

Advancing Effective Interactions and Instruction in VPI Classrooms

Progress Report

**Prepared for the Chairmen of House Appropriations and
Senate Finance Committees**

By UVA-CASTL

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Executive Summary

In accordance with the *A Plan to Ensure High-Quality Instruction in All Virginia Preschool Initiative (VPI) Classrooms*, UVA-CASTL's Advancing Effective Interactions and Instruction (AEII) initiative helps Virginia's school leaders and VPI teachers provide high-quality early learning experiences to support children's school readiness skills through CASTL-AEII's objectives to improve the quality of teacher-child interactions and instruction (measured by the Classroom Assessment Scoring System [CLASS®] tool); support teachers' use of evidenced-based curriculum; and support VPI leaders to provide their teachers high-quality individualized professional development (PD).

CLASS® Observation and Data in VPI Classrooms

External CLASS® data across the 2018-19 and 2019-20 school years were obtained from 95%¹ of the VPI classrooms (1282) across 124 participating VPI divisions². In addition to the required, every-two-years external CLASS® observations, divisions were encouraged to begin planning and conducting local CLASS® observations overseen by local leaders to build local capacity and provide teachers more frequent feedback on their interactions more regularly (at least bi-annually). A little over half of leaders (52%) reported starting their local observations this school year.

In Virginia's VPI classrooms, external CLASS® data from 2018- 2020 indicate that:

- CLASS® scores in VPI classrooms align with national trends.
- 35% of VPI classrooms meet or exceed quality thresholds for emotional, classroom organization, and instructional support.
- 48% of classrooms and divisions' scores fall below the threshold for Instructional Support and above thresholds for Emotional Support and Classroom Organization indicating the need to improve interactions and instruction to promote children's higher-level thinking, language skills, and understanding/persistence.
- 9% and 8% of classrooms fell below 2 and 3 thresholds of quality, respectively.
- Within divisions, there is wide variability across classrooms in the quality of teacher interactions as defined by the CLASS®.

Curriculum Implementation

CASTL-AEII worked with VDOE to ensure that all VPI divisions are using a vetted comprehensive curriculum. CASTL-AEII provided supports related to curriculum implementation and fidelity and gathered information that indicates:

- The majority (97%) of divisions report using a research-based, vetted curriculum.
- Curriculum is a key focus area for professional development (PD) in most divisions; PD is provided by curriculum publishers and internal staff.
- CASTL-AEII provided division leaders opportunities to collaborate with their Virginia colleagues to plan and share strategies for supporting effective curriculum implementation.
- VPI leaders have varying capacity to provide teachers with both ongoing PD and/or feedback to support curriculum implementation including the use of tools to measure fidelity of implementation.

¹100% of classrooms were scheduled to be observed but 5% were not completed due to COVID-19 school closures.

²124 out of the 129 eligible divisions participated in the Virginia Preschool Initiative (VPI). Two divisions' VPI programs (Fairfax City and Emporia) are under the purview of Fairfax County and Greensville, respectively. Therefore, the CASTL-AEII caseload for supporting VPI leaders was 122, which will be used to refer to the total number of participating divisions throughout the rest of the report.

- Divisions frequently provide PD when they adopt a new curriculum. However, teachers who onboard after initial training miss intensive training in how to implement the curriculum.
- Curricular PD often emphasized implementing components of the curriculum but rarely 1) integrated a focus on curriculum use with teacher-child interactions and child assessment data or 2) focused on how to individualize instruction.

Professional Development (PD) in VPI Classrooms

To increase understanding of the use and quality of professional development (PD) across VPI Classrooms, VDOE and CASTL-AEII developed a PD Rubric and Questionnaire to assess and improve PD across divisions. Data gathered from these tools indicate:

- There is a wide variety of professional development (PD) quality being delivered to preschool teachers across the state.
- Providing PD that is practice-focused is the greatest area of need across the state.
- Many divisions lack tools and resources to efficiently use data to plan and evaluate PD.
- Most divisions currently use CLASS® to inform their PD plans, but other data sources are used less frequently.
- The number of hours of PD that is provided to preschool teachers varies widely, ranging from under 15 hours to over 100 hours.
- The frequency with which divisions provide feedback and analysis loops to teachers is highly variable across the state.
- All divisions provide some type of group training or workshop and over half (62%) conduct some amount of PD labeled “coaching.”
- PD usually focuses on teacher-child interactions and curriculum implementation, sometimes focuses on specific instruction areas, and rarely targets instruction for the individualized needs of students.

Supports to Improve Quality

In response to CLASS®, curriculum, PD data findings, and feedback from teachers and leaders, CASTL-AEII provided a variety of supports to VPI division leaders that included group trainings, individualized and group consultation sessions, and resources for PD planning. Data gathered from teacher and leader surveys and AEII consultation and training notes indicate:

- CLASS® knowledge increased for both teachers and leaders as a result of the Introduction to the Initiative group trainings.
- The individualized CASTL-AEII CLASS® reports were perceived as very useful and were used to guide improvement as reported by teachers and leaders.
- Individual and group consultations with leaders helped build their knowledge and skills in using CLASS® and other data to plan effective PD and providing effective PD, including practice-focused PD targeting curriculum implementation and teacher-child interactions.
- Individualized consultation supported leaders to use CLASS® data to plan individualized PD for highest needs classrooms.
- Leaders reported that the PD Rubric was a useful framework and improvement tool for their planning and that their PD planning practices will improve as a result of the PD consultation.

A state-wide measure of improvement in teacher-child interactions quality will not be available until external CLASS® observations are collected in the next two-year period (2020-2022).

COVID 19 Impact and Implications

The COVID-19 pandemic interrupted a number of CASTL-AEII activities in Spring 2020. Out of 1,357 VPI classrooms, 75 (5%) CLASS® observations were incomplete across 19 divisions due to COVID 19-related

school closures. All unused observation funds were returned to the Commonwealth. School closures delayed some leaders' provision of external CLASS® feedback to teachers on external CLASS® reports completed around the time of school closures. CASTL-AEII consultants continued to provide leaders supports in the form of individualized consultation sessions and group sessions and trainings after school closed in March. In the majority of cases, support sessions that were delayed due to leaders' schedules affected during the pandemic were rescheduled by June 1st. In 2020-21, CASTL-AEII recognizes the importance of children safely returning to classrooms for continuity of learning to promote children's social-emotional and academic development. Covid-19 poses challenges for families, programs, and communities, the importance of quality interactions and instruction remains, reinforcing the continued need to observe and support teacher child interactions.

Plans Moving Forward

CASTL and VDOE will continue working together toward VDOE's plans for a statewide uniform measurement and improvement system across publicly funded early childhood programs in Virginia. CASTL-AEII will continue to support educators and division leaders to improve classroom quality and provide effective PD through:

- CLASS® observations and reports:
 - Re-observation of ~700 VPI classrooms, data reports and analysis, including change over time.
 - Initial observations of ~400 observations, half of all non-inclusion, early childhood special education (ECSE) classrooms across the Commonwealth.
- Continued PD support focused on moving all classrooms above quality thresholds and increasing leaders' capacity to utilize data to inform PD.
- Data-based differentiated supports to provide higher need divisions and classrooms more intensive PD and resources.
- Supporting leaders to ensure high quality instruction and interactions as they engage in new in-person and virtual learning structures for the 2020-21 school year as a result of COVID-19. Through the federal Governor's Emergency Education Relief (GEER) Fund, CASTL will provide additional professional development to VPI/Early Childhood Special Education educators to support children's social-emotional needs in response to COVID-19. CASTL will emphasize trainings that support educators to provide inclusive and anti-racist ECE experiences for Virginia's preschool children.

Overview

Background

In 2017, the Joint Legislative Audit and Review Commission (JLARC) released the report “Improving Virginia’s Early Childhood Development Programs” that reviewed state-supported early childhood development programs and made recommendations for improving children’s school readiness through investments to improve quality. The General Assembly supported these recommendations through several investments beginning in 2018-19 to understand and support quality teacher-child interactions and instruction, and effective research-based curriculum implementation in every Virginia Preschool Initiative (VPI) classroom. To that end, the University of Virginia’s Center for Advanced Study of Teaching and Learning (CASTL) has partnered with Virginia Department of Education (VDOE) and VPI programs worked together to meet these goals. CASTL’s work was defined through the budget language below (Item 128.K of the 2019 Appropriation Act):

Out of the appropriation in this Item, \$350,000 the first year and \$350,000 the second year from the general fund was provided through the Department of Education to the University of Virginia to ensure that all Virginia Preschool Initiative classroom programs would 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 were to 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, would establish a statewide minimum acceptable threshold for the quality of teacher-child interactions for Virginia Preschool Initiative classroom programs, and classrooms that were assessed below the threshold would receive additional technical assistance from the Department of Education and the University of Virginia. The threshold would be established with the assistance of the University of Virginia's Center for Advanced Study of Teaching and Learning, using a rigorous and research-based classroom observational instrument. The threshold should be established no later than the beginning of the 2018-2019 school year and the classroom assessments should begin no later than spring 2019. The University of Virginia's Center for Advanced Study of Teaching and Learning should submit a progress report on such classroom observations to the Chairmen of House Appropriations and Senate Finance Committees no later than June 30, 2019, and annually thereafter.

