quality evaluation for the Office of the State Superintendent of Education in more than 800 classrooms and family child care homes in Washington, D.C. She also coordinates data collection efforts for the Early Childhood Technical Assistance Center. Ms. Kahn is bilingual in English and Spanish, is a certified CLASS observer, and holds significant expertise in early childhood assessment best practices. She has served as a lead data collector on School Readiness Consulting Evaluation projects, and supported organization-wide data coordination and analysis.

Ms. Kahn began her career as a research assistant at Child Trends, a non-profit research organization in the District of Columbia. While at Child Trends, she worked on various projects that focused on the well-being of children and their families. She also received training in several early childhood assessment tools. She also gained experience working with large national data sets and developed skills in survey design and development, as well as interview, focus group, and observational instrument development. As a master's student in Couple and Family Therapy she was trained in a variety of family therapy models and had the opportunity to work directly with children and their families. She is most passionate about working with immigrant families and contributing to the knowledge about this population. She is particularly interested in issues that affect the well-being of low-income immigrant Latino families. Ms. Kahn is a Family Science Ph.D. Candidate (ABD) in the School of Public Health at the University of Maryland, College Park. She earned a Master's degree in Couple and Family Therapy at the University of Maryland, College Park, and a B.A. in Psychology from Pomona College.

**Grace Wagner, M.P.P.**, supports the School Readiness Consulting evaluation initiatives and special projects and will provide research and data collection support on the summative evaluation. She has managed logistics and systems for the Children's Literacy Initiative i3 implementation evaluation in several states and supported the teachers of SRC's Child Development course at Columbia Heights Education Campus with teaching and classroom management strategies. Ms. Wagner is a certified CLASS observer for PreK, Toddler, and Infant, and her most recent projects have focused on data collection, coding, and analysis.

While a Logistics Assistant at DC Public Schools, Ms. Wagner managed central textbook and consumable inventory. In this capacity, she supported all district sites for curriculum and textbook needs and identified, monitored, and analyzed data collection of textbook requests, deliveries, and inventories, both centrally and at individual school sites. Ms. Wagner understands the critical need for curriculum and resource efficiency, having worked in Special Education for DCPS and as a high school teacher at Marlboro County High School in Bennettsville, South Carolina. Ms. Wagner holds a Master of Public Policy from George Mason University and a Bachelor of Arts in History and Political Science from the College of Charleston.

## **5. Describe staff experience and expertise in:**

### **a. Multi-site, multi-method program evaluation that requires primary data collection from children;**

As described in earlier sections (E.1, E.4), the proposed SRI and SRC staff members have extensive experience and expertise in conducting multi-site, multi-method program evaluations, including expertise in:

- Conceptualizing summative and formative (outcome and implementation) evaluation designs.
- Development of logic models.
- Development and implementation of survey, interview, focus group, and site visit protocols.
- Recruiting, hiring, training, and supervising child assessors, interviewers, site visitors, and focus group facilitators.
- Piloting and delivering assessment training and assessment implementation for child assessors and interviewers.
- Developing systems to provide ongoing support to collect real-time progress reports from field teams.
- Designing and conducting fidelity checks ensuring that child assessors maintain procedural integrity with assessment implementation standards and practice.
- Collecting informed consent forms and enrolling participants.
- Coordinating the scheduling of data collection activities with school administrative staff.
- Designing reliable, comprehensive systems to track and report data collection progress.
- Maintaining secure databases where data are cleaned and archived regularly by a data coordinator.

- Performing ongoing reliability and fidelity checks, in addition to ongoing training, in order to ensure that the data collected are valid and reliable.
- Preparing a variety of compelling and clear reports, briefs, and other dissemination products.

Illustrative experience includes the following:

- Dr. Gaylor, assisted by Dr. Spiker, is leading two Department of Education Investing in Innovation (i3) grant evaluations: a PreK-3rd grade math professional development intervention project and the Child-Parent Center P-3 Midwest expansion project. Both projects include both summative and formative (impact and implementation) evaluations that meet What Works Clearinghouse rigorous research standards.
- Dr. Spiker is leading the Evaluation of Minnesota's Race to the Top-Early Learning Challenge grant, a multi-site, multi-method evaluation to promote access to high-quality programs for children with high needs. The multi-site, multi-method research combines qualitative data collection (i.e., interviews with key program staff and parents) to capture the differences in implementation across sites, and quantitative assessment batteries with preschool and kindergarten children for a quasi-experimental impact study. Project staff work with each site to identify the best method of conducting child assessments and family interviews with the diverse communities that are being served in high-quality preschool programs, including identifying preferred languages and methods of outreach.
- Drs. Golan and Spiker co-directed the Statewide Evaluation of First 5 California, including its School Readiness Initiative. To track the impact on school readiness trends in high-need areas across California, their team collected Kindergarten Entry Profiles (KEPs) on more than 10,000 entering kindergartners in more than 100 schools for three consecutive years. The KEP assessment involved administering a teacher observation tool based on California's Desired Results Developmental Profile and a parent phone interview that provided information on children's physical health, development, home literacy activities, and transition kindergarten outcomes. The First 5 evaluation also included case studies with 10 sites implementing the comprehensive School Readiness Initiative.
- Dr. Gaylor, assisted by Dr. Spiker, also led the evaluation of the Illinois Early Childhood Block Grant, which involved collection and analysis of data for a statewide sample of children, families, and preschool programs, including kindergarten entry assessments of more than 600 children who had attended more than 150 preschool programs across the state. The evaluation also included qualitative data collection via phone interviews with about 100 preschool program directors and online surveys of 150 preschool teachers. In addition to collecting in-depth data on 150 preschool programs, the evaluation collected an online survey from more than 500 program administrators across the state.
- In an SRC project led by Dr. Agnamba, the District of Columbia Public Schools Program Evaluation, SRC was responsible for the development of the child assessment and fielding protocols and fidelity checklists, and provided ongoing training, technical assistance, fidelity checks, and data management and coordination of SRC and Child Trends staff. Child assessments of 540 children were conducted in the fall and spring, using the Woodcock Johnson II-Letter Word Identification and Applied Problems subtests, the Pencil Tap Test, Backward Digit Span, Challenging Situations Task, and the

Pre-School Self-Regulation Assessment (PSRA). Observations of 286 classrooms were conducted, using the Classroom Assessment Scoring System (CLASS™).

**b. Rigorous statistical methods required to discern program impact and to determine program cost-effectiveness;**

SRI staff have extensive experience with the full spectrum of evaluation approaches—including experimental designs, implementation studies, qualitative studies of the “lived experiences” of program staff or participants, and secondary analysis of existing administrative and survey data. Team members have well-honed capabilities in survey research, including designing and fielding surveys in local communities, social service agencies, home environments, and grantee sites; tracking respondents longitudinally; weighting survey responses to be representative of the target population; and analyzing complex surveys that include both stratification and cluster designs.

- Drs. Gaylor and Spiker are currently leading two Department of Education Investing in Innovation (i3) grant evaluations: a PreK-3rd grade math professional development intervention project and the Child-Parent Center P-3 Midwest expansion project. Both projects use a quasi-experimental design that meets rigorous What Works Clearinghouse guidelines to evaluate impacts of a PreK-3rd grade early math professional development intervention and the expansion of the PreK-3rd grade Chicago Parent Child Model. Both projects also include extensive formative evaluation to examine implementation fidelity.
- Drs. Golan and Spiker co-directed the Statewide Evaluation of First 5 California, including its School Readiness Initiative. To track the impact on school readiness trends in high-need areas across California, their team collected Kindergarten Entry Profiles (KEPs) on more than 10,000 entering kindergartners in more than 100 schools for three consecutive years. The KEP assessment involved administering a teacher observation tool based on California’s Desired Results Developmental Profile and a parent phone interview that provided information on children’s physical health, development, home literacy activities, and transition kindergarten outcomes.
- Dr. Golan co-leads the evaluation of the Florida Teacher Master Initiative, a randomized controlled trial (RCT) to determine the initiative’s impact on preschool through third-grade teachers and their students. As part of this evaluation, SRI is conducting teacher surveys, classroom observations, and analysis of student standardized test performance data in 40 Title I elementary schools. Classroom instruction outcomes will be examined as part of the quasi-experimental design using Classroom Assessment Scoring System (CLASS) observations and survey measures.

SRC staff have led early childhood cost-effectiveness projects for Colorado, New York, and Palm Beach County, Florida. These models incorporated appropriate statistical methods to identify cost and outcome data from primary data and existing cost-benefit estimates. In addition, we have used statistical methods to determine early childhood program quality. Analysis methods for each of these projects included the following:

- Collecting data on dozens of early childhood programs, including enrollments, administrative costs, and dosage levels.
- Conducting in-depth cost analyses based on program scope, children served, and quality level.

- Determining economic benefits for each program by monetizing a range of child outcomes due to program participation.
- Calculating cost-benefit ratios over time based on appropriate discounting methods.
- Statistical analyses (e.g., ANOVA, regression analyses) to determine differences in program quality, as well as associations between program characteristics and program quality ratings.

More detailed descriptions of SRC's cost-effectiveness studies are provided above in section E-1 and Exhibit E2 (i.e., projects # 8, 9, and 10: Children's Services Council of Palm Beach County Cost-Benefit Model; Colorado Early Childhood Investment Model; and New York Early Childhood Return on Investment Model).

### **c. Formative data collection and feedback;**

SRI staff have extensive experience in conducting formative evaluations to generate an in-depth understanding of program implementation, document promising practices, better explain outcomes, and identify and recommend options for program change or subsequent evaluations. SRI has a well-honed process for conducting formative assessments that ensures rigor and quality in design, data collection, and analysis. As a result, the assessment accurately depicts a program's logic model and measures program processes, resources, and outcomes, thereby making a significant contribution to program implementation and improved outcomes. At the outset of an assessment, researchers develop plans for managing all facets of the assessment, including scope, schedule, resources, and processes for communication and quality assurance. Researchers work closely with the client to clarify the assessment questions and create a logic model to set the theoretical framework for our program assessment efforts. Once the framework for the study has been established, researchers develop protocols for collecting background data from stakeholders that enable them to understand the extent to which programs have achieved their intended outcomes, the successes and continuing challenges, the factors that facilitate and impede implementation, and what kinds of data would be most useful for program improvement.

SRI and SRC have experience with formative assessment design and implementation from many projects for which we have:

- Developed and administered questionnaires and surveys that have gathered information on implementation activities, successes and challenges of implementation, etc. (with teachers, administrators, providers, parents).
- Designed, conducted, transcribed, and analyzed focus groups and stakeholder interviews.
- Completed document reviews and qualitative analyses that included coding for inductive and deductive themes.
- Developed and administered observational tools, fidelity tools, and checklists.

Examples of staff experience of formative assessment research include:

- Dr. Golan (co-PI) led the Ready Schools initiative in Miami-Dade County, a formative program assessment to improve the county's systems that contribute to school readiness and success: early care and education, health, and family support. Researchers developed case studies by gathering information on the activities and services, coordination and linkages among different organizations, and supports for and challenges to implementing components of the initiatives, as well as on outcomes for children. To support partners in

developing a results-based accountability system to track program progress, SRI compiled a set of child and family indicators from multiple Miami-Dade County data sources. Indicators, which were aligned with the Ready Schools logic model, helped Ready Schools partners identify gaps in accessibility, use of services, and child and family well-being among specific subpopulations and helped indicate whether gaps were widening or narrowing.

- Dr. Golan also co-leads the Evaluation of the McKnight Foundation Education & Learning Program, which contains a formative evaluation component to refine and strengthen the E&L program as it is implemented in districts and schools. To determine best practices and areas needing improvement, we will measure the extent to which sites are developing and implementing key components of the E&L program and identify challenges and successes. The formative evaluation tracks progress toward the intermediate outcomes (e.g., the extent to which districts create aligned systems and schools create the conditions for improved instruction). We include intermediate outcomes in the formative evaluation because, according to the logic model, effective systems must be in place to realize the desired student achievement gains. Findings about intermediate outcomes will inform both the formative and the summative evaluations.
- As described above in the evaluation of the Illinois Early Childhood Block Grant led by Drs. Gaylor and Spiker, the evaluation included qualitative data collection via phone interviews with about 100 preschool program directors and online surveys of more than 150 preschool teachers. Included were closed-ended and open-ended questions about preschool program quality features, teacher and program director perspectives on quality of program implementation, and available support to promote program quality and teacher professional development.
- In the Minnesota Early Learning Foundation's preschool scholarship evaluation, Drs. Gaylor and Spiker and their team designed and conducted focus groups with parents and in-person semistructured interviews with scholarship program developers and local administrators to learn about the successes and challenges to implementation.

**d. Communicating research results from mixed-methods designs to diverse audiences, including non-research audiences;**

SRI and SRC staff have a long history of communicating research results from mixed-methods designs to diverse audiences, including non-research audiences. In current and previous SRI early childhood evaluation projects, the proposed team has prepared required annual reports and policy/issue briefs, as well as other dissemination products, shared with our clients and their stakeholders. For the early childhood projects above and some others, we have prepared the following kinds of products:

- In the Ready Schools initiative in Miami-Dade County, Dr. Golan and her team, including Ms. Williamson, helped to build support and buy-in for the initiative by supplementing annual research reports with one-page fact sheets on several of these systems (e.g., children's health and early care and education) to distribute to a broad range of stakeholders to educate them on these countywide efforts and their impact.
- For the evaluation of Minnesota's Race to the Top—Early Learning Challenge grant, SRI staff, including Drs. Spiker, Chen, and Wei and Ms. Williamson, prepared for the Minnesota Department of Education (MDE) annual reports and individual briefs for each

of the four participating sites across Minnesota, describing both summative and formative evaluation findings. Information from these reports has been used for continuous improvement planning and for MDE to meet its federal reporting requirements for this grant.

- For the statewide evaluation of the Illinois Early Childhood Block Grant (ECBG) program for the Illinois State Board of Education (ISBE) (state-funded preschool and home visiting programs), Drs. Gaylor and Spiker prepared multiple annual reports and brief fact sheets for the Illinois State Board of Education that were shared with the state legislature and other key audiences (e.g., a statewide early childhood advocacy group that made recommendations for program and workforce improvements).
- As part of the Early Childhood Development Scholarship Model Evaluation for the Minnesota Early Learning Foundation (a public-private partnership), Drs. Gaylor, Spiker, and Wei and Ms. Williamson prepared multiple annual reports and briefs that were used to lobby the state legislature for additional preschool program funding and were used to support a successful application for a Department of Education Race to the Top–Early Learning Challenge grant.
- For the State of Washington, Kindergarten Readiness Assessment Planning project for the Office of the Superintendent of Public Instruction (OSPI), Drs. Golan and Spiker and Ms. Williamson prepared a clear and concise report summarizing the findings on best and current practices and stakeholder priorities, provided recommendations and considerations for next steps in developing a kindergarten assessment process, and suggested an implementation plan that OSPI presented to the state legislature and school officials and districts across the state.
- Over a 5-year period as part of the statewide evaluation of First 5 California, Drs. Golan, Gaylor, and Spiker and Ms. Williamson presented findings from the statewide evaluation in annual reports to the California Legislature, policy briefs, media releases, fact sheets, technical reports, and presentations at national and state conferences. The annual reports provided detailed information on First 5 investments, funded programs, activities, participants, and progress toward the desired results of First 5 California that the 58 First 5 county commissions and the state commission used to advocate for First 5 programs and funding and continuously plan for program improvements.
- For the Case Studies of the Implementation and Use of Kindergarten Entry Assessments project, Dr. Golan and her team are preparing four state-level summaries for the U.S. Department of Education’s internal use and a final report for policy audiences, practitioners, and the general public that captures lessons learned about key considerations in KEA adoption, the implementation process, and use of results.
- For the District of Columbia Pre-K Quality Evaluation, Dr. Agnamba and her team have developed reports and brochures designed to share evaluation results with diverse audiences, including early childhood program administrators, teachers, and families who participate in the public pre-kindergarten system. In addition, Dr. Agnamba and her team have designed and hosted data engagement meetings for program/school administrators and instructional coaches to help them understand study findings, as well as to consider ways in which they can utilize data to plan for professional development and program/school improvement.

- For the Early Childhood Technical Assistance Center Program Evaluation, Ms. Mornan and Ms. Kahn have led the development of detailed program- and classroom-level data reports detailing results for a variety of classroom quality and child outcome measures, and provided technical assistance to program administrators and teachers on how to use the reports to improve classroom practice.

**e. Peer reviewed publishing; and**

Key proposed SRI staff have extensive experience with publishing in peer-reviewed journals and books, including the following recent examples (also see resumes below for several other examples):

- Wei, X., Wagner, M., Hudson, L., Yu, J. W., & Javitz, H. (2015). The effect of transition planning participation and goal-setting on college enrollment among youth with autism spectrum disorders. *Remedial and Special Education*. doi: 10.1177/0741932515581495
- Wei, X., Wagner, M., Hudson, L., Yu, J. W., & Shattuck, P. (2014). Transition to adulthood: Employment, education, and disconnection in individuals with autism spectrum disorders. *Emerging Adulthood*. doi: 10.1177/2167696814534417
- Wei, X., Christiano, E., Yu, J., Wagner, M., & Spiker, D. (2014). Reading and math achievement profiles and longitudinal growth trajectories of children with an autism spectrum disorder. *Autism*. doi: 10.1177/1362361313516549
- Wei, X., Christiano, E. R. A., Yu, J. W., Wagner, M., & Spiker, D. (2014). Reading and math achievement profiles and longitudinal growth trajectories of children with an autism spectrum disorder. *Autism*, 1-11.
- Denham, S. A., Way, E., Kalb, S. C., Warren-Khot, H. K., & Bassett, H. H. (2013). Preschoolers' social information processing and early school success: The Challenging Situations Task. *British Journal of Developmental Psychology*, 31(Pt. 2), 180-197.
- Wei, X., Yu, J., & Shaver, D. (2013). Longitudinal effects of ADHD in children with learning disabilities or emotional disturbances. *Exceptional Children*, 80(2), 205-219.
- Wei, X., Wagner, M., Christiano, E., Shattuck, P., & Yu, J. W. (2013). Special education services received by students with autism spectrum disorders from preschool through high school. *Journal of Special Education*. doi: 10.1177/0022466913483576
- Barton, L., Spiker, D., & Williamson, C. (2012). Characterizing disability in Head Start programs: Not so clearcut. *Early Childhood Research Quarterly*, 27, 596-612.
- Denham, S. A., Bassett, H. H., Mincic, M. S., Kalb, S. C., Way, E. L., Wyatt, T. M., & Segal, Y. (2012). Social-emotional learning profiles of preschoolers' early school success: A person-centered approach. *Learning and Individual Differences*, 22(2), 178-189.
- Gaylor, E., & Spiker, D. (2012). Home visiting programs and their impact on young children's school readiness. In *Encyclopedia on early childhood development*. Centre on Excellence for Early Childhood website. <http://www.excellence-earlychildhood.ca/>
- Hebbeler, K., Spiker, D., & Kahn, L. (2012). IDEA's early childhood programs: Powerful vision and pesky details. *Topics in Early Childhood Special Education*, 31, 199-207.
- Cameron, C. E., Chen, W., Blodgett, J., Cottone, E. A., Mashburn, A. J., Brock, L. L., & Grissmer, D. W. (2012). Primary validation of the Motor Skills Rating Scale. *Journal of Psychoeducational Assessment*, 30, 555-566.
- Tikotzky, L., Chambers, A. S., Kent, J., Gaylor, E., & Manber, R. (2012). Postpartum maternal sleep and mothers' perception of their attachment relationships with the infant among women

- with a history of depression during pregnancy. *International Journal of Behavioral Development*, 36, 440-448.
- Gaylor, E. E., Burnham, M. M., Beebe, D. W., & Wei, X. (2011). Attention and hyperactivity symptoms at kindergarten entry associated with less sleep in preschool. [Abstract]. *Sleep*, 34 (Abstract Supplement), A276.
- Hebbeler, K., Barton, L., Taylor, C, & Spiker, D. (2011). Building good assessment and accountability systems for early childhood programs. *Young Exceptional Children Monograph No. 13*, 173-198.
- Hebbeler, K., & Spiker, D. (2011). Cost-effectiveness and efficacy of programs. In C. Groark (Set Ed.) & S. Eidelman (Vol. Ed.), *Early childhood intervention: Shaping the future for children with special needs and their families, three volumes: Vol. 1* (pp. 173-207). Santa Barbara, CA: Praeger, ABC-CLIO, LLC.
- Spiker, D., Hebbeler, K. M., & Barton, L. R. (2011). Measuring quality of ECE programs for children with disabilities. In M. Zaslow, I. Martinez-Beck, K. Tout, & T. Halle (Eds.), *Quality measurement in early childhood settings* (pp. 229-256). Baltimore, MD: Paul H. Brookes Publishing.
- Gaylor, E. E., Wei, X., & Burnham, M. M. (2010). Associations between nighttime sleep duration and developmental outcomes in a nationally representative sample of preschool-age children. [Abstract]. *Sleep*, 33 (Abstract Supplement), A17.

