CASTL ECE Initiatives Update
VKRP, AEII, & STREAMin³

Amanda Williford
December 5, 2019

VPI Subcommittee Meeting
Overview

- Virginia Kindergarten Readiness Program (VKRP)
- Advancing Effective Interactions and Instruction (AEII)
- STREAMin³ Curriculum Pilot
Chapter 854, Budget Item 128h (a-d):

Out of this appropriation, $1,350,000 the first year and $1,350,000 the second year from the general fund is provided through the Department of Education to the University of Virginia to continue statewide implementation of the Virginia Kindergarten Readiness Program conducted in the fall, and to develop and implement a post-assessment upon the conclusion of the kindergarten year.

The Department of Education shall coordinate with the University of Virginia's Center for Advanced Study of Teaching and Learning to ensure that all school divisions shall be required to have their kindergarten students assessed during the school year using the multi-dimensional kindergarten readiness assessment model no later than by the end of the school year 2019-2020, and annually thereafter. All school divisions shall be required to have their kindergarten students assessed with such model.

Further, out of this appropriation, $100,000 the first year and $100,000 the second year from the general fund shall be allocated to University of Virginia's Center for Advanced Study of Teaching and Learning to provide training to school divisions annually on how to effectively use Virginia Kindergarten Readiness Program data to improve instructional practices and student learning. Such teacher focused professional development and training shall be prioritized for the school divisions that would most benefit from state assistance in order to provide more time for classroom instruction and student learning.

The Department and the University of Virginia's Center for Advanced Study of Teaching and Learning shall use the results of the multi-dimensional Virginia Kindergarten Readiness Program assessments to determine how well the Virginia Preschool Initiative promotes readiness in all key developmental domains assessed. The Department shall submit such findings to the Chairmen of House Appropriations and Senate Finance Committees no later than October 1, 2019, and annually thereafter.  

Fall 2019 Legislative report
VKRP is a set of coordinated assessments
Literacy (PALS), math, self-regulation, and social skills are combined to provide teachers with a more comprehensive picture of students’ skills at the beginning and end of kindergarten. Readiness is defined as having foundational skills in all areas.

VKRP is a reporting system
Provides detailed and integrated information about students’ skills at the student (for teachers and families), classroom, school, division, and state levels.

VKRP is a set of instructional resources
Supports teachers to understand students’ skill levels and to use instructional practices to support their learning and growth.
How Statewide Readiness Data Can be Used in Virginia

- Before Kindergarten:
  - How to best support program improvement
  - Understand how investments are working
  - Provide benchmark to monitor progress

- Kindergarten and Beyond:
  - Guide instruction & interactions
  - Refer for early intervention
  - Target curricula or PD

Actionable Data
Better Decision-Making

VKRP
# VKRP Expansion Over Time

## Classrooms

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of estimated classrooms</td>
<td>5,212</td>
<td>5,055</td>
<td>5,047</td>
<td>5,059</td>
<td>5,055</td>
<td>5,074</td>
</tr>
<tr>
<td>Total of VKRP classrooms</td>
<td>100</td>
<td>533</td>
<td>661</td>
<td>1,200</td>
<td>1,660</td>
<td>5,074</td>
</tr>
<tr>
<td>% of total</td>
<td>1.9</td>
<td>10.5</td>
<td>13.1</td>
<td>21.6</td>
<td>34.2</td>
<td>100*</td>
</tr>
</tbody>
</table>

* Estimated percentage of classrooms and students

## Students

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of estimated students</td>
<td>93,807</td>
<td>90,991</td>
<td>90,850</td>
<td>91,053</td>
<td>91,002</td>
<td>92,407</td>
</tr>
<tr>
<td>Total of VKRP students</td>
<td>2,036</td>
<td>9,809</td>
<td>11,899</td>
<td>20,039</td>
<td>30,666</td>
<td>91,931</td>
</tr>
<tr>
<td>% of total</td>
<td>2.2</td>
<td>10.8</td>
<td>13.1</td>
<td>22.0</td>
<td>34.2</td>
<td>99*</td>
</tr>
</tbody>
</table>