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.

CASTL has prepared this Progress Report for the Chairmen of the House Appropriations and Senate Finance Committees. The main purpose is to summarize key activities, data, findings, and accomplishments for Year 2 (2019-2020), building from the Year 1 (2018-2019), as well as looking ahead to 2020-2021. Years 1 and 2 encompass July 1, 2018 to June 30, 2020.

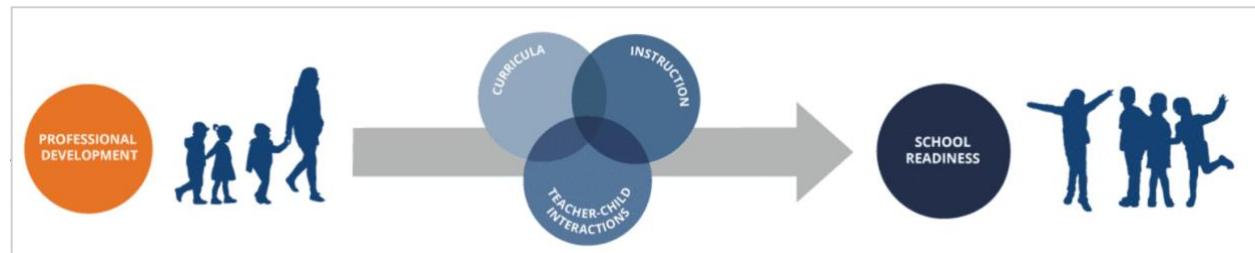
CASTL-AEII Initiative Objectives

CASTL's Advancing Effective Interactions and Instruction (AEII) initiative helps Virginia's school leaders and VPI teachers provide high-quality early learning experiences through three main objectives:

1. Assess the **quality of teacher-child interactions and instruction** through external observations using the Classroom Assessment Scoring System (CLASS®) tool in all VPI classrooms every two years. Children who experience high-quality teacher-child interactions and instruction show higher levels of both social-emotional and academic development.
2. Support VPI teachers' use of **vetted, evidenced-based curriculum**. Effective, evidenced-based curricula help ensure children are supported in their learning in developmentally appropriate ways.
3. Provide ongoing support and resources to help leaders plan **high-quality, individualized professional development (PD)** that enhances teachers' practice.

Figure 1

CASTL-AEII Model for Enhancing School Readiness



CASTL-AEII focuses on these three key ingredients – teacher-child interactions and instruction, curricula, and high-quality professional developments supports – because they are all critical components needed to provide a high-quality early learning environment. CASTL-AEII supports leaders to use data to assess each of these areas and plan individualized professional development that will best equip teachers to support young children's school readiness.

Overview of Data Collected

CLASS® external data. External CLASS® observations occurred in 95%³ of VPI classrooms across the Commonwealth between Fall 2018-Spring 2020. External observations were conducted by Teachstone (contracted by UVA-CASTL) or Virginia Quality (the voluntary Quality Rating and Improvement system administered by the Virginia Early Childhood Foundation). Data from these observations were used to create classroom- and division-level reports, as well as calculate statewide CLASS® score averages.

PD Rubric and Questionnaire. To assess the quality of professional development (PD) around Virginia, VDOE and CASTL-AEII developed a rubric and aligned questionnaire based on six elements of effective PD. Each division completed a questionnaire about their PD that was then coded and scored by CASTL-AEII team members. To date, 99% of the divisions submitted a PD questionnaire that was scored. Data from the questionnaires include numeric scores for each of the elements of effective PD as well as other quantitative and qualitative information gleaned from the questionnaires (e.g. number of hours of PD and data sources used by divisions).

³ 100% of classrooms were scheduled to be observed but 5% were not completed to COVID-19 school closures.

Feedback surveys. CASTL-AEII created and disseminated paper and online surveys to gather information from VPI teachers and division leaders on different aspects of the initiative. Surveys collected information about the Introduction to Initiative sessions, CLASS® reports and feedback meetings, CASTL-AEII consultations and supports, the PD questionnaire, and group consultation sessions. More details about the surveys, including participant information, can be found in the Appendix.

Consultation and training session notes. CASTL-AEII consultants and team members collected data during individual and group consultation and training sessions. Consultants took notes on their discussions with divisions leaders about their division (e.g., reported strengths and areas of need, local CLASS® data collection plans, leader engagement and feedback). Team members also collected information on PD practices during group sessions, through polls and leader input via chats and discussions.

Summary of Supports Provided to Raise Quality & Outcomes

CASTL-AEII provided division leaders a variety of supports that helped leaders provide teachers individualized, data-driven, professional development including feedback and resources to improve the quality of interactions, instruction, and curriculum implementation in VPI classrooms.

1. Supports to understand and improve quality of teacher-child interactions included:

- Reports, trainings, feedback, and PD sessions related to CLASS® knowledge and using CLASS® data. These supports and resources were found to be useful for both teachers and school leaders.

2. Individualized leader consultation sessions included:

- **Kickoff** sessions, which oriented school leaders to the CASTL-AEII Initiative, built relationships, learned of strengths and needs, and modeled individualized PD support.
- **CLASS® Data Use** sessions, which built foundational knowledge and skills to be able to interpret and utilize CLASS® data and supported leaders to plan for improvements, especially in highest need classrooms.
- **PD Feedback** sessions, which built knowledge about the elements of effective PD through PD rubric tool, reflect on current capacity, need areas, and plan improvements.

3. Group trainings and sessions, with free aligned resources included:

- **Introduction to Initiative training** sessions that provided an overview and more in-depth understanding of CLASS®.
- **Know See Do (KSD) Action Planning webinar** to introduce these planning guides for leaders to connect CLASS® and child assessment data to targeted, practice-based professional development options.
- **Giving Effective Feedback webinar** that supported leaders in learning how to provide CLASS-based feedback to teachers.
- **Practice-focused PD breakout sessions (Coaching, PLCs, training/workshops)** that helped leaders plan practice-focused PD strategies in their selected formats (coaching, professional learning communities, or trainings/workshops) to increase Instructionally Supportive interactions.

- **Curriculum sessions** (5 sessions for the 5 most commonly used curricula: Big Day for PreK, Creative Curriculum, OWL, Frog Street, Tools of the Mind) with accompanying “curriculum information sheets” that helped leaders plan effective PD for their selected curricula, in collaboration with their peers.

COVID 19 Impact

COVID 19 produced a widespread, significant impact on the education system and all school divisions stopped in-person classrooms in March of 2020. As a result, 5% of CLASS® observations were not able to be completed. In March, consultants experienced a decrease in PD-related communications. Throughout April and May, however, most leaders were able to participate in rescheduled consulting sessions, further continuing the improvement work initially started.

Looking Ahead

CASTL-AEII will work with VDOE to support division leaders as they plan for a mix of virtual and in-person learning to ensure high quality ECE experiences for children in the 2020-21 school year. Support will be individualized and flexible, aiming to meet division needs in a timely and effective manner. This will include a focus on divisions that have been identified as high need, onboarding ECSE classrooms into the initiative, and supporting teachers in providing inclusive and anti-racist ECE experiences for preschool children. GEER funding will be used to support divisions’ responses to the COVID-19 crisis with targeted professional development that will assist teachers in support children’s social-emotional needs.

Interactions & Instruction: Data on Quality & CASTL-AEII Supports

What are Quality Interactions & Instruction and How Did We Measure Them?

Effective teacher-child interactions are critical for young children to learn in early childhood classrooms. Children in classrooms with high-quality interactions have positive developmental (e.g. social-emotional) and academic outcomes. To measure the quality of teacher-child interactions in VPI classrooms, CASTL-AEII used the Classroom Assessment Scoring System (CLASS®). The CLASS® is a reliable, valid observation tool that assesses three key domains: Emotional Support, Classroom Organization, and Instructional Support. These three domains are further broken down into ten CLASS® dimensions. Tables 3 and 4 in the Appendix provide descriptions of the CLASS® domains and dimensions.