SRC staff has participated in the peer review process for the following publications:

- Brodsky, A. (2012). Estimating the costs of early childhood systems. In S. Kagan, & K. Kauerz, (Eds.). *Early childhood systems building*. New York: Teachers College Press.
- Brodsky, A., DeCesare, D., & Kramer-Wine, J. (2010). Design and implementation considerations for alternative teacher compensation programs. *Theory Into Practice*, 49(3), 213.

**f. Serving as a trusted, objective partner to support formative feedback and facilitate rigorous program evaluation implementation.**

Proposed SRI staff have a well-established track record of working collaboratively and productively with our federal, state, and local clients, as well as a variety of diverse groups, including researchers, early childhood educators, administrators, parents, and others, including individuals from diverse cultural, linguistic, and socioeconomic backgrounds. The team can support formative feedback and facilitate rigorous program evaluation implementation by communicating regularly with state and division staff, as well as the VPI+ implementation team, sharing reports, making presentations, and through other agreed-upon mechanisms.

SRI staff work with clients to use evaluation findings to help promote program improvement, shared learning, informed decision making, and increased public support for effective early childhood policies and programs by developing recommendations related to the evaluation findings. In past projects, we have communicated findings effectively to a variety of audiences, including officials at all levels (e.g., agency staff, legislators, and policymakers), teachers and other school personnel, parents and youth, advocacy and community groups, researchers, and other local, state, and national audiences. We can work collaboratively with the Virginia Department of Education, the 11 school divisions, and other stakeholders to develop common formats as well as individualized formats for specific audiences.

On a number of previous early childhood projects, proposed staff have shared reports and briefs, findings, and recommendations with clients and their stakeholders in ways that have led to continuous improvement in policy and practice, supported future program planning, and supported continuing funding for state early childhood programs and services. Specific examples:

- For the state of Washington Kindergarten Assessment Planning project, Drs. Golan and Spiker prepared a final report with recommendations about a statewide kindergarten assessment process for the Department of Early Learning (DEL) and the Office of Superintendent of Public Instruction (OSPI). Those recommendations were used by OSPI to plan next steps in developing a kindergarten assessment and implement it statewide.
- For the Minnesota Early Learning Foundation (MELF), Drs. Gaylor and Spiker developed and conducted a 4-year process and outcome evaluation of an early childhood scholarship model, which provided high-quality preschool for high-needs children from diverse backgrounds. The positive findings were presented to Minnesota's early childhood leaders and the state legislature and were used to support state legislation passed to continue scholarship funding to pay for high-quality preschool for high needs children. Minnesota also used the formative and impact data from the quasi-experimental study to write its state Race to the Top–Early Learning Challenge grant, which was successful in receiving federal funding.
- Dr. Golan conducted a 3-year evaluation of Ready Schools Florida (RSF). Led by the Early Childhood Initiative Foundation and the University of Florida Lastinger Center for Learning, RSF is one of the W.K. Kellogg Foundation's strategic investments to connect the public school system with early learning centers, families, and community-based organizations for improved child well-being and increased student academic achievement. Reports and brief fact sheets from the evaluation with information on strategies and outcomes are being used to scale up the RSF initiative across Florida and informing national conversations on how best to promote children's school readiness and long-term academic success.
- Reports, briefs, and a set of recommendations prepared by Drs. Gaylor and Spiker for the statewide evaluation of the Illinois Early Childhood Block Grant (ECBG) program for the Illinois State Board of Education (state-funded preschool and home visiting programs for children from low-income families) were shared with the state superintendent and ECBG coordinator, as well as a statewide stakeholder and advocacy group that included directors of early childhood community- and school-based programs, school administrators, researchers, funders, child advocates, and legislators. Key findings led to a number of program improvement activities. For example, impact outcome data showing poorer than expected child outcomes for math are being used to scale up a promising early math professional development intervention with preschool through 3rd grade teachers. Similarly, data from the formative evaluation showing a predominantly older and White preschool workforce are being used to develop strategies to encourage increased recruitment of linguistically and culturally diverse populations into the early childhood field across Illinois' institutions of higher learning.
- For the U.S. Department of Education, Dr. Golan is currently leading the Case Studies of the Implementation and Use of Kindergarten Entry Assessments, which will produce formative evaluation findings: four state-level summaries for the U.S. Department of

Education's internal use to guide technical assistance efforts and a final report for policy audiences, practitioners, and the general public that captures lessons learned about key considerations in KEA adoption, the implementation process, and use of results.

SRC, a firm comprising both an evaluation division and a division that focuses on practice and professional development, also has a strong track record of working collaboratively and productively with our federal, state, and local clients. SRC has partnered with states, cities, districts, and organizations in the DC Metro area and throughout the nation, and is a trusted, objective partner in providing evaluation and research services. SRC's work with schools, programs, teachers, and administrators over the years has allowed us the advantage of being able to use our knowledge of practice to inform our contributions in the evaluation realm. Because the SRC staff includes early childhood practitioners, SRC provides meaningful and highly contextualized recommendations and input throughout the formative evaluation process. SRC has experts in early childhood curriculum, instruction assessment, professional development, and leadership, and as such is well prepared to inform data-driven decision making regarding ongoing program implementation. The SRC evaluation team has conducted rigorous and objective formative and summative evaluations, collaborated with clients and evaluation participants, and provided high-quality reports, briefs, and presentations that have led to actionable recommendations.

**6. Describe how the Offeror's staff will work as a team, and how they will partner with the VPI+ Implementation Team to manage and carry out this complex program evaluation.**

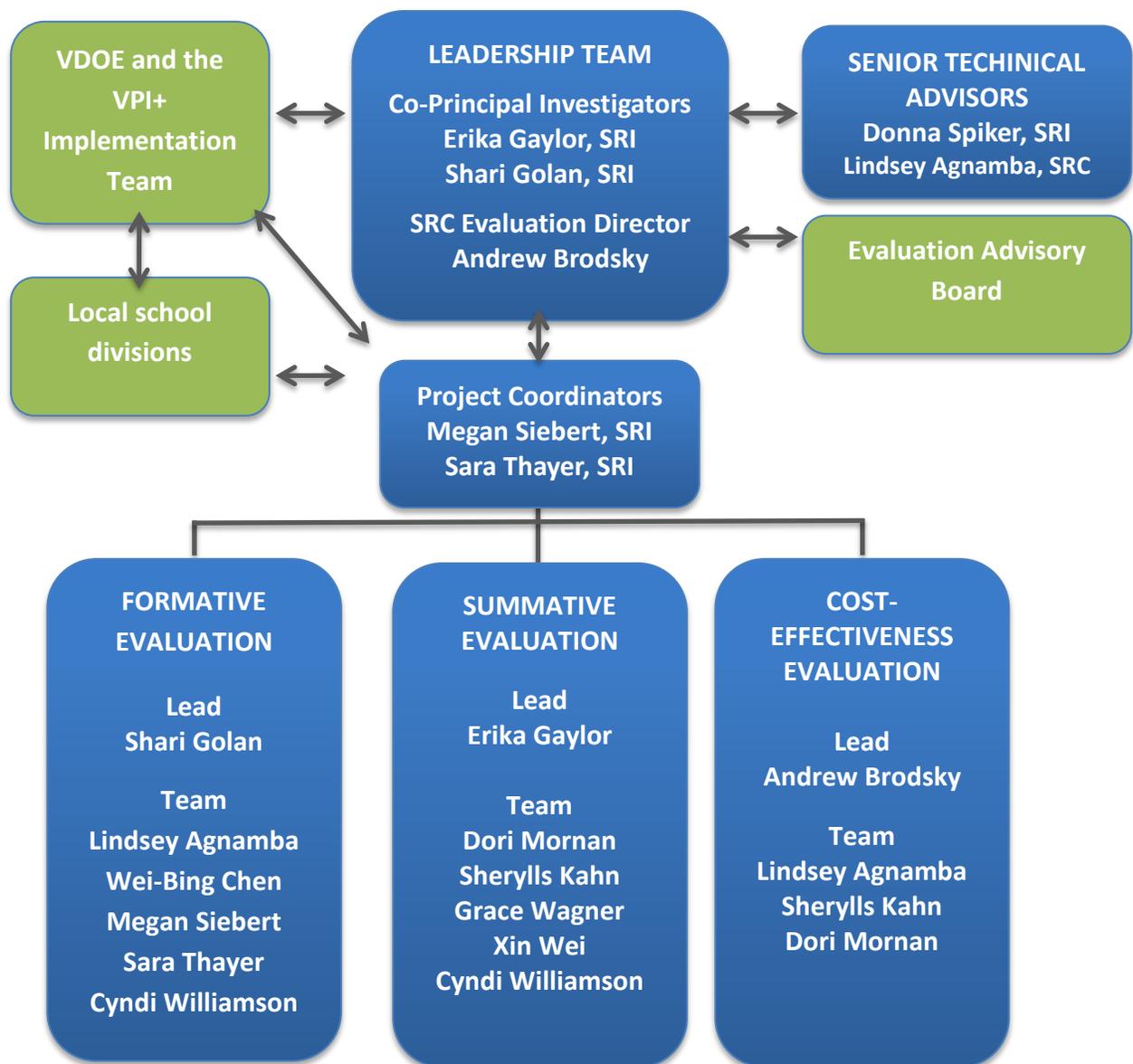
Our entire team is committed to producing high-quality work that meets the expectations expressed in the RFP. Effective planning, responsive communication, and shared decision making will keep project activities on track and overcome obstacles that arise. SRI and SRC's team is flexible and responsive, and will work with VDOE and the VPI+ implementation team on all aspects of the evaluation.

***Project Leadership, Organizational Structure, and Staffing***

SRI and SRC have assembled a team of highly-qualified staff with clear roles and responsibilities. The proposed organizational structure is presented in Exhibit E3. The project leadership team will include the SRI principal investigators (PIs), Drs. Erika Gaylor and Shari Golan, and SRC's evaluation director, Dr. Brodsky. The PIs will oversee and manage the overall project work and will be the Virginia Department of Education's primary contacts. Dr. Golan is the director of one of SRI's research centers, the Center for Education and Human Services in the Education Division, and can ensure that the appropriate institutional resources are dedicated to the project. The PIs will be assisted by senior advisors with deep expertise in pre-K research and evaluation, Dr. Spiker from SRI and Dr. Agnamba from SRC, in reviewing the evaluation design and implementation, as well as the reports and other dissemination products. Two project coordinators, Drs. Siebert and Thayer, in SRI's Arlington, Virginia, office will serve as primary coordinators for five and six school divisions each to communicate and oversee evaluation activities in those divisions. Their responsibilities will include oversight of day-to-day project management, communicating with school division staff to ensure quality and timeliness of data collection, and participate in research activities (e.g., development of data collections protocols and processes, monitoring data collection completion, collection of some of the data).

Each of the three major evaluations will have its own work team with a lead, with Dr. Golan for the formative evaluation, Dr. Gaylor for the summative evaluation, and Dr. Brodsky for the cost-effectiveness evaluation. Exhibit E3 also shows other staff for each of these work teams. For complex tasks, such as qualitative data planning and analysis and summative impact analyses, the work group leads will provide leadership to manage the evaluation activities, with concentrated focus, supervision of junior staff, and input into overall project plans and schedules. The work team leads will meet regularly and also will collaborate with the senior technical advisors on planning activities, identifying and solving problems that arise, and interpreting results. The evaluation advisory board (to be selected in collaboration with VDOE staff) also will review and provide input to the leadership team and VDOE and the VPI+ implementation team on project plans, activities, implementation challenges, findings, and recommendations.

**Exhibit E3. Proposed Management Structure**



To keep tasks coordinated, the co-PIs, project coordinators, and task leads will hold weekly internal evaluation team meetings. We will hold separate regular meetings for each task team as needed. The project coordinators bring strong project management skills and will assist the PIs to monitor project expenditures (e.g., labor hours, expenses for contracts with the collaborating organizations, expert consultants, and outside vendors) and timelines. One of them will manage the project's SRI wiki site that will be used for sharing materials with SRC staff and others as needed, including minutes and notes from meetings. One of them will assist in development and submission of required progress reports.

The evaluation team will develop detailed workplans to use in monitoring progress with all project activities. We will establish regular check-in calls to discuss progress internally among the evaluation team and will participate in all VPI+ implementation team meetings. Minutes will be taken and distributed to all staff and stored on SRI's wiki site for easy access to all parties involved. Quarterly progress reports with details about evaluation activities and progress made also will be shared with the VPI+ implementation team, and follow-up calls will occur to discuss questions about each report within a week of its submission.

Additional details about how the SRI and SRC staff will work as a team and also partner with the VPI+ implementation team are described in Attachment C.

- 7. Include résumés or curriculum vitae for all key personnel (no more than 4 pages each), and letters of commitment from all proposed subcontractors, consultants, professional staff, and other collaborators who are not currently employed by the Offeror in Tab 6 of your proposal after this attachment.**

Résumés of all key personnel and a letter of commitment from our small business subcontractor are attached in Tab 6.

**ERIKA ELIZABETH GAYLOR**  
**SRI International**

Senior Researcher  
 Center for Education and Human Services, SRI Education

**Specialized Professional Competence**

Research and community-based program evaluations related to early childhood outcomes, including health and school readiness, parenting and family outcomes in the first 8 years, longitudinal studies, outcome evaluations, quantitative and qualitative research methods.

**Representative Research Assignments at SRI (since 2005)**

Principal Investigator, subcontract to University of Minnesota, Evaluation of the Midwest Expansion of the Child-Parent Center (CPC) Education Program (Investing in Innovation [i3] Grant). Conducting a quasi-experimental study of the implementation and impact of this preschool to third grade (Pk-3) model that aims to improve school readiness skills and early school achievement and increase parent education and home support for learning.

Principal Investigator, subcontract to Erikson Institute, Evaluation of the Achieving High Standards for Pre-K–Grade 3 Mathematics: A Whole Teacher Approach to Professional Development (PD) in the Chicago Public Schools (i3 Grant). Conducting a quasi-experimental study that includes a matched comparison group of schools and teachers to determine the impact of teacher participation in the PD program on children’s learning and school readiness outcomes, particularly mathematics skills.

Principal Investigator, Washington State Department of Early Learning. Designing and conducting a process and outcome evaluation of a statewide system of centralized support for evidence-based home visiting programs to examine impacts on professional competencies, model fidelity, and implementation quality.

Project Director, subcontract to Erikson Institute, Statewide Evaluation of the Illinois Early Childhood Block Grant Programs for the Illinois State Board of Education. Designed and implemented a statewide evaluation of the 0–5 programs in Illinois, including birth to age 3 programs and 3–5 Preschool for All programs, encompassing outcomes, program quality, and qualitative data collection, analysis, and reporting.

Project Director, Saint Paul Early Childhood Scholarship Program Evaluation, Minnesota Early Learning Foundation. SRI staff developed and conducted a 4-year process and outcome evaluation of the effectiveness of a market-oriented early childhood scholarship model being implemented in Saint Paul. Responsibilities included evaluating the implementation and outcomes of the 4-year Scholarship Program by managing staff and administrative support, providing technical assistance, conducting site visits and trainings, interviewing directors and providers in ECE programs, conducting data collection and analysis, and writing reports and other publications.

Senior Researcher, Model Demonstration Coordination Center (MDCC) for Early Childhood Language Intervention Project, U.S. Department of Education, Office of Special Education Programs (OSEP). The goal of the MDCC is to help OSEP achieve the mission of “knowledge development, transfer, and use to improve educational results for infants, toddlers, children, and youth with disabilities.” Responsibilities include synthesizing three different projects related to early childhood language interventions, providing on-site assistance to SRI and OSEP staff, providing technical assistance to projects located

**ERIKA E. GAYLOR (continued)****Representative Research Assignments at SRI (concluded)**

throughout the United States, preparing meeting materials, and developing common measures and data collection protocols.

Reviewer, What Works Clearinghouse (WWC). Topics: Data Driven Decision Making (DDDM), Early Childhood Education Interventions for Children with a Disability (ECED), and Interventions for Children Classified as Having an Emotional Disturbance (EBD). WWC was established by the Institute of Education Sciences at the U.S. Department of Education to provide educators, policymakers, researchers, and the public with a central and trusted source of scientific evidence about “what works” in education. Reviewers use a systematic protocol to determine whether studies meet standards for evidence-based research and effectiveness.

Project Director, Pre-Kindergarten Exploratory Allowances Project Evaluation, Minnesota Early Learning Foundation. Funded by the state of Minnesota, the Allowances Project provides \$4,000 allowances to low-income families to increase access to high-quality early childhood education programs and promote school readiness in children. Responsibilities included managing staff and administrative support, providing technical assistance, conducting data collection and analysis, and writing reports and other publications.

Early Childhood Researcher, Building Bright Futures for Omaha’s Youth Initiative. The project focused on strategic planning at the community level by creating an integrated, comprehensive initiative that will improve early care and education in Omaha, Nebraska. The “Making the Most of the Early Years” Initiative is to increase access to high-quality early care and education for children living in low-income families, expanding education and training opportunities for providers, and supporting the implementation of countywide quality improvement efforts to increase quality standards and possible reimbursement rates. Responsibilities included mapping the needs of at-risk youth, addressing the concerns of local stakeholders, creating task forces to implement innovative projects, and developing the community action plan based on local needs, resources, and evidence-based practices.

Consultant, FIRST 5 Santa Clara County, as part of a larger comprehensive evaluation of FIRST 5 services in Santa Clara County. Provided a review of evidence-based, cost-effective programs for children birth to 3 years and recommendations for strategic investment. The review provided guidelines for considering investments across several domains of development (i.e., health, social-emotional, and cognitive development).

Evaluation and Technical Assistance Coach, Statewide Data Collection and Evaluation of First 5 California Funded Programs. First 5 was a statewide evaluation of the implementation and outcomes of the system of services and programs for young children and their families from prenatal to age 5 in all 58 counties in California, aimed at supporting the health, development, and well-being of California’s young children and promoting their school readiness. Responsibilities included conducting site visits and trainings, interviewing funded programs, providing technical assistance, conducting data collection and analysis, and writing reports and other publications. Technical assistance included facilitating meetings, monitoring implementation, documenting coaching strategies, and providing encouragement.