* Estimated percentage of classrooms and students
VKRP Moving Forward

- Development and piloting of VKRP in pre-k
- Interactive reports that show growth across the year in students’ skills
- Expanded resources on how to use data to guide instruction
- Scalable training with online options
- Additional family outreach reports and resources facilitating home-school connections
Readiness Results for 2018

- Literacy (n=30,519*)
  - 18% Meeting Benchmark
  - 82% Below Benchmark

- Math (n=27,350*)
  - 20% Meeting Benchmark
  - 80% Below Benchmark

- Self-Regulation (n=27,672*)
  - 18% Meeting Benchmark
  - 82% Below Benchmark

- Social Skills (n=27,672*)
  - 21% Meeting Benchmark
  - 79% Below Benchmark

Note.* = All students who had data on each measure were included to obtain these estimates.
What We’ve Learned

In terms of child skills, Virginia was too narrowly representing readiness. Estimates of children entering kindergarten lacking key readiness skills:

- **When only using literacy (PALS)**
  - 18% 

- **Using VKRP—literacy, math, self-regulation and social skills**
  - 42% 

- **For students who are economically disadvantaged**
  - 50%

*2018 VKRP Data*
2018 Data — Overall Readiness Variability Across Divisions

Division average % of students ready across all domains

Variability in readiness across different divisions.
Comparison of Fall 2018 Readiness Data for Students Who Are and Are Not from Low Income Backgrounds

<table>
<thead>
<tr>
<th></th>
<th>Not Disadvantaged</th>
<th>Disadvantaged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Ready</td>
<td>65.3%</td>
<td>49.5%</td>
</tr>
<tr>
<td>Ready</td>
<td>34.7%</td>
<td>50.5%</td>
</tr>
</tbody>
</table>

n=13,275
n=11,392
Comparison of Fall 2018 VKRP Readiness Scores Between Children from Low Income Backgrounds who Attend VPI and Those With No Preschool Experience

<table>
<thead>
<tr>
<th></th>
<th>Not Ready</th>
<th>Ready</th>
</tr>
</thead>
<tbody>
<tr>
<td>VPI</td>
<td>58.1</td>
<td>41.9</td>
</tr>
<tr>
<td>n=4,694</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Preschool</td>
<td>62.1</td>
<td>37.9</td>
</tr>
<tr>
<td>n=2,578</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12
Advancing Effective Interactions & Instruction in VPI Classrooms
Out of the appropriation in this Item, $300,000 the first year and $700,000 the second year from the general fund is provided through the Department of Education to the University of Virginia's Center for Advanced Study of Teaching and Learning to ensure that all Virginia Preschool Initiative classroom programs teachers receive appropriate individualized professional development training from professional development specialists to support quality teacher-child interactions and effective research-based curriculum implementation. Funding and professional development assistance shall be prioritized for teachers with Classroom Assessment Scoring System (CLASS) observation scores that did not meet the statewide minimum acceptable threshold standard established by University of Virginia's Center for Advanced Study of Teaching and Learning and the Department of Education. The University of Virginia's Center for Advanced Study of Teaching and Learning, assisted on an as needed basis, by the Department of Education, Virginia Early Childhood Foundation, and Elevate Early Education to hire and train specialists to provide such individualized professional development.

Out of the appropriation in this Item, $350,000 the first year and $350,000 the second year from the general fund is provided through the Department of Education to the University of Virginia to ensure that all Virginia Preschool Initiative classroom programs have the quality of their teacher-child interactions assessed through a rigorous and research-based classroom observational instrument at least once every two years using the CLASS observational instrument for such assessment. All classrooms shall be observed no later than June 30, 2020. The University of Virginia, with input from the Department of Education and the use of its detailed plan for such assessments, shall establish a statewide minimum acceptable threshold for the quality of teacher-child interactions for Virginia Preschool Initiative classroom programs, and classrooms that are assessed below the threshold will receive additional technical assistance from the Department of Education and the University of Virginia. The threshold should be established with the assistance of University of Virginia's Center for Advanced Study of Teaching and Learning, using a rigorous and research-based classroom observational instrument. The threshold shall be established no later than the beginning of the 2018-2019 school year and the classroom assessments shall begin no later than spring 2019. The University of Virginia's Center for Advanced Study submi a progress report on such classroom observations to the Chairmen of Ho Finance Committees no later than June 30, 2019, and annually thereafter.