All VPI classrooms are externally observed once every two years. CASTL-AEII worked with Teachstone, the organization that owns the CLASS® observation tool, to complete the external observations in VPI classrooms. In addition, a few divisions used scores from previously completed observations with Virginia Quality (VQ, the voluntary quality rating and improvement system administered by Virginia Early Childhood Foundation) to meet this criterion (per VDOE guidelines). Information about the VPI observation protocol and requirements for observers can be found in Items 1 and 2 in the Appendix.

VDOE encouraged divisions to begin planning and consider implementing local CLASS® observations this school year before requiring local observations twice each year in every VPI classroom in 2020-21. Information about division participation collected by CASTL-AEII consultants indicated that about half of divisions (52%) started their local observations by 2019-2020. Local CLASS® observations are completed by certified observers including, but not limited to, local division leaders, such as VPI coordinators or principals. About 20% of divisions reported various challenges related to completing the local observations, often related to funding staff to get trained to CLASS® reliability. Consultants will continue to support divisions as they plan for completing these observations as part of their process going forward.

The external CLASS® scores gathered last school year and this year will be considered baseline data, providing an initial estimate of the quality of teacher-child interactions in Virginia. In the coming years, external and local observations will provide important data points to inform teacher professional development and track growth in quality as measured by CLASS® over time.

Data on Quality of Interactions in VPI Classrooms

Sample

In addition to the 544 classroom observations completed in Spring 2019, CASTL-AEII completed 724 external observations this school year. This year's 724 observations were spread across 77 divisions, 67 of which were new to the initiative. The other 10 divisions were part of last year's "Early Adopter" group but had remaining classrooms to observe for various reasons (e.g. teacher had an extended absence, division added new VPI classrooms, etc.). Additionally, 14 observations were completed by Virginia Quality (VQ) between Fall 2018 and Spring 2020. Three divisions' observations (7 out of the 14 VQ observations) were done entirely by Virginia Quality. The other 7 VQ observations were done in mixed-delivery classrooms (i.e. community-based preschool programs with VPI funding) in three divisions who also had CASTL-AEII external observations. In total, data were obtained from 1,282 VPI classrooms across 120 divisions in the Commonwealth.

Observations Across the Commonwealth

CASTL-AEII anticipated completing all VPI classroom observations by the end of March 2020. Due to the COVID-19 outbreak and the subsequent closing of Virginia schools in March through the end of the

school year, 75 VPI classrooms across 19 divisions were not observed. CASTL-AEII returned unused observation funds to the Commonwealth.

Completion rates:

- 85% of school divisions had all classrooms observed, representing 95% of VPI classrooms.
- 15% of divisions (19 divisions) had incomplete observation data or were not observed due to COVID-19. 14 of these 19 divisions were over 50% completed. Washington County and Prince Edward County had no external observations completed.⁴

Dimension and Domain Descriptives

Each classroom observation resulted in scores for the ten CLASS® dimensions across four observation cycles (each involving 20 minutes of observation, followed by 10 minutes of scoring) during a typical school day. Dimension scores within each domain were averaged to calculate the domain scores of Emotional Support, Classroom Organization, and Instructional Support.

Table 1 indicates the CLASS® dimension and domain scores averaged across the 1,282 external CLASS® observations. Each row includes the mean (or average) score across the observations, the standard deviation, and the range of lowest scores to highest scores observed.

Table 1

CLASS® Dimension and Domain Descriptive Statistics

CLASS® Domains/Dimensions	Mean	Standard Deviation	Range
Emotional Support Domain Average	5.97	0.74	2.88 – 7
Positive Climate	6.03	0.96	2.25-7
Negative Climate ⁺	1.13	.31	1-3.75
Teacher Sensitivity	5.93	1.01	2.25-7
Regard for Student Perspectives	5.04	1.16	1.25-7
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Classroom Organization Domain Average	5.79	0.85	2.08 – 7
Behavior Management	6.02	1.02	2-7
Productivity	6.10	0.83	2.5-7
Instructional Learning Formats	5.24	1.03	1.5-7
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Instructional Support Domain Average	2.95	0.95	1 - 6.5
Concept Development	2.43	0.95	1-6.75
Quality of Feedback	2.95	1.11	1-7
Language Modeling	3.46	1.06	1-6.75

Note. CLASS® scores range from 1-7, with higher scores indicating higher quality interactions (except Negative Climate scores where higher scores indicate more negativity and lower quality interactions).

⁴ Washington County and Prince Edward County, along with the other three divisions with a completion rate of under 50%, will be observed in 2020-21, along with Cohort 1 from the first year.

These aggregated CLASS® scores indicate VPI classrooms, on average, are a 5.97 in Emotional Support, 5.79 in Classroom Organization and 2.95 in Instructional Support. These statewide aggregated data indicate:

1. **VPI classroom CLASS® averages align with national trends⁵.** Important to note, there are a range of scores within each domain, indicating that classrooms across the Commonwealth provide a range of quality on either side of the average.
2. **Instructional Support is an area of need in VPI classrooms.** The low average indicates that Instructional Support is an area for growth in VPI classrooms. The Instructional Support domain tends to be lower than Emotional Support and Classroom Organization domains nationally as well. Classrooms lower in Instructional Support have fewer interactions that promote children's higher-level thinking, language skills, and understanding/persistence (e.g. questioning, back-and-forth conversations, descriptive feedback).
3. **Variability in dimension scores indicate relative areas of need within domains.** For example, the average score for Regard for Student Perspectives is lower than the other dimension averages in Emotional Support (excluding Negative Climate). Classrooms with this pattern of scores would suggest that teachers have warm, respectful relationships with children and are responsive to individual needs but have more teacher-driven instruction with fewer opportunities for child autonomy. Similarly, the Instructional Learning Formats average score is lower than the other dimension averages in Classroom Organization. Classrooms with this pattern of scores indicate teachers effectively manage behavior and spend time productively but are less effective in engaging children. Although these domains and dimensions were fairly strong overall, there is room for improvement.

VPI Domain Scores by Threshold

VDOE implemented baseline thresholds to determine minimum standards for each CLASS® domain: a score of 5 for Emotional Support and Classroom Organization and 3.25 for Instructional Support. Research indicates these levels are a necessary baseline to ensure positive impacts on children, and the levels align with Level 4 in the current Virginia Quality rating system. Results from research and large-scale initiatives indicate that a large percentage of classrooms may initially fall short of these benchmarks, particularly in the domain of Instructional Support. VDOE identified these thresholds in its Plan to Ensure High-Quality Instruction in all Virginia Preschool Initiative Classrooms and plans to revisit them once robust, statewide data are available. Classrooms that exceed these thresholds still have areas to improve the quality of their interaction and instruction, and the goal for teachers and divisions should be continuous improvement over time.

CASTL-AEII examined the percentage of classrooms and division averages across all three VDOE domain thresholds. Table 2 shows the percentage of VPI classrooms who met or did not meet each of the three domain thresholds. 35% of VPI classrooms met or surpassed all three VDOE domain thresholds. 48% of VPI classrooms met the thresholds for Emotional Support and Classroom Organization but did not meet the threshold for Instructional Support. 9% of VPI classrooms did not meet the VDOE thresholds for two domains, and 8% of classrooms did not meet any of the three thresholds. **These latter two categories represent 213 classrooms and indicate that there are many classrooms around the Commonwealth with significant needs.** Children in these classrooms are not engaged in the kinds of interactions necessary for emotional and cognitive growth, despite being some of Virginia's most vulnerable young learners.

⁵ Head Start 2019 National data are similar to VPI 2018-2020 aggregated data (difference in mean scores 0-.08). Head Start classrooms, on average, scored a 6.05 in Emotional Support, 5.79 in Classroom Organization and 2.91 in Instructional Support. Retrieved June 24, 2020 from <https://eclkc.ohs.acf.hhs.gov/data-ongoing-monitoring/article/national-overview-grantee-class-scores-2019>

Table 2

VPI Classrooms - Met Domain Thresholds

CLASS® Domains - Threshold Status				
Emotional Support	Classroom Organization	Instructional Support	Percentage of classrooms that met thresholds (combined)	
✓	✓	✓	35%	Met 3 thresholds
✓	✓	✗	48%	Met 2 thresholds
✓	✗	✓	<1%	
✗	✓	✓	0%	
✗	✗	✓	<1%	Met 1 threshold
✗	✓	✗	2%	
✓	✗	✗	7%	
✗	✗	✗	8%	Below all thresholds

At the division level, classroom performance on the CLASS® indicated wide variability. There were only a handful of divisions (5% of divisions) where each of their classrooms were above all three thresholds. The other highest performing classrooms were spread across 79 other divisions (66% of divisions). Similarly, 9% of divisions had each of their classrooms above the thresholds for Emotional Support and Classroom Organization, but the other high performing classrooms were in 92 other divisions (77%). Higher need classrooms were likewise spread across divisions. 49% of divisions had classrooms under two thresholds and 33% of divisions had classrooms under all three thresholds. Of note, however, is that there was great variability in the number and proportion of higher need classrooms across divisions. For example, some large divisions had only one high needs classroom, whereas some smaller divisions had no high needs classrooms at all.