**Academic Background**

Ph.D., human development, 2001, University of California, Davis

M.S., child development, 1999, University of California, Davis

B.S., psychology, 1995, University of Iowa, Iowa City

**ERIKA E. GAYLOR (continued)****Selected Publications**

- Gaylor, E., & Spiker, D. (2012). Home visiting programs and their impact on young children's school readiness. In *Encyclopedia on early childhood development*. Centre on Excellence for Early Childhood. Available at <http://www.excellence-earlychildhood.ca/>
- Tikotzky, L., Chambers, A. S., Kent, J., Gaylor, E., & Manber, R. (2012). Postpartum maternal sleep and mothers' perception of their attachment relationships with the infant among women with a history of depression during pregnancy. *International Journal of Behavioral Development, 36*, 440–448.
- Gaylor, E., Spiker, D., Fleming, J., & Korfmacher, J. (2012, April). *Illinois Preschool For All (PFA) program evaluation*. Chicago, IL: Erikson Institute, Herr Research Center for Children and Social Policy.
- Gaylor, E., Spiker, D., Williamson, C., & Ferguson, K. (2011). *Saint Paul Early Childhood Scholarship evaluation: Final evaluation report – 2008-2011*. Menlo Park, CA: SRI International.
- Burnham, M. M., & Gaylor, E. E. (2011). Sleep environments of young children in post-industrial societies. In M. El-Sheikh (Ed.), *Sleep and development: Familial and socio-cultural considerations*. New York, NY: Oxford University Press.
- Gaylor, E. E., Burnham, M. M., Beebe, D. W., & Wei, X. (2011). Attention and hyperactivity symptoms at kindergarten entry associated with less sleep in preschool [Abstract]. *Sleep, 34* (Abstract Supplement), A276.
- Tikotzky, L., Chambers, A. S., Gaylor, E., & Manber, R. (2010). Maternal sleep and depressive symptoms: Links with infant negative affectivity. *Infant Behavior and Development, 33*, 605–612.
- Gaylor, E. E., Wei, X., & Burnham, M. M. (2010). Associations between nighttime sleep duration and developmental outcomes in a nationally representative sample of preschool-age children [Abstract]. *Sleep, 33* (Abstract Supplement), A17.
- Gaylor, E. E., Burnham, M. M., & Wei, X. (2009). A nationally representative analysis of naps in child care [Abstract]. *Sleep, 32* (Abstract Supplement), A90.
- Gaylor, E., Spiker, D., Ferguson, K., Williamson, C., & Georges, A. (2009). *Pre-Kindergarten Allowances project: Final evaluation report*. Menlo Park, CA: SRI International.
- Burnham, M. M., & Gaylor, E. E. (2008). Behavioral sleep disorders in infants and toddlers. In A. Ivanenko (Ed.), *Sleep and psychiatric disorders in children and adolescents*. New York, NY: Informa Healthcare USA.
- Burnham, M. M., Gaylor, E. E., & Anders, T. F. (2006). Sleep disorders. In J. Luby (Ed.), *Handbook of preschool mental health: A guide for practitioners* (pp. 186–208). New York, NY: Guilford Press.
- Gaylor, E. E., Burnham, M. M., Goodlin-Jones, B. L., & Anders, T. F. (2005). A longitudinal follow-up study of young children's sleep patterns using a developmental classification system. *Behavioral Sleep Medicine, 3*(1), 44–61.
- Gaylor, E. E., & Manber, R. (2004). Sleep deprivation during pregnancy and postpartum. In C.A. Kushida (Ed.), *Sleep deprivation*. New York, NY: Marcel Dekker.
- Mao, A., Burnham, M. M., Goodlin-Jones, B. L., Gaylor, E. E., & Anders, T. A. (2004). A comparison of the sleep-wake patterns of cosleeping and solitary-sleeping infants. *Child Psychiatry and Human Development, 35*(2), 95–105.

**ERIKA E. GAYLOR (concluded)****Selected Publications (concluded)**

- Gaylor, E. E., & Huffman, L. C. (2004). *Evaluating the effectiveness of a school-based mental health intervention in decreasing behavioral problems in students with SED*. Palo Alto, CA: Children's Health Council.
- Gaylor, E. E., Marks, A., & Huffman, L. (2004, April). A school-based intervention to reduce disruptive behavior: Gender differences in prevalence and progression of behavior disorders. *Pediatric Research*, Supplement, Abstract No. 475.
- Gaylor, E. E., & Huffman, L. C. (2004). *Evaluating the effectiveness of an eclectic group therapy program in children with social skills deficits*. Palo Alto, CA: Children's Health Council.
- Gaylor, E. E., & Huffman, L. C. (2004). *How satisfied are referring clinicians with an outpatient behavioral health care agency?* Palo Alto, CA: Children's Health Council.
- Casper, R. C., Fleisher, B. E., Lee-Acajas, J. C., Gilles, A., Gaylor, E. E., DeBattista, A., & Hoyme, E. H. (2003). Follow-up of children of depressed mothers exposed or not exposed to antidepressant drugs during pregnancy. *Journal of Pediatrics*, *142*, 402–408.
- Burnham, M. M., Goodlin-Jones, B. L., Gaylor, E. E., & Anders, T. F. (2002). Nighttime sleep-wake patterns and self-soothing from birth to one year of age: A longitudinal intervention study. *Journal of Child Psychology and Psychiatry*, *43*(6), 713–725.
- Burnham, M. M., Goodlin-Jones, B. L., Gaylor, E. E., & Anders, T. F. (2002). The use of sleep aids during the first year of life. *Pediatrics*, *109*(4), 594–601.
- Honomichl, R. D., Goodlin-Jones, B. L., Burnham, M. M., Gaylor, E. E., & Anders, T. F. (2002). Sleep patterns of children with pervasive developmental disorders. *Journal of Autism and Developmental Disorders*, *32*(6), 553–561.
- Gaylor, E. E., Goodlin-Jones, B. L., & Anders, T. F. (2001). Classification of young children's sleep problems: A pilot study. *Journal of the American Academy of Child and Adolescent Psychiatry*, *40*, 61–67.
- Goodlin-Jones, B. L., Burnham, M. M., Gaylor, E. E., & Anders, T. F. (2001). Night waking, self-soothing, and sleep-wake organization in the first year of life. *Journal of Developmental and Behavioral Pediatrics*, *22*(4), 226–233.
- Gaylor, E. E., Goodlin-Jones, B. L., & Anders, T. F. (2000). Predicting and classifying sleep disorders in toddlers, *Sleep*, *23* (Suppl. 2), A202.

**Selected Presentations**

- Gaylor, E., Dominguez, X., & Spiker, D. (2014, April). *Implementation fidelity in a multiyear professional development intervention for preschool to third grade teachers: Decisions, decisions, decisions*. Roundtable discussion, AERA, Philadelphia, PA.
- Gaylor, E. (2011, November). *Minnesota School Readiness Connections (SRC) pilot project. symposium presentation*. STAM/CCPRC, Bethesda, MD.
- Golan, S., & Gaylor, E. (2008, May). *School readiness: Measurement trends and issues*. Paper presented at the National Smart Start Conference, Greensboro, NC.

**Editorial Experience**

- 2012–Present Ad hoc reviewer for *Early Childhood Research Quarterly* and *Behavioral Sleep Medicine*
- 2011–Present Ad hoc reviewer for *Head Start Research Conference* and *Pediatrics*

**SHARI GOLAN**  
**SRI International**

Director

Center for Education and Human Services, SRI Education

**Specialized Professional Competence**

Program assessment, evaluation design, data collection, and analysis of early childhood, family, and community initiatives and programs through direct assessments, survey methodology, randomized controlled trials, and qualitative research methods; policy implementation analysis, integration of multimethod research approaches, and evaluation technical assistance.

**Representative Research Assignments at SRI (since 1992)**

- Principal Investigator, Case Studies of the Implementation and Use of Kindergarten Entry Assessments by States, for the U.S. Department of Education, Policy and Program Studies Service, with guidance from the Department of Health and Human Services (DHHS) to inform federal technical assistance efforts and inform state policymakers and the field.
- Co-Principal Investigator, evaluation of the McKnight Foundation's Education & Learning PreK-3 initiative. Co-directing an impact study on student early literacy skills and a formative evaluation to support program improvement and replication.
- Co-Principal Investigator, evaluation of the Florida Master Teacher Initiative, an Investing in Innovation (i3) Fund development grant. Co-directing a randomized controlled trial to determine the initiative's impact on preschool through third grade teachers and their students.
- Technical Assistance Leader, evaluation of the California Mental Health Services Authority Prevention and Early Intervention Initiative. Providing county and program staff with evaluation technical assistance for program improvement and accountability.
- Principal Investigator, evaluation of the Santa Clara County Family Wellness Court for Infants and Toddlers. Conducted an outcome evaluation of a 5-year federal grant from the Administration on Children, Youth and Families (DHHS) to improve the permanency outcomes for children affected by substance abuse through coordinated services.
- Co-Principal Investigator, evaluation of GreatSchools' College Bound. Conducted a formative evaluation and random controlled trial of this online parent education program.
- Co-Principal Investigator, evaluation design of New Schools Project (NSP), an Erikson Institute PreK-3 professional development model to help principals and teachers incorporate effective and developmentally appropriate practices in their classrooms.
- Co-Principal Investigator, grant from the Administration for Children and Families, Office of Planning, Research and Evaluation (DHHS), to conduct secondary analysis of the Early Childhood Longitudinal Study-Birth Cohort regarding children's transition to kindergarten.
- Co-Principal Investigator, evaluation of Ready Schools Florida. Conducted a 3-year evaluation of Ready Schools Florida, a comprehensive early learning system change effort. Collected qualitative data on implementation and systems change efforts and tracked desired child learning and developmental outcomes using community indicators.
- Senior Researcher, Summative Evaluation of the Ready To Learn (RTL) Initiative. Assisted in the design and implementation of a study of the effectiveness of the RTL intervention (television, web programming, and curricula) on improving children's literacy skills.

**SHARI GOLAN (continued)****Representative Research Assignments at SRI (concluded)**

Co-Principal Investigator, Washington State Department of Early Learning (DEL) Kindergarten Assessment Process. Provided recommendations to the Washington State legislature regarding policies for a statewide kindergarten assessment process based on a literature review, online surveys, and focus groups with various stakeholder groups.

Co-Principal Investigator, Washington State Department of Early Learning Parent Needs Assessment. Designed and conducted a statewide survey of parents of children ages 0–5 and a set of eight special-population focus groups that informed state early learning programs and policies for families in Washington State.

Co-Principal Investigator, Statewide Data Collection and Evaluation of First 5 California Funded Programs. Collaboratively developed a research design with the State Commission and the 58 County Commissions. Oversaw technical assistance, data collection, data analysis, data system development, training, analysis, and report writing, including annual reports to the California Legislature and Governor and policy briefs and technical reports.

Principal Investigator, special data sample collected as part of the National Survey of America's Families (NSAF) focused on families with children from birth to 5 years of age.

Principal Investigator, Evaluation of the Parent Institute for Quality Education (PIQE), with support from the Stuart Foundation. Led the design and implementation of a 3-year study on training new immigrant parents to better support their children's academic, social, and emotional growth at home and through school involvement.

Principal Investigator, Parenting Adolescents Cross-Site Study, for the Substance Abuse and Mental Health Services Administration (SAMHSA). Led the design and implementation of a randomized-design national research study on teenage mothers who were eligible for welfare. Created a shared research design with representatives from 10 sites and SAMHSA. Analyzed cross-site data and prepared reports.

Project Director, Teenage Pregnancy Prevention Grant Program for the California Department of Education. Developed statewide evaluation guidelines, designed data collection forms, and provided technical assistance to grantees.

Project Manager, Healthy Start, a 3-year evaluation of California's comprehensive, integrated, school-linked services initiative. Assisted the California Department of Education in producing a guidebook on evaluation for Healthy Start grantees to support continued data collection.

**Other Professional Experience**

Postgraduate Research Associate, Center for the Study of Evaluation/Center for Research on Evaluation, Standards, and Student Testing, University of California, Los Angeles (1987–92).

**Academic Background**

Ph.D., education, 1992, University of California, Los Angeles

M.A., education (honors), 1988, University of California, Los Angeles

B.A., psychology (highest honors), 1986, University of California, Berkeley

**SHARI GOLAN (continued)****Selected Publications**

- Collins, R., Cerully, R., Wong, E., Golan, S., Yu, J., & Filip-Crawford, G. (2014). *Evaluating the California Mental Health Services Authority's Stigma and Discrimination Reduction Initiative: Year 1 findings*. Prepared for the California Mental Health Services Authority. Menlo Park, CA: SRI International.
- Golan, S., Wechsler, M., Cassidy, L., Arshan, C., Chen, W., Sands, J., Schmidt, R., & Williamson, C. (2013). *The McKnight Foundation Education and Learning Program PreK-Third Grade Literacy Alignment: Formative findings*. Prepared for The McKnight Foundation. Menlo Park, CA: SRI International.
- Golan, S., Wechsler, M., Cassidy, L., Chen, W., Wahlstrom, K., & Kundin, D. (2014). *Evaluation of The McKnight Foundation Education and Learning Program: Interim report*. Prepared for The McKnight Foundation. Menlo Park, CA: SRI International.
- Golan, S., Warner, M., Wechsler, M., Park, C., & Campbell, A. (2013). *Evaluation of the Florida Master Teacher Initiative: Second formative report*. Prepared for the Miami-Dade County Public Schools. Menlo Park, CA: SRI International.
- RAND Corporation & SRI International. (2013). *Evaluation of the California Mental Health Services Authority's Prevention and Early Intervention Initiatives: Progress and preliminary findings*. Prepared for the California Mental Health Services Authority. Los Angeles & Menlo Park, CA: Authors.
- Golan, S., Rouspil, K., Huang, T., & Williamson, C. (2012). *Evaluation of the Family Wellness Court for Infants and Toddlers: Year 5 annual report*. Prepared for Santa Clara County Social Services Agency. Menlo Park, CA: SRI International.
- Golan, S., Wechsler, M., Petersen, D., Mitchell, N., Park, C. J., & Snow, M. (2011). *Ready Schools Miami: A systems change effort to improve children's outcomes*. Prepared for Early Childhood Initiative Foundation and University of Florida Lastinger Center. Menlo Park, CA: SRI International.
- Golan, S., Spiker, D., Petersen, D., Mercier, E., Snow, M., & Williamson, C. (2008). *Parent voices: A statewide look. Washington State Department of Early Learning Parent Needs Assessment: Phone survey report*. Prepared for Washington State Department of Early Learning. Menlo Park, CA: SRI International.
- SRI International. (2007). *Annual report fiscal year 2005-06*. Prepared for the California Children and Families Commission (First 5 California). Menlo Park, CA: Author.
- Golan, S., Spiker, D., & Sumi, C. (2005). *Family support services promote school readiness*. Family Involvement Network of Educators (FINE). Harvard Family Research Project. Retrieved from <http://www.gse.harvard.edu/hfrp/projects/fine/resources/digest/support.html>
- Gomby, D., Spiker, D., Golan, S., Zercher, C., Daniels, M., & Quirk, K. (2005). *Case studies of the First 5 School Readiness Initiative: Promising programs and practices. A focus on early literacy*. Menlo Park, CA: SRI International.
- SRI International & Child Trends. (2004). *Dictionary of statewide indicators*. Menlo Park, CA, & Washington, DC: Authors .
- Golan, S., & Petersen, D. (2002). *Promoting involvement of recent immigrant families in their children's education*. Family Involvement Network of Educators (FINE). Harvard Family Research Project. Retrieved from <http://www.gse.harvard.edu/hfrp/projects/fine/resources/research/golan.html>

## SHARI GOLAN (concluded)

### Selected Publications (concluded)

- SRI International & Child Trends. (2002). *Child, family, & community indicators*. Prepared for the California Children and Families Commission. Menlo Park, CA, & Washington, DC: Authors.
- Golan, S., & Brown, S. (1996). *Healthy Start evaluation guidebook*. Prepared for the California Department of Education. Menlo Park, CA: SRI International.
- Shaver, D., Golan, S., & Wagner, M. (1996). Connecting schools and communities through interagency collaboration for school-linked services. In J. G. Cibulka & W. J. Kritek (Eds.), *Coordination among schools, families, and communities: Prospects for educational reform*. New York, NY: SUNY Press.
- Golan, S., Shaver, D., Wagner, M., Wechsler, M., & Williamson, C. (1996). *From principles to action: Local implementation of California's Healthy Start school-linked services initiative*. Prepared for the Foundation Consortium for School-Linked Services. Menlo Park, CA: SRI International.
- Wagner, M., Newman, L., & Golan, S. (1996). *California's Healthy Start school-linked services initiative: Results for children and families*. Prepared for the Foundation Consortium for School-Linked Services. Menlo Park, CA: SRI International.

### Selected Presentations

- Golan, S. (2014, April). *Measuring implementation fidelity: Decoding a multifaceted early childhood initiative*. Paper presented at the annual conference of the American Educational Research Association, Philadelphia, PA.
- Smith, S., Smith-Bonahue, T., Wechsler, M., & Golan, S. (2013, November). *Innovative, systemic professional development: Working together to improve quality in a diverse urban school district*. Poster presented at the National Association for the Education of Young Children (NAEYC) Annual Conference & Expo, Washington, DC.
- Golan, S., & Spiker, D. (2011, March). *Supporting successful transition to kindergarten for children in poverty*. Poster presented at Biennial Meeting of the Society for Research in Child Development, Montreal, Quebec, Canada.
- Golan, S., Petersen, D., & Spiker, D. (2010, May). *Planning for a statewide kindergarten assessment process: Priorities of diverse stakeholders and current assessment processes*. Paper presented at the annual conference of the American Educational Research Association, Denver, CO.
- Golan, S., Spiker, D., Payne, A., & King, J. (2009, April). *Communicating effectively with parents: Implications from a statewide survey of parents with young children*. Poster presented at Biennial Meeting of the Society for Research in Child Development, Denver, CO.
- Golan, S., & Gaylor, E. (2008, May). *School readiness: Measurement trends and issues*. Paper presented at the National Smart Start Conference, Greensboro, NC.
- Golan, S. (2008, May). *Early childhood systems change efforts: Evaluation issues and methods*. Paper presented at the National Smart Start Conference, Greensboro, NC.
- Golan, S. (2006, April). *School readiness of children entering kindergarten in California high-priority schools*. Paper presented at the annual conference of the American Educational Research Association, San Francisco, CA.

**MEGAN E. SIEBERT****SRI International**

Early Childhood Researcher

Center for Education and Human Services, SRI Education

**Specialized Professional Competence**

Proficiency in SPSS, specifically Structural Equation modeling, Latent Growth Curve Modeling & Hierarchical Linear Regression. CLASS certified. Additional proficiency in Excel and PowerPoint, Quickbase, Googledocs, and SPSS.

**Research Assignments at SRI (since 2014)**

Early Childhood Researcher, Enhanced Assessment Grant (EAG), under subcontract to North Carolina Department of Public Instruction (NCDPI), funded by the U.S. Department of Education (2013–2017). In collaboration with a consortium of 10 states, enhancing the NC K-3 Formative Assessment. Development and enhancement occurs through Evidence Centered Design (ECD) and pilot studies. Provide early childhood development and assessment expertise for enhancement of learning constructs undergoing ECD. Leading cognitive lab planning and training for four states. Co-leading development of pilot and field test plans. Leading pilot and field test activities for two of five states.