June 2019 Legislative report
AEII Goals

1. The quality of teacher-child interactions will be externally observed in all VPI classrooms every two years.

2. Support local CLASS® observations to occur twice a year.

3. All VPI teachers will receive high-quality, individualized professional development (PD) that supports their knowledge, skills, and practice.

4. All VPI teachers will be supported to use a vetted, evidence-based curriculum.
CLASS® Observations

- In Year 1, Spring 2019, CLASS® observations conducted in 544 VPI classrooms across 50 Early Adopter divisions

  June 2019 Legislative report

- This year (Fall 2019- Spring 2020) CLASS® observation in remaining ~780 VPI classrooms
  - To date: 161 (21%) completed from October 1- November 18
Early Adopter CLASS® Data & VPI Thresholds

(50 early adopter divisions, 544 classrooms)
# Patterns across Early Adopter VPI Classrooms

<table>
<thead>
<tr>
<th>CLASS Domain Threshold Status</th>
<th>Proportion</th>
<th>Number of classrooms (out of 544)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classroom Organization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructional Support</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Status</th>
<th>Emotional Support</th>
<th>Classroom Organization</th>
<th>Instructional Support</th>
<th>Proportion</th>
<th>Number of classrooms (out of 544)</th>
</tr>
</thead>
<tbody>
<tr>
<td>↑ = Above threshold</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
<td>.29</td>
<td>159</td>
</tr>
<tr>
<td>↓ = Below threshold</td>
<td>↑</td>
<td>↓</td>
<td>↑</td>
<td>&lt; .01</td>
<td>1</td>
</tr>
<tr>
<td>↑ = Above threshold</td>
<td>↑</td>
<td>↑</td>
<td>↓</td>
<td>.49</td>
<td>269</td>
</tr>
<tr>
<td>↓ = Below threshold</td>
<td>↓</td>
<td>↑</td>
<td>↓</td>
<td>.01</td>
<td>5</td>
</tr>
<tr>
<td>↑ = Above threshold</td>
<td>↑</td>
<td>↓</td>
<td>↓</td>
<td>.08</td>
<td>44</td>
</tr>
<tr>
<td>↓ = Below threshold</td>
<td>↓</td>
<td>↓</td>
<td>↓</td>
<td>.12</td>
<td>66*</td>
</tr>
</tbody>
</table>

*Lowest performing classrooms spread across 25/50 Early Adopter divisions
Action Steps: 25 Divisions with Low-performing Classrooms

- Received **letters to superintendents** indicating the presence of low-performing classrooms
- Were prioritized for **CLASS® Data Use Consultation sessions** to support data-driven improvement planning
  - Sessions resulted in **written action plans** for each low-performing classroom
  - Immediate **Fall 2019 follow-up sessions** provided to higher-need leadership teams
- Were included in first round of **division-level PD Plan review**
- Will receive **Spring 2020 follow-up sessions** to review action plan implementation
CASTL Provides VPI Programs
Individualized Supports

- CLASS® external reports
- Support local CLASS® observations
- Extensive survey
- Curriculum review
- PD Rubric

Data

Consultation with Leaders
- Review CLASS® data
- Target highest needs classrooms
- Review PD Rubric to understand current practices

Data Use

- CLASS® Feedback guides
- Webinars
- Know-See-Do action planning resources

PD Resources

PD Planning

Consultation with Leaders
- Improve PD Plans over time to demonstrate 6 Elements of Effective PD
# Consultation Supports across 122 Divisions