Takeaways from CLASS® data on teacher-child interactions indicate:

- 1. VPI classrooms and divisions have a variety of strengths in terms of teacher-child interactions.** Some VPI classrooms have high-quality interactions that meet or exceed the VDOE thresholds. Children in these classrooms will have ECE experiences and opportunities that research shows link to stronger social-emotional, self-regulation, cognitive, and early academic skills that promote kindergarten readiness.
- 2. A significant number of VPI classrooms and divisions need support to improve the quality of interactions that preschool children experience.** The majority of teachers need support to improve their instructional support to children. Children in classrooms with low Instructional Support scores are less likely to make academic gains. Plus, classrooms below at least two thresholds include even more low-quality interactions. Children in these environments are not experiencing the level of quality needed to develop the skills to be sufficiently ready for kindergarten.

3. **Some divisions have larger percentages of higher need classrooms and need more intensive supports.** Thus, support to divisions to ensure that all higher need classrooms improve must be tailored to divisions' size, needs, and resources.

Supports for Using CLASS® Data & Outcomes

To improve VPI teachers' and leaders' CLASS® knowledge and data use, CASTL-AEII offered numerous supports. Introduction to Initiative trainings were held for each division to provide an overview of the CASTL-AEII initiative, as well as introduce the CLASS® tool to many teachers and leaders before observations occurred. Following the CLASS® observations, CASTL-AEII created classroom-level reports to illustrate areas of strength and growth in classrooms for teachers, as well as created division-level reports to provide aggregated data to leaders. Both classroom-level and division-level reports were useful tools to inform leaders' individualized decisions on PD for teachers. In addition, CASTL-AEII supported leaders to provide CLASS-based feedback to teachers, as well as helped leaders understand how to use CLASS® data, to improve teacher and student outcomes. The following items describe each of these elements in more detail, as well as provide selected outcomes and feedback from the field:

1. **Introduction to Initiative trainings improved teachers' and leaders' CLASS® knowledge.** CASTL-AEII provided an overview of the CLASS® tool to VPI teachers and division leaders. Teachers and leaders learned about the CLASS® domains and dimensions and watched videos to look for examples. Over the spring and fall of 2019, approximately 2,450 teachers and leaders participated in these trainings. A post-training survey, completed by 64% of attendees, indicated that most attendees reported that they knew nothing or a little about the CLASS® tool prior to the Intro training session (75% of responses). After attending the training, most attendees self-assessed that they knew "quite a bit" about CLASS® (80% of responses), indicating these sessions substantially increased CLASS® knowledge around the Commonwealth and prepared leaders and teachers for the upcoming CLASS® observations and feedback sessions.
2. **Classroom-level CLASS® reports provided useful information to teachers about their CLASS® observations.** Each report provided domain-, dimension-, and cycle-level scores, along with information specific to each VPI teacher's observation. The specific information section was organized by areas of strength and growth based on the teachers' dimension scores. Teachers found reports to be a useful tool for understanding their areas of strength and growth. 90% of teachers who responded to the survey indicated that they would use the CLASS® data to inform improvement in teaching practices. Division leaders were also satisfied with the reports, with 82% reporting that the classroom-level reports were "very" or "extremely" useful. These results were similar for the two versions of the report, including the more automated, resource-saving version piloted in 2019-20.
3. **Division-level reports provided an overview of divisions' overall CLASS® performance.** These reports synthesized CLASS® data for each classroom, which was then averaged per site (i.e. school or center) and for the division. Leaders reviewed this data prior to meeting with their consultant, which is described in more detail below. 84% of leaders who responded to the survey rated the division-level reports "very" or "extremely" useful.
4. **CASTL-AEII built upon last year's supports to division leaders in providing effective CLASS-based feedback to teachers.** Division leaders were provided with a structured feedback process to support conversations with their teachers to review and interpret their CLASS® report. VPI division leaders were also given access to the Effective Classroom Interactions (ECI) Online PD Modules to deepen their CLASS® knowledge to better support teachers in feedback meetings.

- This year, a new Effective Feedback webinar was delivered in Fall 2019 to review elements of effective feedback, discuss the contexts of local and external observations, and provide free CLASS-aligned resources. Effective Feedback supports were rated as helpful with 63% of leader respondents reporting the webinars as “very” or “extremely useful.”
- CASTL-AEII created a series of planning guides to help leaders align CLASS® data to PD to promote child outcomes. These *Know, See, Do* (KSD) planning guides provide high-quality resources for leaders to plan division-wide and individualized PD to improve teachers’ interactions and instruction. Each guide includes links for teachers to learn more about children’s needs or teaching strategies, videos to watch the strategies in action, and example SMART goals to implement the new strategies. In 2019-2020, CASTL-AEII developed three KSD guides: for self-regulation skills, social skills, and thinking skills, along with an “action planning template” for leaders to individualize action steps for their teachers. KSD guides for language, literacy, and math are in development. Over 50% of leader survey responses indicated that leaders use these KSD guides at least *sometimes* to plan teachers’ action steps in feedback meetings. About a fifth of survey responses indicate that leaders *always* use KSD guides to plan teachers’ action steps.

5. CASTL-AEII consultants worked with VPI division leaders to improve their ability to use CLASS® data for planning PD. Since many VPI division leaders did not have experience using CLASS® data before the initiative, CASTL-AEII consultants prioritized supports to build data use skills. These supports included a document to guide leaders through a CLASS® data file, as well as a consultation session to review the CLASS® data with their CASTL-AEII consultant.

- The *CLASS® Compendium* document provided instructions and guiding questions on how to interpret the division-level CLASS® report. This resource supported data-driven PD planning for highest need classrooms and sites, as well as division-wide. VPI divisions leaders were asked to review this document and division-level report prior to meeting with their CASTL-AEII consultant for CLASS® data use sessions.
- In CLASS® data use consultation sessions, CASTL-AEII consultants met with leaders to review their division-level CLASS® report and plan improvements, prioritizing highest need classrooms. Sessions were first held with highest need Cohort 1 divisions in Fall 2019, followed by remaining Cohort 1 and Cohort 2 divisions as CLASS® reports were completed. Consultants and leaders co-developed Individualized PD plans for all classrooms with scores below two or three CLASS® domain thresholds. Individualized plans were guided by CLASS® data and leaders’ assessments of “root causes” or challenges contributing to lower quality teacher-child interactions. Individualized improvement plans typically included increasing frequency of leaders’ observation and feedback to teachers on prioritized areas of need. Division-wide plans to improve interactions and instruction were also developed to address trends in needs. Consultants scaffolded division leaders’ data interpretations and planning ideas to increase leader capacity for using CLASS® data to plan effective teacher professional development (PD). Consultants also provided free instructional resources aligned to needs to enhance PD planning (see Professional Development section for more details). These data use sessions were rated highly by division leaders: Nearly 75% of leaders surveyed (representing leaders from 66% of divisions) found the data use sessions “very” or “extremely” useful. CASTL-AEII will continue working with divisions to further improve leader capacity for CLASS® data use.

Curriculum: Data on Quality & CASTL-AEII Supports

What is Curriculum Implementation and Why Does it Matter?

A core component of high-quality early education is that children are provided opportunities, experiences, and materials that allow them to engage deeply across early learning domains to build their school readiness skills. Using effective early childhood curricula helps ensure children are engaged in developmentally appropriate, child-led and teacher-guided activities that promote their learning and development. Use of high-quality curriculum scaffolds teachers to engage in effective interactions and instruction and can be particularly helpful for teachers new to pre-kindergarten. Lacking a formal curriculum, children are more likely to experience variability in the quality of activities to which they are exposed and have a greater chance of missing out on interactions and instruction that support school readiness. However, simply handing teachers a packaged curriculum is not enough to ensure effective implementation of that curriculum. Teachers need professional development focused on how to fully implement their curriculum to maximize the positive impact of the curriculum on children's learning.

What Does the Data Tell Us about Quality of Curriculum Implementation?

Data available on divisions' use of research-based, vetted curricula was drawn from multiple sources including: divisions' responses to PD Questionnaires (99% of divisions), PD Rubric data (99% of divisions), CASTL-AEII notes on Curriculum sessions (with 48% of divisions using top 5 curricula represented), and divisions' reports of their selected curricula to VDOE in October 2019 (100% of divisions). No data on fidelity of implementation is available at this time.