Interviewer, Evaluation of the McKnight Foundation Education and Learning Program, with center of Applied Research and Education Improvement at the University of Minnesota. As part of multi-year evaluation, conducted case study interviews as part of formative evaluation data collection. Interviewed district-level and school-level staff to obtain a broad range of information related to participation in the Education and Learning Program.

Technical Assistance Specialist, the Center for IDEA Early Childhood Data Systems (DaSy), funded by the Office of Special Education (2012–17). Provide a variety of TA services, including TA for state clients around their State Systemic Improvement Plans (SSIP).

**Professional Experience**

Early Childhood Education Division, Assessment & Analysis Manager, District of Columbia Public Schools. Managed research and evaluation projects occurring in early childhood classrooms. Analyzed and helped disseminate information and data about early childhood programs serving low-income students. Worked with teachers and school leaders on the implementation of a comprehensive child assessment system. (2010–2014)

Foundations of Learning Project Research Consultant, MDRC, Social Policy Research Organization. Led a team of coders in conducting observations in preschool classrooms in Newark, NJ using the CLASS coding measure and organized coder training sessions and materials for the project. (2006–2009)

Policy Intern, Children's Defense Fund-New York. Led a community stakeholder survey project in regards to barriers to enrollment in public health insurance. Researched and presented best practices for the coordination of multiple public benefits programs. (2008–2009)

Adjunct Lecturer, City University of New York & National Center for Research on Early Childhood Education. Implemented a professional development course for 30 preschool teachers in NYC with a focus on effective teaching practices, improvement of classroom quality and the enrichment of teacher-student relationships. (April–July 2008)

Freelance Researcher, Sesame Street Workshop. Examined preschoolers' Sesame Street viewing preferences and knowledge gains by conducting pre- and post- episode interviews in childcare centers throughout NY and NJ. (2006–2008)

Research Assistant, 4R's Research Project. Conducted classroom observations in elementary schools throughout New York City using the CLASS coding system. Observations involved assessing classroom climate, teacher-student interaction and instructional skills. (2005–2006)

### **Academic Background**

Ph.D., applied developmental psychology, 2010, Fordham University, Bronx, NY

M.A., applied developmental psychology, 2007, Fordham University, Bronx, NY

B.S., psychology & sociology, 2005, Virginia Polytechnic Institute, Blacksburg, VA

**SARA KALB THAYER**  
**SRI International**

Research Social Scientist  
Center for Education and Human Services, SRI Education

**Specialized Professional Competence**

Social-emotional, early childhood, assessment, educational, mathematics, literacy, disability, and policy research, including the design, implementation, and analysis of multiyear research and evaluation projects. Use of SPSS to analyze quantitative, continuous, categorical, cross-sectional, longitudinal, and person-centered data. Literature review and synthesis.

**Representative Research Assignments at SRI (since 2008)**

- Research Analyst, Enhanced Assessment Grant (EAG), under subcontract to North Carolina Department of Public Instruction (NCDPI), funded by the U.S. Department of Education (2014–18). In collaboration with a consortium of 10 states, enhancing the NC K-3 Formative Assessment. Development and enhancement occurs through Evidence Centered Design (ECD) and pilot studies. Provide early childhood and social-emotional expertise for enhancement of social-emotional constructs undergoing ECD. Co-leading development of pilot and field test plans. Leading pilot and field test activities for one of five states.
- Technical Assistance Specialist, the Center for IDEA Early Childhood Data Systems (DaSy), funded by the Office of Special Education (2012–17). Provide a variety of TA services, including TA for individual state clients. Development and dissemination of TA products for state early intervention and early childhood special education programs supported through the Individuals with Disabilities Education Act (IDEA). Lead a workgroup to assist State Part C and 619 coordinators/programs to address data confidentiality, data sharing, and data privacy questions and issues as they build and use early childhood data systems. Work with programmers to build an internal TA tracking database to monitor and support the evaluation of TA services such as products, webinars, conferences, topical meetings, and consultations.
- Research Analyst, for Case Studies of the Implementation and Use of Kindergarten Entry Assessments by states for the Policy and Program Studies Service, U.S. Department of Education, with guidance from the Department of Health and Human Services (HHS) (2013–16) to inform federal technical assistance efforts, state policymakers, and the field. Conduct interviews with state, district, and school staff in one state to understand the development of their kindergarten entry assessment (KEA). Synthesize information for a state report to Department of Education, and additional synthesis for a public report.
- Technical Assistance Specialist, Adaptive Learning Market Acceleration Program (ALMAP), funded by Gates Foundation (2013–15). Provided TA services for three higher education institutions participating in experimental study of implementing adaptive technology in developmental college courses. Specifically, provides assistance on the study design and evaluation.
- Research Analyst, Impact Evaluation of Response to Intervention Strategies (RtI), funded by the U.S. Department of Education (2008–14). Study evaluated differential impact of RtI on special education outcomes and provides descriptive analyses of teacher, interventionist, and school reading and interventionist practices. Conduct analysis of state and local district and school practices in the implementation of RtI.

**SARA KALB THAYER (continued)****Representative Research Assignments at SRI (concluded)**

Research Analyst, Learning Progressions: Developing an Embedded Formative and Summative Assessment System to Assess and Improve Learning Outcomes for Elementary and Middle School Students with Learning Disabilities in Mathematics (2010–15). Coordinate and collect quantitative and qualitative data, code and prepare data for analysis, item development. Prepare documents for client.

Reviewer, under subcontract to Mathematica Policy Research (MPR) for the What Works Clearinghouse (2009–13). Reviewed rigor of published research according to the standards set forth by the Department of Education's Institute of Education Sciences. Certified reviewer for experimental and single case design research. Conducted reviews for multiple topic areas, including Autism, Early Childhood Education, Early Childhood Education Interventions for Children with a Disability, Intellectual Disabilities, Learning Disabilities, Teacher Compensation. Prepared intervention report for Direct Instruction and Self-Instruction, and single study review for Linguistic Modification and Vocabulary Development. Certified under 2.0 and 3.0 standards.

Research Manager, Striving Readers FUSION Reading Program, under subcontract to the Michigan State Department of Education and in collaboration with the Kansas University (2009–12). Evaluated the effects of the FUSION Reading Program on student reading achievement and motivation in a randomized control trial study. Collaborated

Research Analyst, Study of Early Intervention Service Intensity in Texas (2010). Study evaluated decline in the intensity of services provided. Conducted interviews with service providers and coded data for analysis.

Research Analyst, Research in Disabilities Education Program Evaluation, National Science Foundation (2009). Study evaluated the program's progress in meeting legislative goals. Evaluated and reported qualitative information on participation and performance trends of students with disabilities under two models.

Research Analyst, National Study on Alternate Assessments, funded by the U.S. Department of Education (2009). Study evaluated special education teacher practices and quality in three states. Evaluated and reported on qualitative findings.

Research Analyst, Evaluation of Evidence-Based Practices in Online Learning, funded by the U.S. Department of Education's Office of Educational Technology (2009). Study identified student outcomes associated with online learning. Conducted qualitative data collection during site visits and coded, analyzed and synthesized data for reports.

**Other Professional Experience**

Research Assistant, Assessment of Social-Emotional Skills for School Readiness study, funded by National Institutes of Health, National Institute of Child Health (2005–08). Following two cohorts of children ages 3 through kindergarten, collected and analyzed data for a longitudinal study designed to develop a competency-based assessment for social-emotional skills for preschool children. Collected individual child data on child's affective style and classroom behavior using the Minnesota Preschool Affect Checklist (MPAC), children's emotion knowledge using an Affective Knowledge Test (AKT), children's attention and self-regulation using the Preschool Self Regulation Assessment (PSRA), children's social

**SARA KALB THAYER (continued)****Other Professional Experience (continued)**

information processing The Challenging Situation Task (CST), and children's social competence and Behavioral Evaluation (SCBE-30). Conducted analysis of the continuous and categorical data in SPSS. Collected qualitative data using focus group methodology. Analyzed and reported on qualitative findings. Each year, contributed to the development of the revised MPAC (MPAC-R) through factor analyses and refinement of categories and definitions.

Research Assistant, Children's Emotional Competence: Pathway to Mental Health, funded by William T. Grant Foundation (2004–07). Conducted research for a longitudinal study determining aspects of preschooler's emotional competencies that should be promoted to generate academic, social, and psychological well-being in adolescence. Collected individual data on early adolescents' emotional understanding using the Kusche Affective Interview (KAI-R), children's ability to work constructively with peers and families using games and planning tasks, and children's ability to regulate emotions using an experimental Gift-in-a-Bag paradigm. Coded family and child interactions during laboratory activities using The Observer software. Conducted and analyzed reliability tests of interrater reliability. Analyzed and reported on findings.

Research Assistant, The Emergence and Developmental Course of Forgiveness in Affect, Cognition, and Behavior, funded by the John Templeton Foundation (2003–05). Followed second-, fourth-, and sixth-grade children and their families over 2 years in a longitudinal study examining children and parents' forgiveness patterns, and individual, family, and peer influences on forgiveness. Collected individual data on children's forgiveness using survey and interview methodology, children's attachment using the Family Drawing (FD) procedure, children's affective and cognitive empathy using video stimuli and interview methodology, and children's actual forgiveness practices using semistructured interviews. Coded, analyzed, and reported children's empathy abilities. Developed and used coding scheme to analyze children's reasoning about forgiveness in hypothetical transgression situations with peers. Analyzed and reported data on temperamental and familial contributors to forgiveness.

Research Assistant, Responsive Classroom Efficacy Study, funded by the U.S. Department of Education (2008). Collected data on teacher's strategies for promoting positive social interactions during mathematics instruction and morning transition times for third- and fourth-grade children. Using a structured observation protocol, collected data of student-teacher interactions in 20 elementary schools.

Academic Instructor and Advisor, George Mason University, Department of Psychology (2003–06). Instructor (2005–06): Prepared and delivered course lectures, assignments, and examinations for undergraduate Child Psychology course for two semesters. Undergraduate Academic Advisor (2003–06): Assisted undergraduate students with course planning, academic issues, and preparation for post-undergraduate work and schooling.

Lead Teacher and Assistant, Nisonger Early Childhood Education Center (2000–02). Planned and implemented activities for infants, toddlers, and preschool children with developmental delays. Worked with service professionals to help children meet federally mandated goals.

**SARA KALB THAYER (concluded)****Other Professional Experience (continued)**

Research Assistant, Ohio State University, Department of Psychology (1999–2002). Collected individual data for a treatment-outcome study using computer-based interventions for aggressive elementary school children. Collected individual data on undergraduate students' susceptibility to priming and nonconscious mimicry through an experimental, laboratory-based task. Maintained technical equipment and managed data.

**Academic Background**

Ph.D., psychology, December 2012, George Mason University

B.A., psychology, 2002, Ohio State University

**Selected Publications**

Jenkins, J. R., Schiller, E., Blackorby, J., Thayer, S. K., & Tilly, W. D. (2013). Responsiveness to Intervention in Reading: Architecture and practices. *Learning Disability Quarterly*, 36(1) 36-46.

Denham, S. A., Bassett, H. H., Thayer, S. K., Mincic, M. S., Sirotkin, Y. S., Zinsser, K. (2012). Observing preschoolers; social-emotional behavior: structure, foundations, and prediction of early school success. *Journal of Genetic Psychology*, 173(3), 246-278.

Denham, S. A., Way, E., Kalb, S. C., Warren-Khot, H. K., & Bassett, H. H. (2013). Preschoolers' social information processing and early school success: the challenging situations task. *British Journal of Developmental Psychology*, 31(2), 180-197.

Cameto, R., Bergland, F., Knokey, A.-M., Nagle, K. M., Sanford, C., Kalb, S. C., Blackorby, J., Sinclair, B., Riley, D.L., & Ortega, M. (2010). *Teacher perspectives of school-level implementation of alternate assessments for students with significant cognitive disabilities. A report from the National Study on Alternate Assessments (NCSER 2010-3007)*. Menlo Park, CA: SRI International.

**XIN WEI**  
**SRI International**

SRI Position: Senior Research Analyst  
Center for Education and Human Services, Education Division

**Specialized Professional Competence**

Experimental and quasi-experimental research design, statistical modeling, psychometrics theory and application, program evaluation, educational policy analysis.

**Representative Research Assignments at SRI (since 2008)**

- Co-principal investigator, Predictors of Success in Postsecondary STEM Education and Employment for Students with Autism, funded by National Science Foundation, 2012-15. Design and direct analysis of quasi-experimental studies of the effect of interventions on improving academic and employment outcomes for students with autism in STEM fields.
- Co-principal investigator, Factors Associated with Positive Outcomes for Children and Youth with Autism: Secondary Analysis of Data from SEELS and NLTS2, funded by Institute of Education Sciences, 2012-15. Design and direct analysis of quasi-experimental studies of the effect of interventions on improving academic, social, and employment outcomes for students with autism.
- Lead analyst, Chicago Child-Parent Centers (CPC), funded by the U.S. Department of Education Investing in Innovation fund (i3), 2012-16. Design and direct analysis to evaluate the effect of CPC on child outcomes.
- Lead analyst, Early Math project, funded by the U.S. Department of Education Investing in Innovation fund (i3), 2012-16. Design and direct analysis to evaluate the effect of early math intervention on child outcomes.
- Lead analyst, Collaborative Strategic Reading Colorado (CSR-CO), funded by U.S. Department of Education i3, 2011-14. Designed and directed analysis of a randomized controlled trial of the effect of CSR on student and teacher outcomes.
- Lead analyst, Study of the Rio Grande Valley Center for Teaching and Leading Excellence, funded by U.S. Department of Education i3, 2011-14. Designed and directed analysis of a randomized controlled trial of the effect of the new teacher training program and teacher leadership program on student and teacher outcomes.
- Director of analysis, Striving Readers Project, funded by U.S. Department of Education, 2009-11. Designed and directed analysis of a randomized controlled trial of the effect of the FUSION Reading Program in improving struggling adolescent readers' academic achievement.
- Lead analyst, Salivary Biomarkers Project, funded by National Institute on Drug Abuse, 2009-12. Conducted genome-wide gene expression analysis of the salivary transcriptome. Conducted statistical analysis of real-time PCR data, false discovery rate analysis, and sequence analysis.
- Director of analysis, Intel Reader Project, funded by Intel Corporation, 2010. Designed and analyzed a randomized controlled trial of the effect of Intel Reader on improving academic performance of adolescents with learning disabilities.
- Reviewer, What Works Clearinghouse (under subcontract to Mathematica Policy Research), funded by the Institute of Education Sciences, 2008-12. Reviewed studies on the topics of adolescent literacy, autism, behavior practice guide, interventions for children classified as having an emotional disturbance, learning disabilities, science, and high school math.

**XIN WEI (continued)****Representative Research Assignments at SRI (concluded)**

Lead analyst, secondary analysis of Special Education Elementary Longitudinal Study (SEELS), 2008-12. Applied hierarchical linear modeling (HLM) to compare the reading and math growth trajectories of students in federal disability categories and explored the student, classroom, and school factors contributing to reading and math growth.

Lead analyst, secondary analysis of Early Childhood Longitudinal Study-Birth Cohort (ECLS-B) and Early Childhood Longitudinal Study-Kindergarten Class of 1998-99 (ECLS-K), 2008-12. Use both data sets to explore relationships between sleep behavior and child academic, social, and behavioral outcomes.

Research analyst, evaluation of the Texas High School Project (THSP), funded by Texas Education Agency, 2009. Applied propensity score matching to select comparison schools and used HLM to compare long-term student outcomes between THSP and comparable non-THSP schools.

**Previous Professional Experience**

Statistician and psychometrician, Empirical Education, Palo Alto, California. Designed cluster randomized experiments and quasi-experiments for education program evaluation; designed language tests and conducted test equating; analyzed data using SAS and hierarchical linear modeling; wrote literature reviews, research reports, and conference papers; and gave presentations at American Educational Research Association and Institute of Education Sciences conferences.

Statistical consultant, Social Science Data Service, Stanford University, Stanford, California. Gave workshops and consulted on the use of quantitative and qualitative statistical software and wrote documents on how to use statistical software.

Statistical consultant, Department of Statistics, Stanford University. Consulted on statistical procedures and model building.

Psychometrician intern, Educational Testing Service, Princeton, New Jersey. Developed methods to perform essay scaling/equating, analyzed data by using SAS and GENASYS, and wrote Educational Testing Service reports and conference papers.

Psychometrician intern, Center for Assessment, Dover, New Hampshire. Analyzed student longitudinal data using SAS and HLM; developed statistical methods to evaluate the inconsistency among accountability models (status model, value table, value-added models, and conditional growth percentile); helped write an *R* function to calculate conditional growth percentiles.

**Academic Background**

Ph.D., educational psychology – measurement and statistics, 2008, Stanford University

M.A., statistics, 2006, Stanford University

M.S., human development and family studies, 2004, University of Wisconsin-Madison

B.A., child development, 2000, Nanjing Normal University, China

**Peer-Reviewed Journal Articles**

Wei, X., Wagner, M., Hudson, L., Yu, J. W., & Javitz, H. (2015). The effect of transition planning participation and goal-setting on college enrollment among youth with autism spectrum disorders. *Remedial and Special Education*. doi: 10.1177/0741932515581495

**XIN WEI (continued)****Peer-Reviewed Journal Articles (concluded)**

- Wei, X., Yu, J. W., Shattuck, P., & Blackorby, J. (2015). High school math and science preparation and postsecondary STEM participation for students with an autism spectrum disorder. *Focus on Autism and Other Developmental Disorders*. doi: 10.1177/1088357615588489
- Wei, X., Wagner, M., Hudson, L., Yu, J. W., & Shattuck, P. (2014). Transition to adulthood: Employment, education, and disconnection in individuals with autism spectrum disorders. *Emerging Adulthood*. doi: 10.1177/2167696814534417
- Wei, X., Christiano, E., Yu, J., Wagner, M., & Spiker, D. (2014). Reading and math achievement profiles and longitudinal growth trajectories of children with an autism spectrum disorder. *Autism*. doi: 10.1177/1362361313516549
- Shattuck, P. T., Steinberg, J., Yu, J., Wei, X., Cooper, B. P., Newman, L., & Roux, A. M. (2014). Disability identification and self-efficacy among college students on the autism spectrum. *Autism Research and Treatment*. doi:10.1155/2014/924182
- Wei, X., Patel, D., & Young, V. (2014). Opening the “black box”: Organizational differences between charter schools and traditional public schools. *Education Policy Analysis Archives*, 22(3). Retrieved from: <http://epaa.asu.edu/ojs/article/view/1286>
- Wei, X., Yu, J., & Shaver, D. (2013). Longitudinal effects of ADHD in children with learning disabilities or emotional disturbances. *Exceptional Children*, 80(2), 205-219.
- Wei, X., Christiano, E., Yu, J., Blackorby, J., Shattuck, P., & Newman, L. (2013). Postsecondary pathways and persistence for STEM versus non-STEM majors among college students with an autism spectrum disorder. *Journal of Autism and Developmental Disorders*. doi: 10.1007/s10803-013-1978-5
- Wei, X., Wagner, M., Christiano, E., Shattuck, P., & Yu, J. W. (2013). Special education services received by students with autism spectrum disorders from preschool through high school. *Journal of Special Education*. doi: 10.1177/0022466913483576
- Wei, X., Lenz, K., & Blackorby, J. (2013). Math growth trajectories of students with disabilities: Disability category, gender, racial and SES differences. *Remedial and Special Education*. Published online 16 July 2012. doi:10.1177/0741932512448253
- Wei, X., Yu, J., Shattuck, P., McCracken, M., & Blackorby, J. (2012). Science, technology, engineering, and mathematics (STEM) participation among college students with an autism spectrum disorder. *Journal of Autism and Developmental Disorders*. doi: 10.1007/s10803-012-1700-z
- Bergen, A. W., Mallick, A., Nishita, D., Wei, X., Michel, M., Wacholder, A., David, S. P., Swan, G. E., Reid, M. W., Simons, A., & Andrew, J. A. (2012). Chronic psychosocial stressors and salivary biomarkers in emerging adults. *Psychoneuroendocrinology*, 37(8), 1158-1170.
- Wei, X. (2012). Does NCLB improve the achievement of students with disabilities? A regression discontinuity design. *Journal of Research on Educational Effectiveness*, 5(1), 18-42. doi: 10.1080/19345747.2011.604900
- Wei, X., Blackorby, J., & Schiller, E. (2011). Growth in reading achievement in a national sample of students with disabilities ages 7 to 17. *Exceptional Children*, 78(1), 89-106.
- Wei, X., & Haertel, E. (2011). The effect of ignoring classroom-level variance in estimating the generalizability of school mean scores. *Educational Measurement: Issues and Practice*, 30(1), 13-22. doi: 10.1111/j.1745-3992.2010.00196.x

**XIN WEI (concluded)****Peer-Reviewed Journal Articles (concluded)**

- Wei, X., & Marder, C. (2011). Self-concept development of students with disabilities: Disability category, gender, and racial differences from elementary to high school. *Remedial and Special Education*. doi: 10.1177/0741932510394872
- Wei, X., & Yu, J. (2010). The concurrent and longitudinal effects of child disability types and health on family experiences. *Maternal and Child Health Journal*, 16(4). doi: 10.1007/s10995-010-0711-7
- Wei, X. (2010). Are more stringent NCLB state accountability systems associated with better student outcomes? An analysis of NAEP results across states. *Educational Policy*, 25, 1-41. doi: 10.1177/0895904810386588
- Wei, X., Li, Q., & Ding, Y. (1999) (in Chinese). The development of research on mathematics education in the 1990's. *Shandong Education*, 5, 15-16.