<table>
<thead>
<tr>
<th>Consultation Activity</th>
<th># completed in 2018-19</th>
<th># completed in 2019-20*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro to AEII Initiative (2 hours)</td>
<td>50</td>
<td>72</td>
</tr>
<tr>
<td>Kickoff Consultation Session (1 hour)</td>
<td>51</td>
<td>74</td>
</tr>
<tr>
<td>Feedback PD (5 hours)</td>
<td>122</td>
<td>NA</td>
</tr>
<tr>
<td>CLASS® Data Use Consultation Session (1-1.5 hours)</td>
<td>NA</td>
<td>63 (70+)</td>
</tr>
<tr>
<td>PD Plan Review (1.5 hours)</td>
<td>NA</td>
<td>33 (89)</td>
</tr>
<tr>
<td>PD Feedback Consultation Session (1-1.5 hours)</td>
<td>NA</td>
<td>7 (115+)</td>
</tr>
</tbody>
</table>

*#s in parentheses reflect planned activities to be completed by 6/2020
Professional Development Rubric: Value for Divisions & Commonwealth

6 Elements of Effective Professional Development

- Data-driven
- Specific, articulated objectives with a sustained focus on key areas
- Practice-focused
- Feedback and analysis loops
- Coherence
- Access for all teachers

<table>
<thead>
<tr>
<th>Division Leaders</th>
<th>VA Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>• What defines effective PD?</td>
<td>• What PD is being provided across VA?</td>
</tr>
<tr>
<td>• How does my divisions’ current plan map onto these 6 elements?</td>
<td>• What is the variability in PD across divisions?</td>
</tr>
<tr>
<td>• What changes can be made to improve my divisions’ PD?</td>
<td>• What is needed to support effective PD?</td>
</tr>
</tbody>
</table>
# Sample Division PD Data

<table>
<thead>
<tr>
<th></th>
<th>Not Yet</th>
<th>Emerging</th>
<th>Effective</th>
<th>Exemplary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data-driven</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific, articulated objectives</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Practice-Focused</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feedback and analysis loops</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Coherence</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Access for all teachers</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Data-driven Decision-making

Across 1,324 VPI Classrooms in 123 divisions, we will understand and improve:

Quality of Teacher-Student Interactions (CLASS®)
- Predict high variability, with many classrooms providing low quality Instructional Support and some classrooms providing low quality in all CLASS® domains
- Teachers and divisions with greater needs will receive more individualized PD

Quality of Professional Development Plans
- Predict high variability in both the quality of the 6 Elements of Effective PD and the resources available to plan and deliver effective PD
- Divisions with greater needs will receive more PD
- Will learn what is working in PD to enhance interactions, improve curriculum use, and improve child outcomes that can be scaled up across Virginia
Researchers at UVA CASTL, in collaboration with and funding from Elevate Early Education (E3), recently developed a comprehensive, integrated, and research-based curriculum to be used in E3’s model early childhood education program—The New E3 School. The curriculum was designed to be used at scale in diverse early education settings for children birth to age 5.
2019-2020 Appropriation Act - Department of Social Services

Out of this appropriation $925,000 the first year and $325,000 the second year from the federal Child Care and Development Fund (CCDF) shall be provided to implement a pilot program in cooperation with the University of Virginia Center for Advanced Study of Teaching and Learning (UVA CASTL) to improve early childhood classrooms in faith-based and private child day care centers. The pilot program shall implement UVA CASTL developed curricula, professional development and coaching modules to improve Kindergarten readiness in these centers.

Out of the amounts provided, $525,000 the first year shall be used to implement the pilot program in 50 early childhood classrooms in faith-based and private child day care centers and $400,000 the first year from the federal CCDF shall be provided to develop a version of the Virginia Kindergarten Readiness Program for the pilot program to use in assessing four-year-olds in these early childhood classrooms.