Major takeaways across data sources include:

- Almost all divisions report using a research-based, vetted curriculum in VPI classrooms.** 97% of VPI divisions reported using one of the 8 vetted curricula. The most commonly used comprehensive curricula are Creative Curriculum (used by 34% of divisions) and Scholastic's Big Day for PreK (used by 24% of divisions). Only four divisions were not yet using a vetted curriculum: three reported using a non-vetted curricula (Starfall for PK, We Can by Voyager, and Houghton Mifflin PreK Curriculum Theme Box), and one reported using the PreK standards (the Virginia Foundation Blocks) as a curriculum.

Table 3

Primary Curricula Used by Divisions and Curriculum Session Participation

Primary Curriculum (as reported by division)	# Divisions using curriculum	% Divisions using curriculum	# Divisions (using curricula) attended Leaders Curriculum Calls Spring 2020	% Divisions (using curricula) Attended Leaders Curriculum Calls Spring 2020
Creative Curriculum	42	34%	22	52%
Scholastic's Big Day for PreK	29	24%	8	28%
Frog Street	17	14%	14	82%
Tools of the Mind	9	7%	3	33%
Opening the World of Learning	7	6%	3	43%
High Scope	6	5%	N/A	N/A
Streamin ³	6	5%	N/A	N/A
Blueprint for Early Literacy/Blueprint 2.0	2	2%	N/A	N/A
TOTAL	118	97%	50	48%

- 2. Curriculum is a key focus area for PD in most divisions; leaders seek out both external experts (i.e., curriculum publishers) and provide their own curricular PD.** Sixty-three percent of divisions reported focusing on curriculum implementation in the professional development provided to teachers in 2019-2020 (i.e. listed as a learning objective in the PD Questionnaire; see PD section for details). Most divisions reported that they contract with publishers to offer initial trainings when adopting new curricula, and some divisions follow that initial training with additional training/coaching days from publishers and/or teacher professional learning community (PLC) meetings throughout the year. Division leaders who implemented curriculum-focused PLCs said their teachers found PLC meetings helpful in promoting collaborative learning and allowing teachers to become more confident in their implementation.
- 3. Many division leaders embrace opportunities to collaborate with their colleagues across the state to plan and share strategies for supporting effective curriculum implementation.** More than 70 VPI division leaders from 51 divisions (about half of divisions using the curricula) attended one of five interactive, group consultation sessions facilitated by CASTL-AEII in the spring of 2020. These Curriculum sessions were focused on supporting curriculum implementation in the 5 most commonly used curricula: Creative Curriculum, Big Day for PreK, Frog Street, Tools of the Mind, and Opening the World of Learning.
- 4. There is variability in leaders' capacity to provide teachers with ongoing PD or feedback to support curriculum implementation.** Whereas some division leaders have been using their current curriculum for many years, have attended publisher-provided PD, and had ongoing contacts with publishers/trainers to develop internal capacity for supporting curriculum implementation, others are new to their current curriculum and have little exposure to the various components (including teaching guides, materials, child assessments, resources to support individualization, and fidelity checklists). The more leaders can learn about the various components of the curricula and what they look like when implemented as intended, the more they will be able to ensure that teachers know and use these resources and can provide teachers feedback to enhance implementation fidelity/quality.
- 5. There is variability in use of standardized tools to support fidelity of curriculum implementation.** Of the five most frequently used vetted curricula, two (Frog Street and Big Day for PreK) provide brief fidelity tools to support teachers' implementation of the curriculum at no cost; one (Creative Curriculum) provides in-depth tools at additional cost, and two (Tools of the Mind, OWL) do not offer any standardized fidelity tool, necessitating that VPI division leaders craft their own methods of assessing implementation fidelity. The subset of VPI division leaders who participated in the five group consultation sessions on curriculum implementation were asked to share how they used fidelity tools. Given such variability in availability of fidelity tools, wide variability in how divisions reported using such tools is not surprising. For some curricula (Big Day, Tools of the Mind, OWL sessions) no VPI division leaders reported using tools to assess/support fidelity. For others (Frog Street) there was much more widespread use of fidelity tools provided by publishers. *Having a curriculum fidelity tool and the capacity to use it to provide teachers with ongoing feedback is important for ensuring best practices in curriculum implementation.*
- 6. Although divisions frequently provide PD when they adopt a new curriculum, teachers who onboard after the initial adoption year may miss formalized training in how to implement the curriculum.** Among the VPI division leaders who participated in group consultation sessions on curriculum implementation, most report that in their first year of implementation, they

purchased publisher-provided PD. There was more variability in VPI division leaders' reports of having "in house" PD in their first year of curriculum implementation (i.e., between 0% for Frog Street to 48% for Creative Curriculum). Very few VPI division leaders reported having no initial PD in the year a new curriculum was adopted. Following the initial adoption year, many VPI division leaders reported offering sustained but less intensive and formalized PD opportunities. When new teachers come to VPI classrooms after a curriculum has been adopted, they may not have opportunities to access formalized PD. Even teachers who received initial PD but do not receive ongoing, targeted feedback may drift in implementation fidelity and/or not be aware of updated curriculum guidance or resources. Funding for ongoing PD on curriculum implementation and lack of internal expertise or time for coaching were reported to be barriers. *New teachers and VPI division leaders need access to initial and ongoing curricular PD.*

7. **Curricular PD often emphasizes implementing components of the curriculum but rarely 1) integrates a focus on curriculum use with teacher-child interactions and child assessment data** (the other two teaching quality elements, described in the PD Rubric: Coherence element) **or 2) focuses on how to individualize instruction for children with disabilities.** Fewer VPI division leaders report delivering PD that tackles these topics, but those who do have reported that their teachers who are best able to see curriculum implementation, teacher-child interactions, and child assessments in a coherent, integrated way are most skilled at deftly implementing the curriculum in ways that respond to individual children's varied learning needs. *Providing curricular PD that integrates a focus on teacher-child interactions, child assessment, and children with disabilities would help ensure that teachers provide rich daily experiences meeting all children's needs.*

CASTL-AEII Supports for Curriculum Implementation & Outcomes

A goal of the initiative is to ensure that all VPI teachers use a vetted, evidence-based curriculum in order to promote children's learning and development. CASTL-AEII has provided supports to VPI division leaders to achieve this goal in multiple formats including individual consultation and facilitating collaboration and planning efforts via group consultation sessions. These formats are described in more detail below.

1. **Individualized division consultation sessions helped build foundational knowledge of curriculum as a key lever for promoting child learning.** This occurred in all types of consultation sessions (see Overview): Kickoff consultation sessions, CLASS® Data Use sessions and PD Feedback consultation sessions.

In Kickoff sessions with Cohort 2 VPI division leaders in fall 2019, curriculum implementation was emphasized as a key pathway to support children's learning. VPI division leaders were asked to share what curriculum they were using and reflect on their plans to support teachers in implementing that curriculum during the 2019-2020 school year. Consultants provided resources (such as crosswalks between curricula and CLASS®) for divisions who were not yet aware of/in possession of these resources.

In CLASS® Data Use sessions, consultants reviewed pathways to improving teacher-child interactions and again prompted use of crosswalks or other tools for VPI division leaders to better make connections between curriculum implementation and interactions.

Through PD Questionnaires as well as in PD Feedback sessions in fall 2019-Spring 2020 (see Professional Development section for details), consultants supported VPI division leaders in exploring what effective PD looks like as it applies to curriculum content. VPI division leaders

were prompted to consider the extent to which 1) their PD was *coherent* (focused clearly on the curriculum, interactions, and child assessment pathways without extraneous content and integrating these three pathways), 2) they provided *observation and feedback* to support teachers in their curriculum implementation, 3) they used *data sources* such as fidelity checklists to learn more about what further PD on curriculum implementation was needed and whether existing PD was having the intended impact and 4) that they had *specific, articulated objectives* about how to build teachers' skills in curriculum implementation as part of their PD roadmaps for the 2019-2020 school year.

2. **Group Curriculum sessions allowed leaders to share best practices for planning and delivering effective curricular PD for the top 5 vetted VPI curricula.** Curriculum sessions provided VPI division leaders with an overview of trainings, tools, and resources offered by the publishers in their chosen curricula and prompted leaders to reflect and share with fellow VPI division leaders how they supported adoption of new curricula, ongoing PD, fidelity monitoring, and supports for individualizing and connecting curriculum implementation with classroom interactions and assessment.