**Recent Research Reports**

- Murphy, R., Snow, E., Mislevy, J., Gallagher, L., Krumm, A. E., & Wei, X. (2014). *Blended learning report*. Menlo Park, CA: SRI International.
- Lenz, K., Wei, X., & Blackorby, J. (2011). *Evaluation of the effects of the Intel® Reader on improving the reading performance of adolescents with learning disabilities*. Menlo Park, CA: SRI International.
- Newman, L., Wagner, M., Knokey, A. M., Marder, C., Nagle, K., Shaver, D., Wei, X., Cameto, R., Contreras, E., Ferguson, K., Greene, S., & Schwarting, M. (2011). *The post-high school outcomes of young adults with disabilities up to 8 years after high school. A report from the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International.
- Young, V., Adelman, N., Bier, N., Cassidy, L., House, A., Keating, K., Klopfensten, K., Padilla, C., Wang, H., & Wei, X. (2010). *Evaluation of the Texas High School Project. First comprehensive annual report*. Austin, TX: Texas Education Agency.

**Recent Presentations (after 2012)**

- Yu, J. W., Wagner, M., & Wei, X. (2014, April). *The effects of behavior-based services on social communication among adolescents with autism spectrum disorder*. Paper presented at the American Educational Research Association Annual Meeting, Philadelphia, PA.
- Wei, X., Christiano, E. R. A., Yu, J., Shattuck, P., Blackorby, J., & Spiker, D. (2013, April). *Postsecondary pathways and persistence among college students with autism spectrum disorders*. Paper presented at the Bay Area Autism Consortium, Palo Alto, CA.
- Wei, X., Yu, J., Shattuck, P., & Blackorby, J. (2013, April). *Pipelines to postsecondary science, technology, engineering, and mathematics (STEM) majors for students with an autism spectrum disorder*. Paper presented at the American Educational Research Association Annual Conference, San Francisco, CA.
- Schiller, E., Wei, X., Thayer, S., Blackorby, J., Javitz, H., & Williamson, C. (2012, September). *A randomized controlled trial of the impact of the Fusion Reading intervention on reading achievement and motivation for adolescent struggling readers*. Paper presented at the Society for Research on Educational Effectiveness Conference, Washington, DC.
- Wei, X., & Yu, J. (2012, April). *Students with disabilities in postsecondary educational institutions: Focusing on STEM*. Paper presented at the Council for Exceptional Children Convention, Denver, CO.

**CYNDI WILLIAMSON**  
**SRI International**

Principal Programmer/Analyst  
 Center for Education and Human Services, SRI Education

**Specialized Professional Competence**

SAS programming for database construction, management, and statistical analysis of complex databases; Stata, and Visual Basic programming; database management and documentation; supervision of survey activities, including scannable questionnaire design, interviewing, questionnaire coding, mailing, and follow-up procedures; report generation using SAS, Excel, and Word.

**Representative Research Assignments at SRI (since 1988)**

Programmer, evaluation of the McKnight Foundation's Education & Learning PreK-3 initiative.

Programming for an impact study on student early literacy skills and a formative evaluation to support program improvement and replication. Data collection for longitudinal and cross-sectional analyses of children in multiple districts and schools. Combined data from schools, assessments, and surveys (paper and online).

Programmer, evaluation of the Florida Teacher Master Initiative, an Investing in Innovation (i3)

Fund development grant. Programming for a randomized controlled trial to determine the initiative's impact on preschool through third-grade teachers and their students. Combined data from the district, from surveys, and from classroom observations. Provided programming for cleaning, coding, and creating appropriate analytic subsets.

Lead programmer, ENHANCE: Validating the Child Outcomes Summary Form Process.

Extensive programming for a research project funded by IES designed to investigate the reliability and validity of the COSF process for accountability purposes, which included four validity studies involving data from 8 states and 37 sites. It involved direct child assessments, coding interactions in videos, surveys, and data analysis with large scale state data sets. Cleaned each data from each source; combined child-, provider-, and program-level data; prepared and reviewed descriptive statistics; and worked closely with the project coordinator to conduct multivariate analyses.

Lead programmer, Statewide Data Collection and Evaluation of First 5 California Funded Programs and First 5 School Readiness Initiative. Responsible for collecting, cleaning, and merging annual report data from scannable forms, the web-based data system, and data exports from county commissions. Aggregated data and prepared summaries of funded programs and program participants. Delivered data and documentation on summarized and raw data for individual counties and First 5 California staff. Trained local evaluation and program staff in the use and interpretation of population-based data.

Programmer, evaluation of the Santa Clara County Family Wellness Court for Infants and Toddlers. Supported an outcome evaluation of a 5-year federal grant to improve the permanency outcomes for children affected by methamphetamine or other substance abuse through a coordinated set of services. Responsible for combining data for children and their parents from multiple social service agencies, analyzing data for quarterly and annual reports, and preparing data for upload for use by the federal government.

Programmer, Washington State Department of Early Learning Parent Needs Assessment.

Analyzed data from a statewide survey of parents of children ages 0–5. Data analysis used weighted data and cross-tabulations to capture parents' ideas and preferences about healthy

## **CYNDI WILLIAMSON (continued)**

### **Representative Research Assignments at SRI (concluded)**

family development, early learning of children, and the types of programs, services, information, and supports parents would like to access.

Programming related to secondary analysis of the Head Start Family and Child Experiences Survey (FACES 2000) dataset to identify models predicting outcomes for four subgroups of children: those with health care concerns, disabilities or special needs, high cumulative environmental risk, and dual language learners.

Database management and documentation, statistical analysis programming, and data collection for several nationwide longitudinal studies of samples of handicapped youth, for statewide studies of early learning opportunities and systems, and for countywide studies of early childhood education.

SAS programming for California's comprehensive, integrated, school-linked services initiative, Healthy Start.

### **Other Professional Experience**

Stanford University, Stanford, CA. Programmer (1997–2002).

Technology Assessment Group, San Francisco, CA. Statistical Analyst (1995–97).

Social Policy Research Associates, Menlo Park, CA. Programmer/Analyst (1993–95). SAS programming to support research and evaluation of programs and policies relating to employment assistance, job training, education, and comprehensive social services.

### **Academic Background**

B.S., statistics, 1993, California State University, Hayward

### **Selected Publications**

Barton, L., Spiker, D., & Williamson, C. (2012). Characterizing disability in Head Start programs: Not so clearcut. *Early Childhood Research Quarterly*, 27(4), 596–612.

Golan, S., Rouspil, K., Huang, T., & Williamson, C. (2012). *Evaluation of the Family Wellness Court for Infants and Toddlers: Final report year 5*. Prepared for Santa Clara County Social Service Agency. Menlo Park, CA: SRI International.

Golan, S., Spiker, D., Petersen, D., Mercier, E., Snow, M., & Williamson, C. (2008). *Parent voices: A statewide look. Washington State Department of Early Learning Parent Needs Assessment: Phone survey report*. Prepared for Washington State Department of Early Learning. Menlo Park, CA: SRI International.

SRI International. (2007). *Annual report fiscal year 2005–06*. Prepared for the California Children and Families Commission (First 5 California). Menlo Park, CA: Author.

SRI International. (2006). *Annual report fiscal year 2004–05*. Prepared for the California Children and Families Commission (First 5 California). Menlo Park, CA: Author.

SRI International. (2005). *Annual report fiscal year 2003–04*. Prepared for the California Children and Families Commission (First 5 California). Menlo Park, CA: Author.

McCracken, M., Valdes, K., Williamson, C., & Godard, P. (2004). *Special Education Elementary Longitudinal Study, Wave 2 data documentation and dictionary*. Menlo Park, CA: SRI International.

Valdes, K., Godard, P., & Williamson, C. (2003). *The National Longitudinal Study of Special Education Students-2, Wave 1 data documentation and dictionary*. Menlo Park, CA: SRI International.

**CYNDI WILLIAMSON (concluded)****Selected Publications (concluded)**

- McCracken, M., Valdes, K., Williamson, C., & Godard, P. (2003). *Special Education Elementary Longitudinal Study, Wave 1 data documentation and dictionary*. Menlo Park, CA: SRI International.
- Mathias, S. D., Williamson, C. L., Colwell, H. H., Cisternas, M. G., Pasta, D. J., Stolshek, B. S., et al. (1997). Assessing health-related quality of life and health state preference in persons with obesity: A validation study. *Quality of Life Research*, 6(4), 311–322.
- Valdes, K., Williamson, C., & Wagner, M. (1990). *The National Longitudinal Transition Study of Special Education Students statistical almanac, Vols. 1–10*. Menlo Park, CA: SRI International.

**Selected Presentations**

- Schiller, E., Wei, X., Thayer, S., Blackorby, J., Javitz, H., & Williamson, C. (2012, September). *A randomized controlled trial of the impact of the Fusion Reading intervention on reading achievement and motivation for adolescent struggling readers*. Paper presented at the Society for Research on Educational Effectiveness Conference, Washington, DC.
- Barton, L., Spiker, D., Williamson, C., & Fabrikant, N. (2011, April). *A national picture of the high-risk subgroups of children in Head Start using the FACES 2000 data*. Poster presented at the Meeting of the Society for Research in Child Development, Montreal, Canada.
- Williamson, C. L. (2007, October). *Producing an automated data dictionary as an RTF file (or a topic to bring up at a party if you want to be left alone)*. Presented at the Western Users of SAS Software Regional User's Group Conference, San Francisco, CA.
- McNeill, J., & Williamson, C. (2005, April). *Population-based and core participant intake data*. Presented at the First 5 California Statewide Regional Workshop on Using First 5 Statewide Evaluation Data Locally, Sacramento, CA.
- Williamson, C., & Stafford, K. (2004, February & March). *Population-based data*. Presented at the First 5 California Statewide Regional Workshop on Using First 5 Statewide Evaluation Data Locally, Sacramento and Burbank, CA.
- Pasta, D. J., Cisternas, M. G., & Williamson, C. L. (1998, October). *Estimating standard errors of treatment effects for probit models and for linear models of log-transformed variables using PROC IML*. Presented at the Western Users of SAS Software Regional User's Group Conference, Oakland, CA.
- Williamson, C. L. (1997, October). *You want me to put how many numbers in this document?* Presented at the Western Users of SAS Software Regional User's Group Conference, Universal City, CA.
- Williamson, C. L., & Kreutzer, S. D. (1996, October; 1997, March). *Using survey data—Tips to pick up speed on the road to analysis*. Presented at the Western Users of SAS Software Regional User's Group Conference, San Francisco, CA, and SAS User's Group International Conference, San Diego, CA.
- Ruskus, J., Williamson, C. L., & Kelley F. A. (1993, April). *From a woman's point of view: Barriers and facilitators to success in science and engineering*. Presented at the American Educational Research Association annual meeting, Atlanta, GA.

**DONNA K. SPIKER**  
**SRI International**

Program Manager, Early Childhood Programs  
Center for Education and Human Services, SRI Education

**Specialized Professional Competence**

Program evaluation, technical assistance, child development, child and family assessment, disability, early intervention and preschool special education, longitudinal studies, outcome evaluations, and quantitative and qualitative research methods.

**Representative Research Assignments at SRI (since 1996)**

Co-Director, Center for IDEA Early Childhood Data Systems for the Office of Special Education Programs (OSEP). A national technical assistance center to assist states on the development and enhancement of statewide early childhood longitudinal data systems to improve their ability to collect, analyze, and report high-quality data required under sections 616 and 618 of IDEA.

Senior Evaluation Consultant, subcontract to University of Minnesota, Evaluation of the Midwest Expansion of the Child-Parent Center (CPC) Education Program (Investing in Innovation [i3] Grant). Designing an evaluation to conduct a quasi-experimental study of the implementation and impact of this preschool to third grade (Pk-3) model that aims to improve school readiness skills and early school achievement and increase parent education and home support for learning.

Principal Investigator, subcontract to Erikson Institute, Early Mathematics Education (EME) Innovations project, a schoolwide professional development program for preschool to third-grade teachers, funded by a U.S. Department of Education i3 Grant. Designed and implementing the project's evaluation to examine child, teacher, and schoolwide outcomes.

Principal Investigator, subcontract to Erikson Institute, Statewide Evaluation of Illinois Early Childhood Block Grant for the Illinois State Board of Education. Designed and implementing a statewide evaluation of the 0–5 programs in Illinois including birth to age 3 programs and 3–5 Preschool for All programs, encompassing outcome, program quality, and qualitative data collection, analysis, and reporting.

Senior Researcher, Design and IDEA-related Analyses for the National Assessment for the Institute for Education Sciences (IES). On this design and analysis project, responsible for support on analyses and research review tasks related to IDEA early intervention and preschool special education.

Associate Director, Early Childhood Outcomes (ECO) Center. Center provides national leadership, conducts research, and provides technical assistance for the U.S. Department of Education and state agencies in conceptualizing and measuring child and family outcomes for young children with disabilities (birth to age 5).

Co-Leader, Washington State Department of Early Learning Kindergarten Assessment Process Project. Co-led efforts to inform recommendations to Washington's State legislature about a statewide kindergarten assessment process. Responsibilities included conducting a literature review on best practices for assessing young children, summarizing kindergarten assessment processes used by states, and collecting input from a stakeholder groups about their priorities for a statewide kindergarten assessment process using online surveys and focus groups.

**DONNA K. SPIKER (continued)****Representative Research Assignments at SRI (concluded)**

Principal Investigator, Secondary Analysis of Head Start Data Grant from the Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research, and Evaluation. Conducting longitudinal data analysis of kindergarten outcomes using the 2000 national FACES dataset of children who attended Head Start by examining four subgroups at high risk for poor outcomes (i.e., English learners, children with health concerns, high cumulative environmental risk, and disabilities).

Principal Investigator, Evaluation of Minnesota Early Learning Foundation's Saint Paul Early Childhood Scholarship Program. Designed and implementing a formative and summative evaluation of a market-driven model for providing high-quality preschool participation for children from low-income families in Saint Paul, Minnesota.

Project Co-Director, Statewide Data Collection and Evaluation of First 5 California Funded Programs and the School Readiness Initiative Evaluation. A California statewide evaluation of the implementation and outcomes of the system of services and programs for young children and their families (prenatal to age 5) in all 58 counties to support the health, development, and well-being and school readiness of California's young children.

**Academic Background**

Ph.D., child development, with a minor specialization in special education, 1979, University of Minnesota

B.S., psychology, 1972, University of Chicago

**Selected Publications**

Hebbeler, K., & Spiker, D. (in press). The National Early Intervention Longitudinal Study (NEILS). In C. R. Reynolds, K. J. Vannest, & E. Fletcher-Janzen (Eds.), *Encyclopedia of special education: A reference for the education of children, adolescents, and adults with disabilities and other exceptional Individuals* (Fourth Edition). New York, NY: John Wiley and Sons.

Barton, L., Spiker, D., & Williamson, C. (2012). Characterizing disability in Head Start programs: Not so clearcut. *Early Childhood Research Quarterly*, 27, 596–612.

Hebbeler, K., Spiker, D., & Kahn, L. (2012). IDEA's early childhood programs: Powerful vision and pesky details. *Topics in Early Childhood Special Education*, 31, 199–207.

Hebbeler, K., Barton, L., Taylor, C., & Spiker, D. (2011). Building good assessment and accountability systems for early childhood programs. *Young Exceptional Children Monographs No. 13*, pp. 173–198.

Hebbeler, K., & Spiker, D. (2011). Cost-effectiveness and efficacy of programs. In C. Groark & S. Eidelman (Eds.), *Early childhood intervention: Shaping the future for children with special needs and their families* (Vol. 1, pp. 173–207). Santa Barbara, CA: Praeger, ABC-CLIO, LLC.

Scarborough, A., Hebbeler, K., Spiker, D., & Simeonsson, R. J. (2011). Using survival analysis to describe developmental achievements of early intervention recipients at kindergarten. *Infants and Young Children*, 24, 133–152.

Rondal, J. A., Perera, J., & Spiker, D. (Eds.). (2011). *Neurocognitive rehabilitation of Down syndrome: The early years*. Cambridge, England: Cambridge University Press.