Out of the amounts provided, $325,000 the second year shall be used to implement an evaluation of the pilot program.
Public-Private Partnership

50 Classrooms funded by the Virginia Department of Social Services

50 Classrooms funded by the Obici Healthcare Foundation

12 Classrooms funded by the Alleghany Foundation

112 Classrooms

105 Active Classrooms*

- 228 Participating Teachers
- 82 Preschool Classrooms
- 52 VPI Classrooms
- 20 Toddler Rooms
- 7 Infant Rooms
- 15 areas of Virginia
- 7 Divisions
- Over 1,500 children

* No programs or teachers have attrited from the pilot. However, some classrooms have closed over time and some of the non-VDSS classrooms are on a delayed start date.
What is STREAMin³?

**CORE**
- RELATE
- REGULATE
- THINK
- COMMUNICATE
- MOVE

**STREAM**
- SCIENCE
- TECHNOLOGY
- READING
- ENGINEERING
- ART
- MATH

Daily activities, routines, & games that maximize the moment-to-moment teacher-child and peer interactions.

Individualized coaching & professional development aligned to the curriculum.

Observations tools & assessments to inform teaching and increase implementation quality.
STREAMin3 Professional Development

- Highly knowledgeable about the STREAMin3 Curriculum
- Certified, CLASS® observers for infant, toddler, and preschool
- VKRP trained
- Trained on 6 Elements of Effective PD

Coach

Bi-weekly Meetings with Teachers

Bi-weekly Classroom Observations

Monthly Program PD Sessions
Questions the Pilot Will Answer

? How well is STREAMin³ implemented in classrooms?

? Do the characteristics of the programs (e.g., program size) and teachers (e.g., years of experience or education) relate to how well STREAMin³ is implemented?

? Does using STREAMin³ relate to improvements in teacher instruction and gains in children’s early learning?
## Information & Data Collected

<table>
<thead>
<tr>
<th>Teacher, Leader, and Program Characteristics</th>
<th>Fidelity of Implementation</th>
<th>Classroom and Child Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background and demographics of program, children, and teachers.</td>
<td>Dosage</td>
<td>CLASS®</td>
</tr>
<tr>
<td>Teacher surveys about work climate, job stress, and satisfaction with STREAMin3.</td>
<td>Quality of delivery</td>
<td>VKRP</td>
</tr>
<tr>
<td>Ongoing tracking of changes: teacher and leader turnover, movement of teachers, classroom closures.</td>
<td>Participant responsiveness</td>
<td>PALS</td>
</tr>
</tbody>
</table>
## Information & Data Collected

<table>
<thead>
<tr>
<th>Description</th>
<th>How Measured</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DOSAGE</strong></td>
<td>The amount of exposure to STREAMin³ curriculum routines, activities, and coaching. Measured with coach activity logs, professional development attendance records, and surveys of teachers and directors.</td>
</tr>
<tr>
<td><strong>ADHERENCE TO &amp; QUALITY OF DELIVERY</strong></td>
<td>How closely what is actually happening in classrooms and during the coaching sessions reflects the intended implementation of STREAMin³ curriculum. Measured using observations conducted by coaches every two weeks.</td>
</tr>
<tr>
<td><strong>PARTICIPANT RESPONSIVENESS</strong></td>
<td>How teachers, leaders, and families feel about the curriculum. These feelings often influence the quality, adherence, and dosage of delivery. Measured through feedback surveys (collected in the spring) and coach ratings of teacher engagement.</td>
</tr>
</tbody>
</table>
Partnering with VPI in 52 Classrooms

- Franklin - 4 classrooms
- Isle of Wight - 6 classrooms
- Southampton - 10 classrooms
- Suffolk - 24 classrooms
- Surry - 2 classrooms
- Covington - 6 classrooms

Unique in Virginia
The only classrooms with coordinated implementation of all ECE initiatives
Measures of improved educational experiences in preschool

- Curriculum Use—Implementation Fidelity
- Teacher-Child Interactions—CLASS® Observations
- Children’s School Readiness—VKRP

Data provided back to teachers and leaders during preschool to continuously improve children’s early educational experience

Resulting in improved learning during preschool and
Increased school readiness at kindergarten entry