Each session was a 1.5-hour interactive videoconference for VPI division leaders who plan and/or deliver professional development related to curriculum (including VPI coordinators, administrators, and coaches). Sessions were guided by a series of key questions that connected to the PD Rubric elements (see section on Professional Development: Data on Quality & CASTL-AEII Supports for details). In addition to sharing ideas and resources with one another, divisions were provided with information summary sheets as references to increase awareness of and access to publisher provided supports, as well as highlighting linked child assessment tools and components of the curriculum that were most/least aligned with a focus on CLASS-based interactions. Feedback from these sessions were positive; though survey response rates were low during the Covid-19 pandemic, select leaders indicated that they found the curriculum sessions *helpful* to *very helpful* (4.23 average on a scale of 1-5). 92% of responses also indicated that attendees gained new ideas or resources to use for planning effective curricular PD.

Professional Development: Data on Quality & CASTL-AEII Supports

What Does Effective PD Look Like and How Did We Measure It?

Research shows that effective professional development (PD) can improve the quality of interactions, instruction, and curriculum implementation that preschool teachers provide for young children. VPI Guidelines (2018-20) required that teachers and instructional assistants attend at least 15 clock hours of professional development (PD) per year focused on teacher-child interactions and instruction⁶; however, there were no requirements related to format or specific PD elements. Divisions provided a high-level summary of their plans for these 15 PD hours, but detailed information was not collected, and thus PD was not well-understood across Virginia's VPI programs.

Despite PD being a critical lever of improvement for teacher practices and child outcomes, there was no known tool available for Virginia to assess or improve quality PD in 2018-19. VDOE and CASTL-AEII worked together to create the PD Rubric and PD Questionnaire in summer 2019. This particular aspect of the CASTL-AEII initiative was supported by a pre-doctoral policy fellowship from the Society for Research in Child Development (SRCD) awarded to a CASTL doctoral student⁷.

The PD Rubric describes six elements of PD that research indicates are key ingredients for successful PD. These six elements are data-driven; specific, articulated objectives; practice-focused; feedback and analysis loops; coherence; and access for all teachers. The PD Rubric, summarized below, provides definitions of these 6 elements as well as descriptions of each element at four levels of quality (Not Yet, Emerging, Effective, Exemplary; see Figure 2 in the Appendix).

PD Rubric: Six Elements of Effective PD

-  **A Data-Driven** approach ensures that the content is relevant, that the amount is sufficient, and ultimately that the PD is effective. This element was comprised of two indicators: data use, which includes the ways in which data are used to inform and/or evaluate PD, and data-related resources, which reflects the extent to which divisions have mechanisms (i.e., meeting structures, tools) in place that facilitate continual data collection and analysis across the school year.
-  **Specific, Articulated Objectives** clearly outline what teachers should get out of their PD experience and are limited to a few key topics so teachers have sufficient exposure and time to develop new knowledge and skills.
-  **Practice-Focused PD** formats actively engage teachers in the PD process and intentionally builds on their skills in order to improve practices.
-  **Feedback and Analysis Loops** provide teachers opportunities to try out a new practice, receive feedback on how it went, and analyze their practice with a colleague.
-  **Coherence** is an integrated approach where PD aligns with the curriculum, child assessment information, and classroom observation data.

⁶ 2019 VPI Guidelines state that teachers and instructional assistants must attend at least 15 clock hours per year of professional development that supports their knowledge, skills, and practice to facilitate effective teacher-child interactions and instruction that promotes children's learning and development towards kindergarten readiness.

⁷ AEII-CASTL would like to acknowledge the work of Ann Partee who led the development of PD Rubric and PD Questionnaire as part of her SRCD policy fellowship with the VDOE.



Access for All Teachers ensures PD is available to all teachers, including lead teachers and instructional aides, across all programs (e.g., VPI, ECSE, Title I, or Head Start).

The PD Rubric was used with the PD Questionnaire, which asked divisions to comprehensively report on their current PD practices related to the six elements of effective PD. After a division submitted the PD Questionnaire to CASTL-AEII, consultants and the lead developer of the tool applied the PD Rubric to the responses using a codebook for consistent coding. This process resulted in a set of six PD quality scores, one for each element of PD, with higher scores reflecting more effective PD. These data provide an overarching picture of the quality of PD across VPI divisions.

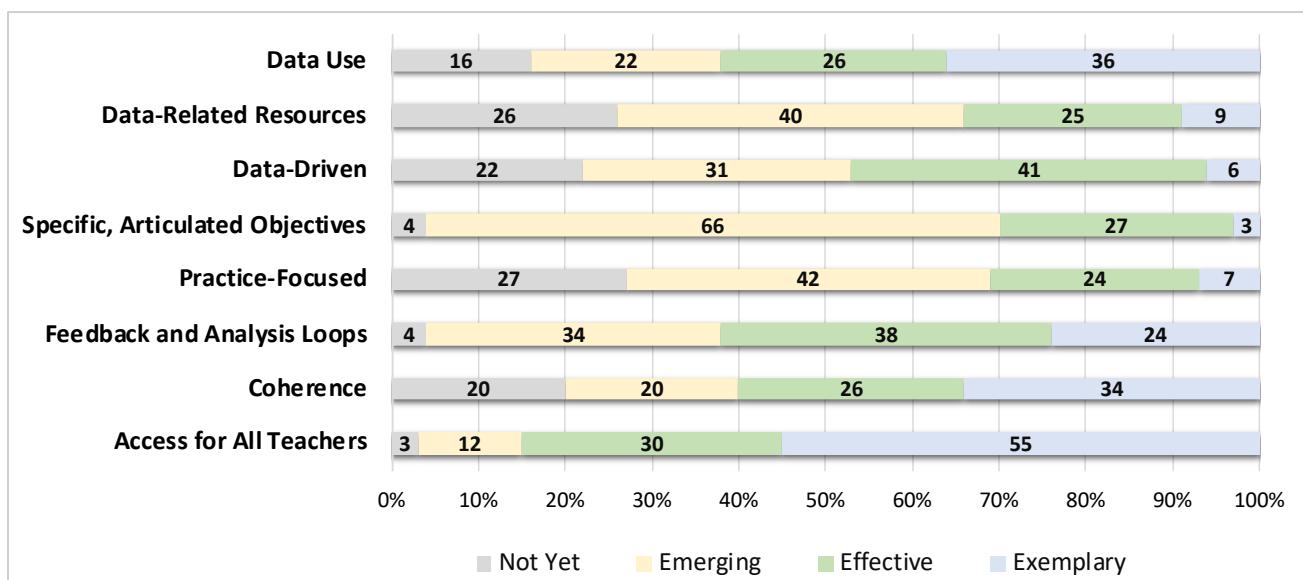
What Does the Data Tell Us about Quality of Professional Development?

Data gathered using the PD Rubric and PD Questionnaire (collected for 99% of divisions) indicated the following takeaways:

1. **PD quality varies widely across the state.** The full range of possible scores, from 1 (Not Yet) to 4 (Exemplary), was found for all 6 elements of effective PD, including the 2 subscales for the Data-driven element (Data Use and Data-Related Resources), shown in Figure 2 below.

Figure 2

PD Rubric Data Distribution: Percent of Divisions at Each Level of Effectiveness



Note. Figure 2 displays the percent of divisions whose PD effectiveness were rated at each level of the PD Rubric: Not Yet (gray), Emerging (yellow), Effective (green) and Exemplary (blue). Color bands are provided for each PD Rubric element and the 2 Data-Driven subscales and percentages are displayed as numerals on each color (e.g. 16% of divisions scored Not Yet for Data Use).

2. **Providing PD that is practice-focused is the greatest area of need across the state.** The practice-focused PD element considers the proportion of PD time that teachers actively learn new skills (through role plays, coaching, analyzing videos, etc.) as opposed to PD in which teachers learn new knowledge or discuss practice generally (i.e., passive PD). PD for VPI teachers is less than 50% practice-focused (Not Yet or Emerging levels) in nearly 70% of divisions. About a quarter (27%) of divisions reported that teachers spend almost all their time (75-100%) in *passive* PD activities such as attending trainings, workshops, or Professional Learning Communities that center on general

planning. While these formats may build foundational knowledge, they are less likely to translate to changes in teaching practices, which impact child outcomes.