**DONNA K. SPIKER (continued)****Selected Publications (continued)**

- Spiker, D., Hebbeler, K., & Barton, L. (2011). Measuring quality of ECE programs for children with disabilities. M. Zaslow, I. Martinez-Beck, K. Tout, & T. Halle (Eds.), *Quality measurement in early childhood settings* (pp. 229-256). Baltimore, MD: Paul H. Brookes.
- Spiker, D. (2011). The history of early intervention for infants and young children with Down syndrome and their families: Where have we been and where are we going? In J. A. Rondal, J. Perera, & D. Spiker (Eds.), *Neurocognitive rehabilitation of Down syndrome: The early years* (pp. 15–35). Cambridge, England: Cambridge University Press.
- Hebbeler, K., & Spiker, D. (2011). The National Early Intervention Longitudinal Study (NEILS). In C. R. Reynolds, K. J. Vannest, & Y. E. Fletcher-Janzen (Eds.), *Encyclopedia of special education: A reference for the education of children, adolescents, and adults with disabilities and other exceptional individuals, Fourth Ed.* (pp. 1787–1791). Hoboken, NJ: John Wiley & Sons.
- Spiker, D., Hebbeler, K., & Barton, L. (2010). Measuring quality of early care and education for children with disabilities. In M. Zaslow, K. Tout, T. Halle, & I. Martinez-Beck (Eds.), *Next steps in the measurement of quality in early childhood settings* (pp. 229–256). Baltimore, MD: Paul H. Brookes.
- Gaylor, E., Spiker, D., Hebbeler, K., Williamson, C., & Snow, M. (2010). *Saint Paul Early Childhood Scholarship Program evaluation: Annual report*. Menlo Park, CA: SRI International.
- Gaylor, E., Spiker, D., Hebbeler, K., Williamson, C., & Snow, M. (2009). *Saint Paul Early Childhood Scholarship Program evaluation: Annual report*. Menlo Park, CA: SRI International.
- Golan, S., Petersen, D., & Spiker, D. (2008). *Kindergarten assessment process planning report*. Menlo Park, CA: SRI International.
- Spiker, D., Barton, L., Ferguson, K., Celio, C., Petersen, D., Golan, S., & Villanueva, A. (2008). *Selected bibliography about early childhood and kindergarten assessment and school readiness*. Menlo Park, CA: SRI International.
- Hebbeler, K., Spiker, D., Morrison, K., & Mallik, S. (2008). A national look at the characteristics of Part C early intervention services. *Young Exceptional Children, Monograph Series No. 10*, 1–18.
- Bailey, D. B., Nelson, L., Hebbeler, K., & Spiker, D. (2007). Modeling the impact of formal and informal supports for young children with disabilities and their families. *Pediatrics, 120*, e992–e1001.
- Scarborough, A., Spiker, D., Hebbeler, K., & Simeonsson, R. J. (2007). Dimensions of behavior of toddlers entering early intervention: Child and family correlates. *Infant Behavior and Development, 30*, 466–478.
- Hebbeler, K., Spiker, D., Bailey, D. B., Scarborough, A., Mallik, S., Simeonsson, R., Singer, M., & Nelson, L. (2007). *Early intervention for infants and toddlers with disabilities and their families: Participants, services, and outcomes*. Final report of the National Early Intervention Longitudinal Study (NEILS). Menlo Park, CA: SRI International.
- Scarborough, A., Hebbeler, K., Simeonsson, R., & Spiker, D. (2007). Caregiver descriptions of the developmental skills of infants and toddlers entering early intervention services. *Journal of Early Intervention, 79*, 207–227.

**DONNA K. SPIKER (concluded)****Selected Publications (concluded)**

- Bailey, D. B., Bruder, M. B., Hebbeler, K., Carta, J., Defosset, M., Greenwood, C., Kahn, L., Mallik, S., Markowitz, J., Spiker, D., Walker, D., & Barton, L. (2006). Recommended outcomes for families of young children with disabilities. *Journal of Early Intervention, 28*, 227–251.
- Spiker, D. (2006). Off to a good start: Early intervention for infants and young children with Down syndrome and their families. In J. A. Rondal & J. Peresa (Eds.), *Down syndrome: Neurobehavioral specificity* (pp. 175–190). New York, NY: John Wiley and Sons.
- Scarborough, A., Hebbeler, K. M., & Spiker, D. (2006). Eligibility characteristics of infants and toddlers entering early intervention in the U.S. *Journal of Policy and Practice in Intellectual Disabilities, 3*, 57–64.
- Bailey, D., Hebbeler, K., Spiker, D., Scarborough, A., Mallik, S., & Nelson, L. (2005). 36-month outcomes for families of children with disabilities participating in early intervention. *Pediatrics, 116*, 1346–1352.
- Spiker, D., Hebbeler, K., & Mallik, S. (2005). Developing and implementing early intervention programs: Children with established disabilities. In M. J. Guralnick (Ed.), *Developmental systems approach to early intervention* (pp. 305–349). Baltimore, MD: Paul H. Brookes.
- Scarborough, A. S., Spiker, D., Mallik, S., Hebbeler, K. M., Bailey, D., & Simeonsson, R. (2004). Who are the children and families receiving early intervention services? *Exceptional Children, 70*, 469–483.
- Bailey, D. B., Hebbeler, K., Scarborough, A., Spiker, D., Mallik, S., & Simeonsson, R. J. (2004). First experiences with early intervention: A national perspective. *Pediatrics, 113*, 887–869.
- Hebbeler, K., & Spiker, D. (2003). Initiatives on children with special needs. In J. Brooks-Gunn & L. Berlin (Eds.), *Early child development in the 21st century: Profiles of current research initiatives* (pp. 296–325). New York, NY: Teachers College Press.
- Spiker, D., & Silver, J. (1999). Early intervention services. In J. A. Silver, B. J. Amster, & T. Haecker (Eds.), *Young children and foster care: A guide for professionals* (pp. 347–371). Baltimore, MD: Paul H. Brookes.
- Spiker, D., Hebbeler, K., Wagner, M., Cameto, R., & McKenna, P. (2000). A framework for describing variation in state early intervention systems. *Topics in Early Childhood Special Education, 20*, 195–207.
- Spiker, D., & Hebbeler, K. (1999). Early intervention services. In M. D. Levine, W. B. Carey, & A. C. Crocker (Eds.), *Developmental-behavioral pediatrics* (3rd ed., pp. 793–802). Philadelphia, PA: W. B. Saunders.
- Mahoney, G., Boyce, G., Fewell, R., Spiker, D., & Wheeden, C.A. (1998). The relationship between parent-child interaction to the effectiveness of early intervention services for at-risk children and children with disabilities. *Topics in Early Childhood Special Education, 18*, 5–17.
- Bailey, D. B., Jr., McWilliam, R. A., Darkes, L. A., Hebbeler, K., Simeonsson, R. J., Spiker, D., & Wagner, M. (1998). Family outcomes in early intervention: A framework for program evaluation and efficacy research. *Exceptional Children, 64*, 313–328.

**WEI-BING CHEN**  
**SRI International**

Early Childhood Researcher  
 Center for Education and Human Services, SRI Education

**Specialized Professional Competence**

Ecological perspectives on early childhood development, family support and engagement, school readiness, strengthening early learning and development systems, intervention in early care and education settings, multi-domain process and outcome evaluations utilizing quantitative and qualitative methods.

**Academic Background**

Ph.D., Educational Psychology-Applied Developmental Science, 2010, University of Virginia, Charlottesville, VA  
 B.A., Psychology, Molecular Cell Biology, 2002, University of California, Berkeley

**Representative Research Assignments at SRI (since 2012)**

- Project leader for First Five San Mateo County Comprehensive Evaluation. Provide coordinated evaluation services and technical assistance to early childhood programs in San Mateo County, CA that promote early learning, child health and development, and family engagement. Also facilitate communication and systems change within and across programs.
- Co-leader of Minnesota's Race to the Top-Early Learning Challenge (RTT-ELC) Funds to Promote Access to High Quality Programs Evaluation. Conduct process and outcome evaluation of Minnesota's Early Learning Scholarship and Title I Preschool Incentive programs, which aim to improve the school readiness of young children with high needs through increased access to high quality early learning and development programs. Topical expertise utilized includes that of child care and preschool settings, Quality Rating and Improvement Systems (QRIS), and mixed methods approaches to evaluation.
- Project member on McKnight Foundation Education and Learning Program Evaluation. Conducting process and outcome evaluation of a McKnight Foundation-funded pre-K to third grade literacy initiative implemented in public schools in the Twin Cities Metro Area of Minnesota. Topical expertise utilized includes that of teacher professional development, the Classroom Assessment Scoring System (CLASS), dual language learners, and mixed methods approaches to evaluation.
- Project coordinator for Washington State's Federal MIECHV (Maternal, Infant, Early Childhood Home Visiting) Program Evaluation Research Project. Conducting process and outcome evaluation of Washington State's centralized system of supports for increasing quality and implementation fidelity among home visiting programs funded by the federal competitive MIECHV grant. Topical expertise utilized includes that of evidence-based home visiting models and workforce development.

**WEI-BING CHEN (continued)****Other Professional Experience**

Instructor, Department of Psychology, University of California, Berkeley (Summer 2012).

Developed and taught an intensive 6-week summer session course on child development in different cultures.

Research Associate, Center for Advanced Study of Teaching and Learning, University of Virginia, Charlottesville (2010–12). Member of Institute of Education Science-funded team evaluating WINGS for Kids, a socioemotional learning program for elementary-aged students with high needs in Charleston, SC. Member of National Institutes of Health-funded team that developed curriculum, assessment battery, and fidelity measures for Minds in Motion visuospatial/fine motor skills intervention that aimed to improve children's executive function and mathematics achievement. Implemented randomized controlled trial of intervention.

Pre-doctoral Fellow, Curry School of Education and Center for Advanced Study of Teaching and Learning, University of Virginia, Charlottesville (2006–10). Collaborated on Math and Science Achievement Gaps of Minority and Disadvantaged Students grant, conducting secondary data analysis of the ECLS-K and ECLS-B to investigate the achievement gap, racial categorizing, fine motor skill development, and parent-child interaction quality. Collaborated on School-based Intervention Teams project to examine the effects of the pre-referral intervention team process on elementary student and teacher outcomes, and on Transitioning to High School project examining an intervention for low-achieving ninth graders.

Research Assistant, Edgewood Center for Children and Families, San Francisco, California (2004–06). Conducted mixed-methods evaluations of programs supporting kinship caregivers, school-based behavioral interventions, long-term residential care for children with severe emotional disturbances, and respite care for special-needs adoptive families.

Teacher's Assistant/Counselor, Edgewood Center for Children and Families, San Francisco, CA (2002–04). Paraprofessional in day treatment program at Level 14 residential facility for children ages 6 through 14 with severe emotional disturbances. Assisted special education teacher in planning and teaching academic lessons, performed behavior management, and coached students on the development of social skills. Assumed role of lead teacher in teacher's absence and on designated nonacademic days. Assisted clinical staff in facilitating group psychotherapy.

Research Assistant, Department of Psychology, University of California, Berkeley (2001–04). Served as research assistant on studies of social interaction among individuals with social anxiety, the expression and experience of emotion in people with schizophrenia, and social aggression in school aged children.

Child Tutor, Children's Hospital Autism Intervention, Oakland, California (2002). Play tutor to children under age 3 with autism spectrum diagnoses in newly developed early intervention program. Provided services in clinic, home, and daycare settings under guidance from clinical psychology, child behavior, speech pathology, and occupational therapy professionals. Received training in Applied Behavior Analysis and discrete trials.

**WEI-BING CHEN (concluded)****Publications**

- Cameron, C. E., Chen, W., Blodgett, J., Cottone, E. A., Mashburn, A. J., Brock, L. L., & Grissmer, D. W. (2012). Primary validation of the Motor Skills Rating Scale. *Journal of Psychoeducational Assessment, 30*, 555-566.
- Chen, W., & Gregory, A. (2011). Parental involvement in the pre-referral process: Implications for schools. *Remedial and Special Education, 32*, 447-457. doi:10.1177/0741932510362490
- Chen, W., & Gregory, A. (2009). Parental involvement as a protective factor during the transition to high school. *Journal of Educational Research, 103*, 53-62.

**Selected Conference Presentations**

- Chen, W., Grimm, K., & Grissmer, D. W. (2011, April). *A longitudinal examination of the antecedents and consequences of fine motor development between 2 and 5 years*. Paper presented at the annual meeting of the Society for Research in Child Development, Montreal, Canada.
- Chen, W., Grimm, K., Grissmer, D. W., & Gregory, A. (2010, April). *Fine motor skills as a mediator of the relationship between early parent-child interactions and math at kindergarten entry*. Paper presented at the Conference on Human Development, New York, NY.
- Chen, W., Grissmer, D. W., & Gregory, A. (2010, April). *Racial and ethnic categorization in large-scale secondary data analysis: How decisions can affect research conclusions*. Paper presented at the annual meeting of the American Educational Research Association, Denver, CO.
- Chen, W., & Gregory, A. (2009, February). *Parental participation in pre-referral interventions: A records review*. Paper presented at the annual meeting of the National Association of School Psychologists, Boston, MA.
- Chen, W., & Gregory, A. (2008, March). *Parental involvement: What types matter for teens, and student perspectives on home-school contact*. Poster presented at the annual meeting of the American Educational Research Association, New York, NY.

**Lindsey Allard Agnamba, Ed.D.**  
 Director, School Readiness Consulting  
 (877) 447-0327  
 allard@schoolreadinessconsulting.com

Current Position

**School Readiness Consulting**

**Silver Spring, MD**

**Founder/ Director**

2005-Present

- Founder of School Readiness Consulting. Responsible for setting the vision and direction of the consulting group, organizational and project leadership, strategic planning, and external relations.

*Current Projects*

**Consultant, Partner: Mile High Montessori**

- In partnership with Mile High Montessori, developing professional learning center of excellence. Leading the development of a professional learning framework and curriculum overview that include specialized plans for specific groups of participants, identification of training standards, and related topics under each strand.

**Consultant, Partner: Target Community Relations**

- Developed a framework and provided early literacy technical expertise to evaluate Target's Reading Grant applicant's success metrics.

**Consultant, Partner, District of Columbia Office of the State Superintendent of Education**

- Responsible for leading project team to design and implement a statewide evaluation of quality throughout all early care and education sectors of the District of Columbia.

**Developer/Consultant, Partner: Fight for Children**

- Developer of principal and school leadership mentoring curriculum and approach, and provision of ongoing training and technical assistance for project staff and mentors in Joe's Champs, an early childhood program ensuring children in DC's high-need neighborhoods are taught by highly effective early childhood teachers.

**Special Advisor, Curriculum, Instruction and Assessment, Partner: DC Public Schools – Office of Early Childhood Education**

- Developer of districtwide coaching model and districtwide professional learning strategy and approach and provision of ongoing technical assistance to early childhood leadership team.

**Director, School Readiness Consulting's Early Childhood Technical Assistance Center**

- Leadership and creation of all aspects of the Early Childhood Technical Assistance Center (EC TA Center), a comprehensive professional development center that offers a unique space for schools, merging high-quality, collaborative, professional learning opportunities with the latest research in early childhood education and development.

**Consultant, Partner: Build Initiative**

- Partnering with the QRIS national learning network Director to support continuous quality improvement within state QRIS systems.
- Providing systems consultation, writing support, and technical assistance to BUILD Initiative on various topics.

*Previous Projects***Early Childhood Expert, Partner: Northeast Regional Education Lab/American Institutes for Research**

- Provision of expertise, policy analysis, and review of research on kindergarten readiness assessments.

**Project Director/Research and Training Consultant, Partner: Child Trends, Inc.**

- Evaluation leadership team of the Early Childhood Excellence in Teaching Project (Department of Education Early Childhood Educator Professional Development) .
- Evaluation partner on District of Columbia Public Schools Pre-K Evaluation (partnership between Child Trends, School Readiness Consulting, Harvard GSE, and University of Virginia/CASTL)
- Responsible for training observers on various measures, conducting reliability checks, managing informed consent, and providing project management services.

**Early Childhood Consultant, Partner: New Leaders for New Schools**

- Provision of training and technical assistance for resident principals and alumni of NLNS principal training program.

**Early Childhood Technical Expert/Team Lead, Partner: District of Columbia Public Charter School Board**

- Team leader and member of on-site program development review of existing chartered organizations as well as review of applications submitted for charter school initiation.

**Consultant/Product Developer, Partner: Georgetown Center for Child and Human Development**

- Responsible for developing materials for The Center for Effective Mental Health Consultation. Materials for use by Mental Health Consultants in supporting work to promote young children's social and emotional development and address challenging behaviors.

**Writer/Consultant, Partner: Zero to Three**

- Writer and developer of briefs, tools, training, and materials to support the social and emotional development and address challenging behaviors in infants and toddlers.

**Professional Development Consultant and Developer, Partner: Teaching Strategies, Inc.**

- Lead developer for Teaching Strategies' Technical Assistance model and training content for The Coach's Guide: A Resource for Providing Individualized Professional Development.

**Director, Partner: District of Columbia Head Start State Collaboration Office - Early Care and Education Administration/Department of Human Services**

- Facilitated citywide efforts in building early childhood systems and access to comprehensive services and support for all low-income children.
- Responsible for ensuring the involvement of Head Start in the development of District policies, plans, processes, and decisions affecting low-income families.

Selected Professional Development: Training & Technical Assistance

**Office of Head Start (OHS) U.S. Department of Health and Human Services, Consultant/National Trainer**

- Provision of training Head Start staff to reliability on the Classroom Assessment Scoring System (CLASS) Pre-K.

**Early Childhood Leadership Institute, Language and Literacy Technical Assistance Specialist**

- Provision of technical assistance, training, classroom observation and analysis, and other continuous quality improvement efforts within early care and education settings.

**Teaching Strategies Inc. -- Staff Development Network Master Trainer**

- Provision of training and technical assistance for practitioners and administrators on the Creative Curriculum System for Preschool and the Creative Curriculum System for Infants, Toddlers and Twos throughout the United States and internationally.

**Technical Assistance Center on Social Emotional Intervention for Young Children (TACSEI) Consultant**

- TACSEI Consultant Bank member invited by TACSEI to join the bank because of demonstrated knowledge regarding young children's behavior and social emotional development as well as experience in training and technical assistance.

Selected Boards/Committees/Working Groups

- *Workgroup Member*, Implementation and Fidelity Research Workgroup, Office of Policy Research and Evaluation (OPRE)/Child Care Policy Research Consortium (CCPRC) (2012-Current)
- National Academy of Sciences' Institute of Medicine remarks to the committee (2014)
- *National expert panel*, Head Start Professional Development: Developing the Evidence for Best Practice (2012-2013)
- *President*, Maryland Community Association for the Education of Young Children (2005-2009)
- *Working Group Member*, Montgomery County Council Preschool Implementation Work Group (2009)
- *Application Committee Chair*, District of Columbia Early Care and Education Certified Trainer Review (2004-2009)
- *Steering Committee*, Early Childhood Comprehensive Systems Grant (DOH/MFHA) (2004-2008)
- *Technical working group*, Early Learning Standards for the District of Columbia (2005)

Selected Publications

Allard Agnamba, L. Early Childhood Leadership Curriculum. 2013: School Readiness Consulting.

Allard Agnamba, L. Preparation And Ongoing Support For Early Childhood Instructional Coaches: A Case Study Exploration Of An Instructional Coaching Program. 2012: University of Pennsylvania.

Hunter, A., Blackwell, K.T., Allard, L., and Luceno, L. CSEFEL Infant Toddler Module 2: Responsive Routines, Environments, and Targeted Strategies to Support Social Emotional Development in Infants and Toddlers. 2011: Center on the Social and Emotional Foundations for Early Learning.

Allard, L., Hunter, A., and Anderson Simons, K. CSEFEL Inventory of Practices for Promoting Infant and Toddlers' Social Emotional Competence. 2011: Center on the Social and Emotional Foundations for Early Learning

Allard, L. and Hunter, A. *Understanding Temperament in Infants and Toddlers*. The Center on the Social and Emotional Foundations for Early Learning, USDHHS, 2011.

#### Education

- 2012**      **Ed.D., University of Pennsylvania Graduate School of Education**, Educational Leadership. *Dissertation: Preparation And Ongoing Support For Early Childhood Instructional Coaches*
- 2002**      **Ed.M., Harvard Graduate School of Education**, Education Policy, Focus: Equality of Opportunity in Early Childhood Education
- 2001**      **B.S., Wheelock College**, Human Development/Early Childhood Education

#### Certified/reliable in administration of the following assessment tools:

- Classroom Assessment Scoring System (CLASS) Reliability Trainer (Toddler, Prek, K-3);
- Teaching Pyramid Observation Tool (TPOT): Measuring Fidelity to the Center on the Social and Emotional Foundations for Early Learning (CSEFEL) Model;
- Early Language and Literacy Classroom Observation (ELLCO) Pre-K–Revised/K-3;
- Early Childhood/Infant and Toddler/Family Child Care Environmental Rating Scale
- Program Administration Scale (PAS): Measuring ECE Leadership and Management

**Andrew L. Brodsky, Ph.D.**

Interim Evaluation Director, School Readiness Consulting

1-877-447-0327 ext. 725

brodsky@schoolreadinessconsulting.com

Current Position**School Readiness Consulting****Silver Spring, MD****Interim Evaluation Director****April 2015 - present***Current Projects***Project Director, Partner: Target Community Foundation**

- Overseeing creation of rubric to evaluate literacy programs funded by Target.
- Managing the communications with partner and literacy programs to get all needed information, and the use of the rubric in scoring and reporting process.

Additional Experience**2013- Present President; Brodsky Research, LLC, Longmont, CO**

- Led early childhood cost-benefit projects for the U.S. Office of Child Care, Colorado, New York, and Palm Beach, which included model conceptualizing, directing original research and methodology, organizing advisory committees, managing data collection, statistical analysis, software development, and overseeing stakeholder review.
- Created dynamic we-based decision models for policymakers that included managing developers, overseeing user interface and administrative functions, and working with clients on model design and data analysis issues.
- Led education evaluation and survey research projects for clients that included the Massachusetts Department of Early Education and Care, and the Community Foundation of Boulder County.
- Maintained Invest Early blog, tracking national and international developments in early childhood research and policy.

**2007-2013 Senior Associate and Board Member; Augenblick, Palaich, and Associates, Denver, CO**

- Led early childhood cost-benefit projects for a number of clients, including Ohio, Minnesota, Massachusetts, and NACCRRA.
- Expert consultation on child care financing and cost estimation for clients including the National Child Care Information Center (NCCIC), the Piton Foundation, the Washington Department of Early Learning, the Maine Department of Human Services, and the Boulder Early Childhood Council Finance Task Force.



## Selected Publications

### *Book Chapters and Articles*

Brodsky, A. (2012). "Estimating the Costs of Early Childhood Systems." In Kagan, S., and Kauerz, K. *Early Childhood Systems Building*. New York: Teachers College Press. 2012.

Brodsky, A., DeCesare, D., and Kramer-Wine, J. (2010). Design and Implementation Considerations for Alternative Teacher Compensation Programs. *Theory Into Practice*, Volume 49 Issue 3, 213.

### *Publications, Reports, and Presentations*

Brodsky, A., Workman, S., and Mitchell, A. (2014). *Child Care Provider Characteristics and Net Revenues*. Policy brief prepared for the U.S. Office of Child Care.

Brodsky, A. (2013). *Modeling The Costs and Benefits of Early Childhood Systems*. Presentation to the Asia-Regional Network for Early Childhood, Singapore.

Brodsky, A., Roberson, N., and Augenblick, J. (2013). *Pay For Success Financing For Early Childhood Programming in Colorado*. Report prepared for the Piton Foundation.

Brodsky, A., and Roberson, N. (2012) *Return on Investment for Early Childhood Investments in Colorado*. Brief prepared for the Colorado Early Childhood Leadership Commission.

Brodsky, A., Augenblick, J., and Cunha, J. (2012). *Price Sensitivity in Student Selection of Public Four-Year Institutions in Colorado*. Report presented to the Colorado Department of Higher Education.

Brodsky, A. (2010). *2010 Maine Market Rate Survey: Analysis and Recommendations*. Report presented to the Maine Department of Health and Human Services. Washington, D.C.: National Child Care Information Center.

Brodsky, A., Palaich, R., and Rooney, K. (2010). *Early Childhood Infrastructure Financing Study*. Report presented to the State of Colorado Lieutenant Governor's Office.

Palaich, R., Brown, A., Rooney, K. and Brodsky, A. (2009). *2008-2009 Evaluation Report*. Report Presented to the Denver Preschool Program. Denver, CO: Augenblick, Palaich, and Associates.

### *Other Publications and Media Appearances*

"Invest In Colorado's Youngest Children." Guest Commentary published in the Denver Post online, April 29, 2013.

"The Spaces Between Us." Essay accepted by *This I Believe* and read aloud on *Bob Edwards Weekend*, September 2010.

Interview on Colorado's achievement gap on KCFR's Colorado Matters, September 1, 2006

Cited as an expert source by the Denver Post, the Rocky Mountain News, the Progressive Policy Institute, Diverse: Issues in Higher Education, the Colorado Springs Gazette, and the National Clearinghouse for English Language Acquisition.

### Selected Research Projects

- **Children’s Services Council of Palm Beach Cost-Benefit Model** (current), *Project Lead*  
Client: Palm Beach Children’s Services Council
- **Child Care Provider Cost of Quality Calculator** (2012-current), *Project Lead*  
Client: U.S. Office of Child Care (OCC)
- **Colorado Provider Cost of Quality Calculator** (current), *Co-Project Lead*  
Client: Colorado Department of Human Services
- **Massachusetts Non-Traditional Hours Child Care Study** (2014), *Co-Project Lead*  
Client: Massachusetts Department of Early Care and Education
- **Colorado Early Childhood Investment Model** (2012-2014), *Project Lead*  
Client: Colorado Early Childhood Leadership Commission
- **Pay For Success Preschool Cost and Feasibility Study** (2012-2013), *Project Lead*  
Client: Piton Foundation
- **New York Early Childhood Cost-Benefit Model** (2011-2013), *Project Lead*  
Client: New York Early Childhood Advisory Council.
- **Massachusetts Child Care Quality Cost Model** (2012-2013), *Project Lead*  
Client: Massachusetts Department of Early Education and Care
- **National Early Childhood Cost and Financing Calculator** (2010-2012), *Project Lead*  
Client: National Association of Child Care Resource and Referral Agencies
- **Denver Preschool Program Evaluation** (2008-current), *Data Analyst*  
Client: Denver Preschool Program

### Education

- 2012** Summer Research Training Institute in Cluster Randomized Trials; Institute of Education Sciences, U.S. Department of Education
- 2008-2012** Ph.D., University of Colorado, Educational Research Methods and Policy  
*Dissertation: Accountability Reform and Student Achievement in Colorado Public Schools*
- 1996-1997** Extended Teacher Education Program, University of Southern Maine  
Maine Elementary Teaching Certification, June 1997  
Colorado Elementary Teaching Certification, September 1998
- 1998-1992** B.S., University of Massachusetts, Psychology

**Sherylls Yadira (Valladares) Kahn**  
 Senior Associate, School Readiness Consulting  
 1-877-447-0327 ext. 717  
 valladares@schoolreadinessconsulting.com

Current Position

**School Readiness Consulting**  
**Senior Associate, 2011 – Present**

**Silver Spring, MD**

*Current Projects*

**Senior Associate, School Readiness Consulting's Early Childhood Technical Assistance Center**

- Coordinating and leading trainings/team meeting, ECTA Center communications, child assessments trainings and administration;
- Data tracking, cleaning, scheduling and conducting ongoing individual team meetings; designing and creating pre/post data reports

**Senior Data Associate, DC Pre-K Quality Evaluation, Partner: District of Columbia Office of the State Superintendent of Education,**

- Establish and maintain open and ongoing communication with clear expectations with project team, including preparing the orientation and protocol training around entering data after each CLASS observation accurately and procedure for sharing hard copies of data.
- Coordinates data cleaning, including creating score database for every classroom and every school, maintaining a running log of strengths and errors associated with data collectors
- Data reporting to comprise creating an SPSS data set that includes all variables of interest, leading the development of the final report and individual/CBO reports

Additional Experience

2009- Present **Instructor/Graduate Assistant, University of Maryland, College Park, MD**

- Instructor for FMSC477: Internship and analysis in Family Science (2012-present)
- Teaching Assistant for FMSC477: Internship and analysis in Family Science (2011-2012)
- Graded exams, managed online learning system site for other courses in the department
- Coordinated data collection for research project on African American families and racial socialization

2011-2013 **Research Assistant, Johns Hopkins University School of Medicine, Baltimore, MD**

- Scheduled and conducted interviews for a qualitative research project on the effect of couple violence on children

2009-2011 **Therapist Intern, Center for Healthy Families, University of Maryland, College Park, MD**

- Trained for Marriage and Family Therapy License (LGMFT)
- Completed 400+ client-contact hours
- Provided individual, couple, and family therapy services to a diverse population of clients; employed a variety of therapy models (CBT, Bowen Family Systems, Structural, Solution-Focused, Narrative, Experiential, EFT); trained in play therapy

2006-2009 **Senior Research Assistant, Child Trends, Washington, DC**

- Gained experience in survey design and development through work on the Supporting Healthy Marriage Initiative
- Assisted in the development of interview and focus group protocols
- Trained in several early childhood assessment tools
- Conducted over-the-phone and in-person interviews with racially/ethnically diverse groups, parents, and school administrators/staff, cognitive interviews with children and teens, low-income married couples, and school administrators, and focus groups with low-income Latino youth
- Conducted SAS analyses using data from the National Survey of Children's Health (NSCH)
- Conducted literature reviews, and co-authored several research briefs

Education

2014 (Exp) **Ph.D., University of Maryland, School of Public Health, Family Science**

2011 **M.S., University of Maryland, School of Public Health, Couple and Family Therapy**

Master's Thesis: *Couple Therapy: Does it Improve Individual and Relational Well-Being in Couples Experiencing Mild to Moderate Aggression?*

2006 **B.A., Pomona College, Psychology; Minor: Spanish**

Senior Thesis (Honor Recognition): *Remembering Divorce: The Impact of Parental Conflict and Sibling Relationships on the Psychological Adjustment of Women*

**Claremont Graduate University, Claremont, CA**

Summer Component – Ronald E. McNair Scholars Program, June 2005-August 2005

**Universidad SEK, Segovia, Spain**

Studied Spanish Art and History, Mythical Literature, and Psychology, January 2005 – June 2005

Presentations

November 2005 14<sup>th</sup> Ronald E. McNair Scholars Research Conference, Delavan, WI  
 March 2006 7<sup>th</sup> Annual Minority Member Program Student, Research Conference, Claremont, CA  
 September 2010 American Association for Marriage and Family Therapy (AAMFT) Annual Conference, Atlanta, GA  
 September 2012 American Association for Marriage and Family Therapy (AAMFT) Annual Conference, Charlotte, NC

November, 2012 Association for Behavioral and Cognitive Therapies (ABCT) Annual Conventions, National Harbor, MD

### Related Skills

- Fluent in Spanish (native); English (native proficiency)
- Proficient in SPSS and SAS
- Certified/Trained observation and assessment tools: Classroom Assessment Scoring System – PreK and Toddler (CLASS); Early Learning and Literacy Classroom Observation (ELLCO); Peabody Picture Vocabulary Test-Fourth Edition (PPVT); Test of Early Mathematics Ability (TEMA); Challenging Situations Task; Backward Digit Span; Woodcock-Johnson III Tests of Achievement

### Publications

Kahn, S. Y., Epstein, N.B., Kivlighan Jr., J.M. (in press). Couple therapy for partner aggression: Effects on individual and relational well-being. *Journal of Couple and Relationship Therapy*.

Kenedy, E., Wilson, B., Valladares, S., Bronte-Tinkew, J. (2007). Improving Attendance and Retention in Out-of-School Time programs. Washington, D.C.: Child Trends.

Logan, C., & Valladares, S. (2007). Summary Report on Oklahoma City Cognitive Interviews for Healthy Marriage Item Development. Report prepared for MDRC. Washington, D.C.: Child Trends.

Valladares, S., et al (2007). Summary Report on San Antonio, TX and Washington, DC Cognitive Interviews for Healthy Marriage Item Development for the Supporting Healthy Marriage Evaluation. Washington, D.C.: Child Trends.

Valladares, S. & Moore, K. (2009). The Strengths of Poor Families. Washington, D.C.: Child Trends.

Valladares, S. & Ramos, M. (2011). Children of Latino Immigrants and Out-of-School-Time Programs. Washington, D.C.: Child Trends.

**Dori Mornan**

Project Manager, School Readiness Consulting  
 1-877-447-0327 ext. 707  
 mornan@schoolreadinessconsulting.com

Current Positions

**School Readiness Consulting**  
**Project Manager, 2012-Present**

**Silver Spring, MD**

*Current Projects*

**Project Manager, Partner: Office of the State Superintendent of Education, District of Columbia**

- Manage project team in conduction 520 CLASS™ evaluations throughout the District of Columbia preschool/pre-k classrooms, including maintaining weekly schedules for fielding efforts and data preservation.
- Plan and coordinate monthly team meetings for team building, tracking progress, sharing project updates around process and procedures, and troubleshooting issues.
- Maintain ongoing communication with partner regarding data, research, and stakeholders

**Project Manager, Partner: Johns Hopkins University/Center for Technology in Education, Maryland**

- Manage project team to conduct a study to validate Maryland's child care quality rating and improvement system (QRIS), MD EXCELS.
- Plans and coordinates the data collection efforts of over 1,200 classrooms, using the CLASS™, in three cycles throughout 2015.

*Previous Projects*

**Project Associate, Partner: BUILD Initiative**

- Developed protocol questions and interviewed state leaders on how they consider family engagement in the kindergarten entry assessment (KEA) process
- Provided research and development towards the brief, "Families Know Best: Integrating Parent Knowledge into Young Child Assessment Systems"

**Project Associate, School Readiness Consulting Leadership Curriculum**

- Supported director and senior partner in researching and drafting various tasks in creating SRC Leadership Curriculum

**Project Associate, Partner: REL Northeast and Islands' Early Childhood Education Research Alliance**

- Provided research and contributed to a literature review and webinar around research, policymaking, and practitioner perspectives on early childhood assessments

Additional Experience

**2007-2010 Assistant Director, Political and Legislative Mobilization – American**

**Federation of Teachers; Washington, DC**

- Coordinate and implement the union's grassroots program in support of their legislative agenda and acting as liaison with the legislative department; expanding the grassroots programs with AFT local and state federations

**2003-2007 Senior Associate, Center for the Child Care Workforce, AFTEF; Washington, DC**

- Developed, coordinated, and implemented programmatic activities including those related to public policy, organizing research to improve early care and education compensation and training opportunities for the workforce at the federal, state, and community level.

Education

1999

**M.S., University of Albany, SUNY; Educational Administration and Policy Studies**

1998

**B.A., University of Albany, SUNY; English, *Minor: Education***Related Skills

- Certified/Trained observation and assessment tools: Classroom Assessment Scoring System – PreK and Toddler (CLASS); Environmental Rating Scale-Early Childhood and Family Child Care (ECERS, FCCERS)

**A. Grace Wagner**  
 Evaluation Associate, School Readiness Consulting  
 (877) 447-0327 ext. 711  
 wagner@schoolreadinessconsulting.com

Current Position

**School Readiness Consulting  
 MD**

**Silver Spring,**

**Evaluation Associate**  
 August 2014 – Present

*Current Projects*

**Evaluation Associate, DC Pre-K Quality Evaluation, Partner: District of Columbia Office of the State Superintendent of Education**

- Coordinates data cleaning, including creating score database for every classroom and every school, maintaining a running log of strengths and errors associated with data collectors
- Assist team in development of protocols and training for data collection team, provide additional assistance to data collectors on CLASS evaluation tool, and overall management of data collectors

**Evaluation Associate, Maryland EXCELS QRIS Validation Study, Partner: Johns Hopkins University**

- Assist project manager in overall management of data collection team, including training and development of protocols
- Developing systems for data entry and coordinating data cleaning that includes score databases for each data collector to identify strengths and errors

*Previous Position*

**Executive Assistant**

March 2013 – August 2014

- Managed operations and logistics on large data collection project in Chicago, Newark, and Philadelphia
- Assist and collaborate with Director and other staff in proposal writing, development, and submission
- Managed organization-wide systems, payroll, and office operations

Additional Experience

**2011-2013 Logistics Assistant-Textbooks, District of Columbia Public Schools;**  
 Washington,  
 D.C.

- Identified, monitored, and analyzed data collection of textbooks request, deliveries, and inventories centrally and at individual school sites

- Edited, updated, and assisted in implementing Textbooks Management Policy and Procedures
- Supported all district sites for curriculum and textbook needs, compliance with textbook policies, and individual site needs and requests
- Assisted with textbook and warehouse budgeting, including verifying quote requests and invoices, and receiving and approving invoices and vouchers
- Managed central textbook inventory, including working with vendors and school sites on replenishment needs

**2010-2011 Special Education Aide - Raymond Education Campus, District of Columbia Public Schools; Washington, D.C.**

- Developed lesson plans and modifications in adherence to IEP for special education students in cooperation with lead teacher
- Assisted in lesson implementation, test administration, data collection and analysis in compliance with district and federal laws and regulations
- Participated in district and federally mandated and recommended trainings, including IMPACT and DCPS professional developments

**2008-2010 Social Studies Teacher, Marlboro County High Schools; Bennettsville, SC**

- Created, implemented, and adjusted lesson plans for daily instruction in compliance with state and school standards
- Modified instruction, testing, and classroom procedures for student with special needs in collaboration with Special Education instructors
- Attended and completed professional development trainings for Teacher Advancement Program and South Carolina Induction Teacher Training Program

Internships/Activities

**2011-2012 Peer Editor, *New Voices in Public Policy*; George Mason University**

**2011 Intern - Urban Education Leadership Internship Program, District of Columbia Public Schools – Office of the Chief Operating Officer; Washington, D.C.**

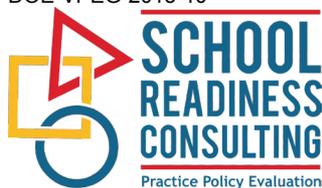
**2008 Clinical Intern/Student Teacher, Baptist Hill High School; Hollywood, SC**

Education

**2012 MPP, George Mason University School of Public Policy**

**2008 Secondary Teacher Certification (Social Studies), College of Charleston**

**2007 B.A., College of Charleston; Political Science, History**



Dr. Erika Gaylor & Dr. Shari Golan  
SRI International  
333 Ravenswood Avenue  
Menlo Park, CA 94025-3493

June 1, 2015

Dear Drs. Gaylor and Golan:

We are pleased to serve as research partners on your proposed evaluation of Virginia's VPI+ program. We understand the purpose of the project is to conduct a comprehensive program evaluation of Virginia's Preschool Expansion Grant (VPI+) that includes: (1) formative feedback; (2) summative assessments; and (3) cost effectiveness analysis for the Virginia Department of Education (VDOE). Virginia has implemented an innovative initiative to ensure that children in the Commonwealth (especially those in high needs communities) have access to evidence-based curricula and world-class teaching and learning environments. Virginia is to be commended for providing participating school divisions, teachers, and partners with such a broad range of program components and supports. We are very supportive of the Commonwealth's intention to thoroughly evaluate the effectiveness of their investment in improving preschool quality, access and impact.

School Readiness Consulting has a long track record in early childhood education program evaluation including multi-site, multi-method data collection, cost-effectiveness analysis, and assessor and teacher training. Our staff includes experienced early childhood researchers, data collection coordinators and experts in early childhood assessment. Dr. Andrew Brodsky is well known for his rigorous cost effectiveness analysis. SRC is pleased to contribute our expertise in these areas to SRI's proposed evaluation. As we have discussed, we plan to collaborate with SRI in designing and analyzing the formative feedback and summative assessment data, reporting, and participating with the VPI+ implementation team. SRC will also take the lead on conducting the cost-effectiveness analysis and collecting the child assessment data. We anticipate providing high-level coordination and support on research activities, attending all team meetings, and supporting data analysis, interpretation of findings, report writing and presentation of findings.