3. **Many divisions lack tools and resources to efficiently use data to plan and evaluate PD.** Data-driven PD that meets teachers' and children's needs requires that divisions have access to tools and resources to track, interpret, and utilize data. However, many divisions (68%) reported using no data tools to plan or evaluate their PD offerings. Some divisions (32%) reported using at least one data tool — typically either data spreadsheets/trackers (24% of divisions) or online systems/software (14% of divisions). When divisions did report using a data tool, it most likely included only one data source (e.g., CLASS® scores) such that PD needs could not be synthesized across various types of data, such as CLASS®, child assessment data, and curriculum fidelity data.
4. **Most divisions use CLASS® to inform their PD plans, with other data sources used less frequently.** 85% use CLASS® data to plan PD. Some divisions use other data sources, but this occurred less frequently. For instance, 58% of divisions use PALS Pre-K literacy data, 52% use classroom observation data besides CLASS® (such as local teacher evaluations), and less than half (41%) reported using child assessment data besides PALS PreK or VKRP data (e.g. curriculum assessment data) to guide the focus and track intended outcomes of PD.
5. **The number of hours of PD provided to teachers varies widely across the Commonwealth.** Across divisions, the number of PD hours provided to teachers is highly variable, although the state's 15 hour per year minimum requirement is almost always exceeded. Nearly 25% of divisions reported having 30 or fewer hours of PD, whereas 13% reported having 100+ hours of PD. PD varies in format (e.g., trainings/workshops, Professional Learning Communities, observation and feedback) and quality. More PD is not necessarily better; PD aligned to the 6 elements of effectiveness described above is more likely to promote improvements.
6. **The frequency with which divisions provide feedback and analysis loops to teachers is highly variable across the state.** Across divisions, there is a wide range in how often division leaders or other colleagues observe teachers in their classroom and provide feedback that analyzes teaching practices (i.e., "feedback & analysis loops"). 39% of divisions reported providing feedback loops infrequently (1-3/year), 38% of divisions reported providing them occasionally (4-8 per/year), and only 23% of divisions reported provided them frequently (9 or more/year, which would typically mean at least monthly). High-frequency feedback (monthly-weekly) is most often supported in research on effective PD.
7. **All divisions provide some type of group training or workshop and over half (62%) conduct some amount of PD labeled "coaching."** The types of coaching, who provides coaching, and the structure provided vary widely. Some divisions offer professional learning communities (PLCs) where peers share and learn from each other. Both ECE research and other initiatives have pointed to classroom-embedded learning formats, like coaching and PLCs, as promising, practice-focused formats to enhance teacher practices, as opposed to trainings/workshops, which may not bridge as easily to classroom practices.
8. **PD usually focuses on teacher-child interactions and curriculum implementation, sometimes focuses on specific instruction areas, and rarely targets instruction for individualized needs of students.** Most PD Questionnaires listed PD learning objectives that included improving teacher-child interactions (CLASS®) (75%) and/or curriculum (63%), which aligns with 2 of 3 key teaching quality areas in CASTL-AEII. Learning objectives listed for PD less commonly focused on specific areas of instruction (e.g., math, literacy, social-emotional). Some divisions specifically listed Social

Emotional and/or Self-Regulation (36%) or language/literacy (25%) instruction as PD learning objectives, but only 14% listed math. Divisions rarely identified a focus on instruction for individualized needs of students. A small portion of divisions listed individualized practices for teaching children with disabilities (12%) or instruction for English/Dual Language Learners (4%).

CASTL-AEII Supports for Effective Professional Development & Outcomes

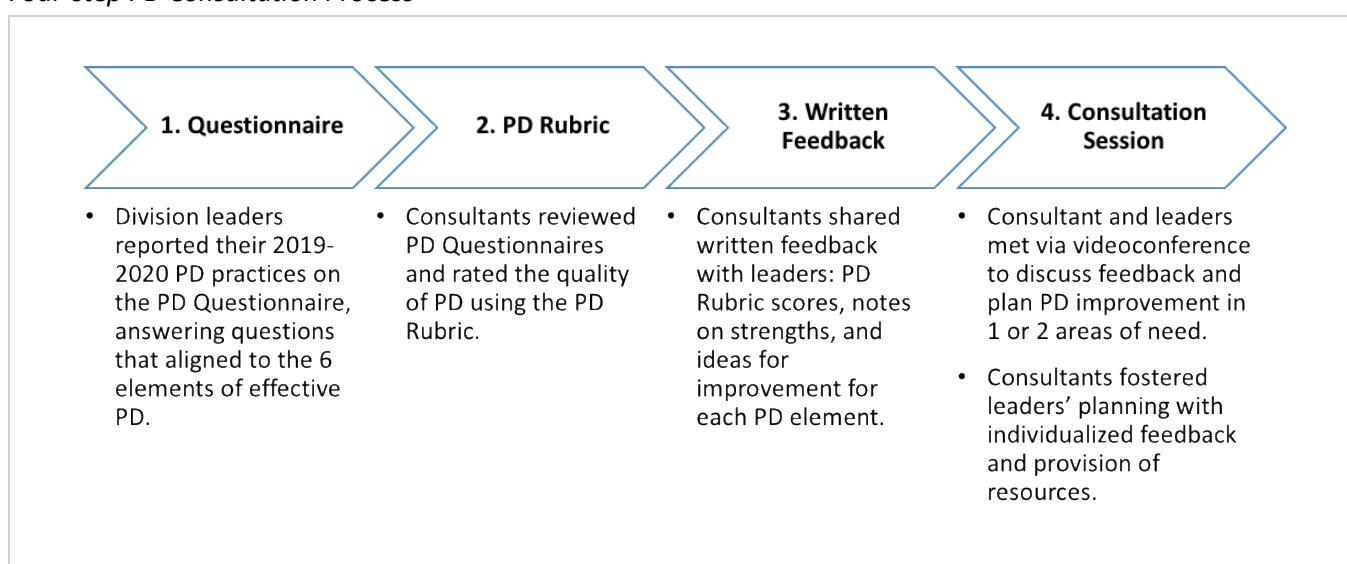
CASTL-AEII worked in partnership with VDOE and local VPI school divisions to promote professional development that is data-driven, individualized, and targeted towards the needs of teachers and children. High-quality PD ensures that children experience high quality teacher-child interactions, well-implemented curricula, and developmentally appropriate instruction.

Professional Development planning support was provided to leaders through individualized consultation sessions, online group trainings, group consultation opportunities, and through provision of resources, described below:

1. **Individualized PD Feedback Consultation sessions** were held with each division's leadership team (often consisting of 2 leaders, the VPI coordinator, and a central or site-level administrator). In 2019-2020, consultants worked with division leaders to understand what PD practices were currently being used, assess the extent to which current PD approaches aligned with evidence-based PD practices, and develop plans to improve PD. The four-step PD Consultation Process is summarized in Figure 3 below. This process utilized the PD Rubric to organize and describe PD quality and to provide data on PD quality specific to each division. These sessions also incorporated CLASS® as a key data source for individualized PD planning to ensure support for highest needs classrooms.

Figure 3

Four-step PD Consultation Process



2. **Group Trainings and Consultation sessions** were designed to build leaders' background knowledge and skills related to planning and implementing effective PD. Content (e.g., interactions, instruction, curriculum) and formats (e.g., feedback/coaching, PLCs, trainings/workshops) provided varied. Sessions focused on: Giving Effective Feedback; Know, See, Do Action Planning webinar; Practice-focused PD breakout sessions (Coaching, PLCs, training/workshops) and Curriculum Leader sessions (See descriptions in the Table 4 on the next page).

Table 4

Summary of Group Training and Consultation sessions to build leaders' capacities with PD

Group Training & Consultation Sessions	Learning Objectives for Leaders
Giving Effective Feedback Webinar	<ul style="list-style-type: none"> • Learn the principles of effective feedback. • Explore how to use CLASS® data as a springboard for providing effective feedback to teachers, and how to provide teachers with targeted action plans to support growth in their teaching practices (interactions, instruction, and curriculum implementation).
Know, See, Do Action Planning Webinar	<ul style="list-style-type: none"> • Understand the content and structure of the Know, See, Do (KSD) Action Planning Resources. • Explore how to use the KSD resources to increase practice-focused professional development for teachers, and how to create targeted Know, See, Do Action plans.
Practice-focused PD Breakout Interactive Sessions (Coaching, PLCs, training/workshops)	<ul style="list-style-type: none"> • Learn about 3 evidence-based PD models shown to improve Instructional Support interaction. • Understand and see examples of practice-focused strategies. • Plan to embed more of these strategies within chosen PD format (Coaching, PLCs, or Trainings/Workshops) to improve teachers' instructionally supportive interactions with children.
Curriculum Leader Sessions (Big Day for PreK, Creative Curriculum, OWL, Frog Street, Tools of the Mind)	<ul style="list-style-type: none"> • Share and hear ideas for ways to support curriculum implementation through effective PD (guided by a series of key questions that connect the PD Rubric elements). • Learn about key curricular tools/resources to use in planning PD (e.g., fidelity tools, crosswalks) as well as trainings offered by the curriculum publisher (provided in a curriculum information sheet); build collaboration with fellow leaders across Virginia implementing the same curricula.