School Readiness Consulting will join the very strong team that you have assembled for this project. We very much look forward to the possibility of working with you on this important project.

Sincerely,

A handwritten signature in black ink, appearing to read "Lindsey Allard Agnamba".

---

Lindsey Allard Agnamba, Ph.D.  
Executive Director



**Tab 7**

**References for Similar Evaluation Services**



### References for Similar Evaluation Services

#### Multi-site evaluations that required primary data collection from young children with at least one focused on preschool program evaluation

**Name:** Evaluation of Minnesota’s Race to the Top–Early Learning Challenge

**Point-of-contact name:** Lisa Barnidge, Project Manager, Office of Early Learning, MN Department of Education

**Address:** MN Department of Education  
1500 West Hwy 36  
Roseville, MN 55113

**Email address:** [lisa.barnidge@state.mn.us](mailto:lisa.barnidge@state.mn.us)

**Phone number:** (651) 582-8849

**Description of the services provided:** SRI International, with a subcontract to Child Trends, is evaluating the Minnesota Department of Education’s (MDE) Race to the Top–Early Learning Challenge (RTT-ELC) funds to promote access to high-quality programs for children with high needs. The evaluation is being conducted in four Transformation Zones identified by the MDE and includes formative and summative evaluations of two projects within Minnesota’s RTT-ELC grant: Early Learning Scholarships and Title I-PreK Incentives. The goals of the evaluation are to describe and analyze the effectiveness of the implementation of the scholarships and the Title I-PreK incentives, describe how the funds are used to increase access and meet the needs of families, examine the extent to which access for children with high needs to high-quality early learning programs has increased, describe family engagement in the EC programs, and examine the impact of EC program participation on children’s outcomes and school readiness.

**Time period services were performed:** October 2012–June 2016

**Name:** Evaluation of the McKnight Foundation  
Education & Learning Program

**Point-of-contact name:** Erin Gavin, Policy and Program Officer –  
Education and Learning, The McKnight  
Foundation

**Address:** The McKnight Foundation  
710 South Second Street, Suite 400  
Minneapolis, MN 55401

**Email address:** [egavin@mcknight.org](mailto:egavin@mcknight.org)

**Phone number:** (612) 333-4220

**Description of the services provided:**

The McKnight Foundation’s Education & Learning (E&L) program is an effort to improve the literacy achievement of students in the Twin Cities through pathways that integrate and enhance prekindergarten through third grade literacy education. The evaluation is being conducted by SRI International and the Center for Applied Research and Educational Improvement (CAREI) at the University of Minnesota. It is a multi-year study that seeks to (1) document baseline conditions to understand the current strengths and needs in the partner districts, (2) formatively support the development and refinement of the E&L program, and (3) measure the E&L program’s effectiveness in developing proficient third-grade readers. To answer the formative research questions, we are using a multimethod approach that involves case studies, teacher observations, and teacher logs. Additional formative data will come from early literacy assessment data collected for the summative evaluation. To investigate the program’s impact on student achievement, we are conducting a longitudinal quasi-experimental study that compares literacy skill growth from preschool to second grade between students who stay in pathways schools and matched students who attend other elementary schools. We also are assessing impact on literacy skills through a cross-sectional study that examines third-grade reading test scores in pathway schools compared with matched nonpathway schools.

**Time period services were performed:** September 2011–February 2016

**Name:** Evaluation of the Illinois Early Childhood Block Grant

**Point-of-contact name:** Jana Fleming, J.D., Ph.D., Herr Research Center for Children and Social Policy, Erikson Institute

**Address:** Erikson Institute  
451 North LaSalle Street  
Chicago, IL 60654-4510

**Email address:** [janafleming@Erikson.edu](mailto:janafleming@Erikson.edu)

**Phone number:** (312) 330-0156

**Description of the services provided:**

As the subcontractor to Erikson Institute, SRI collaboratively designed and conducted a statewide evaluation of the Illinois Early Childhood Block Grant (ECBG) program for the Illinois State Board of Education. The evaluation addressed questions about the children and families participating in the program and the quality and outcomes of the program. The ECBG program includes a wide variety of early childhood programs for children from birth to 5 years old and their parents (home visiting, parenting education, preschool programs) that aim to improve children's school readiness and other outcomes, support at-risk families, and provide high-quality early childhood services. Erikson Institute and the SRI team worked closely with key stakeholders across the state of Illinois who comprised an advisory committee to review the evaluation plan and the resulting data. SRI had major responsibility for the evaluation of the 3–5 Preschool For All (PFA) program involving collection and analysis of data for a statewide sample of children, families, and preschool programs, including kindergarten entry assessments of more than 600 children who attended PFA programs. The results showed positive impacts of the PFA program on children's school readiness skills, including those for children across income and risk subgroups. The project had a variety of dissemination reports and brief fact sheets for the Illinois State Board of Education that were shared with the legislature and other key audiences.

**Time period services were performed:** April 2008–September 2011

**Name:** District of Columbia Pre-K Quality Evaluation  
**Point-of-contact name:** Elizabeth Groginsky, Assistant Superintendent of Early Learning, District of Columbia Office of the State Superintendent of Education  
**Address:** DC Office of the State Superintendent of Education  
810 1st Street, NE, 9th Floor  
Washington, DC 20002  
**Email address:** [elizabeth.groginsky@dc.gov](mailto:elizabeth.groginsky@dc.gov)  
**Phone number:** (202) 727-2814  
**Description of the services provided:** School Readiness Consulting, with a contract from the District of Columbia Office of the State Superintendent of Education (OSSE) Office of Early Learning, is evaluating Pre-K classroom quality within the District of Columbia charter- and community-based Pre-K programs. The District of Columbia has accomplished its goal of offering universal access to Pre-K programs and is now working toward the goal of ensuring programming that meets high quality standards and can increase school readiness rates for all Pre-K students within the District. The evaluation is being conducted in more than 450 classrooms throughout the District, using the Pre-K version of the Classroom Assessment Scoring System (CLASS™) to measure teacher-student interactions that may improve teaching and learning. School Readiness Consulting is also working with OSSE to analyze and interpret data and report findings to policymakers, educators, and other stakeholders.  
**Time period services were performed:** January 2014–September 2015

**Tab 8**

**Business Volume (Attachments F–H)**



## Pricing Template

Offeror: SRI International

**Offeror Note:** In Table A, enter the activities planned for VPI+ classrooms (per Attachment C) for each potential year of the contract (Years 1 – 4), the price per classroom, the subtotal price (Price per classroom X the number of VPI+ classrooms) and enter the total price (subtotals for year 1 + year 2 + year 3 + year 4) that meet the requirements for VPI+ classrooms as defined in Section III and outlined in Section IV, Statement of Needs, Part A.

**TABLE A – NEW VPI+ CLASSROOMS**

Potential Term of the Contract	Activities Planned Per Year	Number of VPI+ Classrooms	Times	Price Per Classroom	Subtotal
Year 1 (Date of Award – June 30, 2016)	Refine logic model and evaluation design; develop formative evaluation tools and collect data; conduct preK summative assessments; conduct cost-effectiveness analysis; submit reports to divisions and VDOE/VPI+ team; recruit and convene evaluation advisory board (EAB); analyze data; IRB approval; develop data sharing agreements; comply with VA codes; disaggregate data; update plan	111	X	\$8,204.70	\$910,722
Year 2 (July 1, 2016 – June 30, 2017)	Conduct formative evaluation; conduct preK and K summative assessments; conduct cost-effectiveness analysis; submit reports to divisions and VDOE/VPI+ team; convene EAB; analyze data; comply with VA codes; disaggregate data; update plan	117	X	\$8,895.87	\$1,040,817
Year 3 (July 1, 2017 – June 30, 2018)	Conduct formative evaluation; conduct K summative assessments; train preK teachers to assess children and gather results; conduct cost-effectiveness analysis; submit reports to divisions and VDOE/VPI+ team; convene EAB; analyze data; comply with VA codes; disaggregate data; update plan	121	X	\$6,822.72	\$825,549
Year 4 (July 1, 2018 – June 30, 2019)	Conduct formative evaluation; train K teachers to assess children; gather preK and K results; conduct cost effectiveness analysis; submit reports to divisions and VDOE/VPI+ team; convene EAB; analyze data; comply with VA codes; disaggregate data; update plan	121	X	\$4,777.25	\$578,047
<b>TOTAL PRICE</b>					<b>\$ 3,355,135</b>

**TABLE B – IMPROVED CLASSROOMS**

**Offeror Note:** In Table B, enter the activities planned (per Attachment C) for improved classrooms for each potential year of the contract (Years 1 – 4), the price per classroom, the subtotal price (Price per classroom X the number of Improved classrooms) and indicate the total price (subtotal for year one, year 2, year 3 and year 4) that meet the requirements for VPI+ classrooms as defined in Section III and outlined in Section IV, Statement of Needs, Part B.

Potential Term of the Contract	Activities Planned Per Year	Number of Improved Classrooms	Times	Price Per Classroom	Subtotal Price
Year One (Date of Award – June 30, 2016)	Refine logic model and evaluation design; develop formative evaluation tools and collect data; conduct preK summative assessments; conduct cost-effectiveness analysis; submit reports to divisions and VDOE/VPI+ team; recruit and convene evaluation advisory board (EAB); analyze data; IRB approval; develop data sharing agreements; comply with VA codes; disaggregate data; update plan	89	X	\$8,351.53	\$743,286
Year Two (July 1, 2016 – June 30, 2017)	Conduct formative evaluation; conduct preK and K summative assessments; conduct-cost effectiveness analysis; submit reports to divisions and VDOE/VPI+ team; convene EAB; analyze data; comply with VA codes; disaggregate data; update plan	108	X	\$8,881.78	\$959,232
Year Three (July 1, 2017 – June 30, 2018)	Conduct formative evaluation; conduct K summative assessments; train preK teachers to assess children and gather results; conduct cost effectiveness analysis; submit reports to divisions and VDOE/VPI+ team; convene EAB; analyze data; comply with VA codes; disaggregate data; update plan	113	X	\$6,808.22	\$769,329
Year Four (July 1, 2018 – June 30, 2019)	Conduct formative evaluation; train K teachers to assess children; gather preK and K results; conduct cost-effectiveness analysis; submit reports to divisions and VDOE/VPI+ team; convene EAB; analyze data; comply with VA codes; disaggregate data; update plan	118	X	\$4,725.97	\$557,664
<b>TOTAL PRICE</b>					<b>\$3,029,511</b>

**OFFEROR NOTE:**

Total Price From Table A	<u>\$3,355,135</u>
Total Price From Table B	<u>\$3,029,511</u>
*Total Price (A+B)	<u>\$6,384,646</u>

\*This price will be used for scoring of Criteria 4 – Pricing.

**Attachment G****Small Business Subcontracting Plan**

It is the goal of the Commonwealth that over 42% of its purchases be made from small businesses. All potential bidders are required to submit a Small Business Subcontracting Plan.

**Small Business:** "Small business (including micro)" means a business which holds a certification as such by the Virginia Department of Small Business and Supplier Diversity (DSBSD) on the due date for proposals. This shall also include DSBSD-certified women- and minority-owned businesses when they also hold a DSBSD certification as a small business on the proposal due date. Currently, DSBSD offers small business certification and micro business designation to firms that qualify under the definitions below.

Certification applications are available through DSBSD online at [www.DSBSD.virginia.gov](http://www.DSBSD.virginia.gov) (Customer Service).

**Offeror Name:** SRI International for School Readiness Consulting, LLC

**Preparer Name:** Mary Thoen for Karen Iannone, Small Business Liaison Officer.

Mary.thoen@sri.com

**Instructions**

- A. If you are certified by the DSBSD as a micro/small business, complete only Section A of this form. This includes but is not limited to DSBSD-certified women-owned and minority-owned businesses when they have also received DSBSD small business certification.
- B. If you are not a DSBSD-certified small business, complete Section B of this form. For the offeror to receive credit for the small business subcontracting plan evaluation criteria, the offeror shall identify the portions of the contract that will be subcontracted to DSBSD-certified small business for the initial contract period in Section B.

Offerors which are small businesses themselves will receive the maximum available points for the small business participation plan evaluation criterion, and do not have any further subcontracting requirements.

Offerors which are not certified small businesses will be assigned points based on proposed expenditures with DSBSD-certified small businesses for the initial contract period in relation to the offeror's total price for the initial contract period.

Points will be assigned based on each offeror's proposed subcontracting expenditures with DSBSD certified small businesses for the initial contract period as indicated in Section B in relation to the offeror's total price.

**Section A**

If your firm is certified by the Department of Small Business and Supplier Diversity (DSBSD), provide your certification number and the date of certification):

Certification number: \_\_\_\_\_ Certification Date: \_\_\_\_\_

*Pending review*

**Section B**

Populate the table below to show your firm's plans for utilization of DSBSD-certified small businesses in the performance of this contract for the initial contract period in relation to the bidder's total price for the initial contract period. Certified small businesses include but are not limited to DSBSD-certified women-owned and minority-owned businesses that have also received the DSBSD small business certification. Include plans to utilize small businesses as part of joint ventures, partnerships, subcontractors, suppliers, etc. It is important to note that these proposed participation will be incorporated into the subsequent contract and will be a requirement of the contract. Failure to obtain the proposed participation percentages may result in breach of the contract.

**B. Plans for Utilization of DSBSD-Certified Small Businesses for this Procurement**

<b>Micro/Small Business Name &amp; Address DMBE Certificate #</b>	<b>Status if Micro/Small Business is also: Women (W), Minority (M)</b>	<b>Contact Person, Telephone &amp; Email</b>	<b>Type of Goods and/or Services</b>	<b>Planned Involvement During Initial Period of the Contract</b>	<b>Planned Contract Dollars During Initial Period of the Contract (\$ or %)</b>
School Readiness Consulting, LLC, (Certification in progress)	(W)	Lindsey Allard Agnamba 877-447-0327 x700 <a href="mailto:allard@schoolreadinessconsulting.com">allard@schoolreadinessconsulting.com</a>	Collaborate and assist SRI with VPI+ formative evaluation, conduct cost effectiveness analysis, and collect child assessment data for summative assessments.	Throughout the life of the award period	\$2,808,579
<b>Totals \$</b>					<b>\$2,808,579</b>

State Corporation Commission Form

**Virginia State Corporation Commission (SCC) registration information. The offeror:**

- is a corporation or other business entity with the following SCC identification number: F0195794 **-OR-**
- is not a corporation, limited liability company, limited partnership, registered limited liability partnership, or business trust **-OR-**
- is an out-of-state business entity that does not regularly and continuously maintain as part of its ordinary and customary business any employees, agents, offices, facilities, or inventories in Virginia (not counting any employees or agents in Virginia who merely solicit orders that require acceptance outside Virginia before they become contracts, and not counting any incidental presence of the offeror in Virginia that is needed in order to assemble, maintain, and repair goods in accordance with the contracts by which such goods were sold and shipped into Virginia from offeror's out-of-state location) **-OR-**
- is an out-of-state business entity that is including with this proposal an opinion of legal counsel which accurately and completely discloses the undersigned offeror's current contacts with Virginia and describes why those contacts do not constitute the transaction of business in Virginia within the meaning of § 13.1-757 or other similar provisions in Titles 13.1 or 50 of the Code of Virginia.
- \*\*NOTE\*\*** >> Check the following box if you have not completed any of the foregoing options but currently have pending before the SCC an application for authority to transact business in the Commonwealth of Virginia and wish to be considered for a waiver to allow you to submit the SCC identification number after the due date for proposals (the Commonwealth reserves the right to determine in its sole discretion whether to allow such waiver):



**Tab 9**  
**Additional Materials**



### Bibliography

1. Duncan, G. J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P., . . . Japel, C. (2007). School readiness and later achievement. *Developmental Psychology*, 43(6), 1428–1446.
2. Woodcock, R. W., McGrew, K. S., & Mather, N. (2001). *Woodcock-Johnson III Tests of Achievement*. Itasca, IL: Riverside Publishing.
3. Zelazo, P. D. (2006). The Dimensional Change Card Sort (DCCS): A method of assessing executive function in children. *Nature Protocols*, 1(1), 297-301.
4. Bauer, P. J., & Zelazo, P. D. (2013). NIH Toolbox Cognitive Function Battery (CFB): Summary, conclusions, and implications for cognitive development. In P. D. Zelazo & P. J. Bauer (Eds.), *National Institutes of Health Toolbox-Cognitive Function Battery (NIH Toolbox CFB): Validation for Children between 3 and 15 years*. Ann Arbor, MI: Society for Research in Child Development.
5. Weiland, C., Wolfe, C. B., Hurwitz, M. D., Clements, D. H., Sarama, J. H., & Yoshikawa, H. (2012). Early mathematics assessment: validation of the short form of a prekindergarten and kindergarten mathematics measure. *Educational Psychology: An International Journal of Experimental Educational Psychology*, 32(3), 311-333.
6. Weiland, C., & Yoshikawa, H. (2013). Impacts of a prekindergarten program on children's mathematics, language, executive function, and emotional skills. *Child Development*, 84(6), 2112-2130. doi: 10.1111/cdev.12099
7. Hightower, A. D., & Perkins, P. E. (2010). *Teacher-child rating scale 2.1. Examiner's manual*. Rochester, NY: Children's Institute.
8. Ponitz, C. C., McClelland, M. M., Jewkes, A. M., Connor, C. M., Farris, C. L., & Morrison, F. J. (2008). Touch your toes! Developing a direct measure of behavioral regulation in early childhood. *Early Childhood Research Quarterly*, 23, 141-158.
9. Ponitz, C. C., McClelland, M. M., Matthews, J. S., & Morrison, F. J. (2009). A structured observation of behavioral self-regulation and its contribution to kindergarten outcomes. *Developmental Psychology*, 45(3), 605–619.
10. Virginia University Research Consortium on Early Childhood. (2015). *Predicting on-time promotion to and literacy achievement in eighth grade relation to public prekindergarten in Virginia*. Richmond, VA: Virginia Early Childhood Foundation.
11. Huang, F. I., Invernizzi, M. A., & Drake, E. A. (2012). The differential effects of preschool. Evidence from Virginia. *Early Childhood Research Quarterly*, 27, 33-45.
12. Stuart, E. A. (2010). Matching methods for causal inference: A review and a look forward. *Statistical Science*, 25, 1-21.
13. Cellini, S. R., & Kee, J. E. (2010). Cost-effectiveness and cost-benefit analysis. In J. S. Wholey, H. P. Hatry, & K. E. Newcomer (Eds.), *Handbook of practical program evaluation* (pp. 493-530). San Francisco, CA: Jossey-Bass.
14. Barnett, W. S., & Masse, L. N. (2007). Comparative benefit-cost analysis of the Abecedarian program and its policy implications. *Economics of Education Review*, 26(1), 113-125.
15. Heckman, J. J., Moon, S. H., Pinto, R., Savelyev, P. A., & Yavitz, A. (2009). *The rate of return to the High/Schope Perry Preschool Program*. Cambridge, MA: National Bureau of Economic Research.
16. Karoly, L. A., & Bigelow, J. H. (2005). *The economics of investing in universal preschool education in California*. Santa Monica, CA: RAND Corporation.