3. Provision of rich instructional and PD planning resources. Instructional resources focused on a range of key classroom topics, from supporting children's social and emotional development to fostering their critical thinking skills, were made freely available. Resources were vetted and organized by educational experts at CASTL. All group trainings and consultation sessions, as described above, were archived as webinars on the CASTL-AEII website (www.aeionline.org), so that all leaders could access or share critical information with other local leaders on-demand.

Figure 4*Instructional Resources Provided on the CASTL-AEII Website*

Instructional Resources

These resources are freely available for use and have been carefully vetted and organized by educational experts at CASTL and VDOE.



Video Library
A searchable video library with over 100 short exemplars

[VISIT VIDEO LIBRARY](#)



Websites
Educational websites that cover a range of preschool topics

[REVIEW WEBSITES](#)



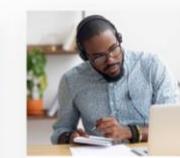
Workshops
Five one-hour workshop suites ready for you to download and use

[BROWSE WORKSHOPS](#)



Resource Library
A searchable library of educational resources

[SEARCH FOR RESOURCES](#)



Webinars
A series of educational webinars available to join or review

[BROWSE WEBINARS](#)

Data from the PD Consultation Survey collected from leaders in 89% of divisions and consultant notes (including notes from PD Feedback calls conducted with 98% of divisions and curriculum leader calls with 41% of divisions represented) indicated the following outcomes:

- 1. As with the CLASS®, the PD Rubric served not only to assess PD quality, but also provided a useful improvement and framework tool** to support leaders' analysis of their current PD quality and planning for improvements. VPI division leaders benefitted from actionable data on their baseline implementation of effective PD practices and a framework for making data-driven decisions to enhance the quality of their PD offerings.
- 2. Individualized consultation led to increased leader capacity in three key areas:**
 - **Increased knowledge of effective PD practices.** Most leaders had never been trained on effective PD elements as laid out in the PD rubric. All leaders had multiple opportunities to understand, reflect on, and plan using the PD Rubric effective elements.
 - **Increased skills in using data to plan for PD improvements.** All division teams left PD Feedback sessions with plans for improving the effectiveness of their PD, often in the areas of Data-Driven and/or Practice-focused. 75% of leaders agreed that they will change their PD planning practices as a result of the consultation. Leaders were highly satisfied with the PD Consultation process. Nearly 75% of leaders found the PD feedback sessions "very" or "extremely" useful. Although some leaders said that the time required to complete the PD Questionnaire was significant, they usually found that the benefits in terms of feedback and collaborative improvement planning with their consultant made the time worthwhile.
 - **Enhanced skills/ability to individualize PD supports based on data.** Leaders discussed Data-driven PD, including how to use CLASS® and other data (observation, child assessment data) to plan PD that met the needs of teachers and children. Individualized PD for highest needs classrooms was emphasized. Consultants provided additional follow-up supports as needed.
- 3. Group trainings and consultation sessions provided opportunities for leaders to build knowledge, reflect on and share practices with fellow ECE leaders, and plan for PD improvements.** These opportunities included the Giving Effective Feedback webinar; Know, See, Do Action Planning webinar; Practice-focused PD breakout sessions (Coaching, PLC's, training/workshops); Curriculum Leader sessions. Leader feedback was positive.
- 4. Leaders used Instructional Resources on the CASTL-AEII website. (<https://aeiionline.org/>)** Leaders expressed appreciation during sessions and/or indicated on surveys that they found the free resources (e.g. Know, See, Do) provided by the initiative helpful, especially when introduced/reviewed through consultation sessions and trainings.

Looking Ahead to 2020-2021

CASTL-AEII, in partnership with VDOE, will continue to observe the quality of teacher-child interactions in state-funded preschool classrooms and provide PD to ECE division leaders that build capacity to improve classroom quality in the 2020-21 school year. This plan will be informed by results from the first two years of this work, in partnership with VPI leaders and teachers. Goals and activities will align with broader state and local efforts in birth-to-five ECE contexts to inform VDOE's plans for a uniform measurement and improvement system across all publicly funded programs. Activities will be aligned toward the goal of improving the quality of effective interactions and instruction in every early care and education classroom so that all young children are engaged in experiences and interactions that will help prepare them for success in kindergarten and beyond. Plans will provide flexibility to respond to COVID-19 while continuing to promote the high-quality experiences preschool children need to be ready for kindergarten.

CASTL-AEII anticipate the following activities in 2020-21:

1. **CLASS® observations in half of all VPI classrooms (anticipated to be ~700).** In the 2020-21 school year, classrooms in divisions that participated in the 2018-19 school year will be re-observed. This will allow for an initial assessment of how the quality of teacher-child interactions has changed in those divisions over time, in the midst of statewide improvement efforts. These observational data at the division-, site-, and classroom-levels will provide critical feedback to division-level early childhood leaders and VPI early educators to help inform next steps in local professional development and curriculum implementation supports.
2. **CLASS® observations in half of all early childhood special education (ECSE) classrooms across the Commonwealth (anticipated to be ~400).** Given that this will be the first statewide, standardized observations of ECSE classrooms, a pilot approach will be taken, including training and support to division-level leaders that ensure early educators in these classrooms are prepared for the observations and receive maximum benefit from the feedback. There will be opportunities for feedback from all stakeholders.
3. **CASTL-AEII consultants will support all divisions to continue building and implementing effective professional development plans.** Following from independent assessments of strengths and weaknesses of divisions' professional development plans, consultants will guide division-level leaders through a continuous quality improvement process focused on strengthening effective PD elements. Consultants will continue to provide opportunities for divisions to develop capacity to understand and use data to inform programming and PD plans.
4. **Using data from the past two years, CASTL-AEII will differentiate supports so that higher needs divisions and classrooms receive more intensive attention and resources from our consulting team.** Supports will be provided to divisions to ensure that preschool children receive ECE experiences that meet minimum thresholds for quality. Divisions with larger percentages of higher needs classrooms and those with less effective PD plans will receive more intensive support to improve the quality of interactions and instruction within their division.
5. **Support leaders to ensure high quality instruction and interactions as they engage in new in-person and virtual learning structures due to COVID-19.** Covid-19 poses challenges for families, programs, and communities; however, the importance of quality interactions and instruction remains, reinforcing the continued need to observe and support teacher child interactions. Through the federal Governor's Emergency Education Relief (GEER) Fund, CASTL will provide

additional professional development to VPI/Early Childhood Special Education educators to support children's social-emotional needs in response to the COVID 19 crisis.

Appendix

Overview of Data Collected

Table 1

Overview of Activities/Supports and Corresponding Data Sources

AEII Activity/Supports Overview	Participants & Data Sources
Introduction to Initiative Workshops	
<ul style="list-style-type: none">In-person and online workshops prepared divisions for the CLASS® observations and the CLASS® observation tool	<ul style="list-style-type: none">Over 2400 attendees – teachers, leaders, coaches, etc.Attendees filled out a post-workshop survey
Kickoff Consultation Sessions	
<ul style="list-style-type: none">Oriented division leaders to the AEII Initiative and CASTL consultationBuilt relationships/engagement with leadersCollected data on strengths and needs, followed-up with notes, resourcesProvided individualized additional supports as needed	<ul style="list-style-type: none">Division leaders met with AEII consultantsConsultants took notes during each session
External CLASS® Observations	
<ul style="list-style-type: none">Teachstone observers completed observations in VPI classroomsVirginia Quality did observations in 14 VPI classrooms around the Commonwealth	<ul style="list-style-type: none">98% of divisions have CLASS® data (120 out of 122 divisions)95% of observations completed (1282 out of 1356; including VQ-observed classrooms) *2 divisions do not have data due to COVID 19 closures
Classroom- and Division-Level Reports	
<ul style="list-style-type: none">Following the Teachstone observations, CASTL created classroom-level reports with teachers' CLASS scores: Version 1 included specific observer examples; Version 2 included indicator-level data based on the frequency observed. Division leaders received division-level reports with teachers' domain- and dimension-level data	<ul style="list-style-type: none">1268 classroom-level reports sent393 Cohort 2 classrooms (from 35 divisions) received Version 1 (plus all Cohort 1 classrooms)331 Cohort 2 classrooms (from 34 divisions) received Version 2117 division-level reports sentTeacher and leader feedback surveys asked about usefulness of reports
Effective Feedback Practices Webinar	
<ul style="list-style-type: none">Provided leaders support on giving teachers feedback about CLASS® Reports	<ul style="list-style-type: none">Division leaders attended the webinarLeader feedback survey asked about usefulness of webinar

AEII Activity/Supports Overview	Participants & Data Sources
Know, See, Do Resources & Webinar	
<ul style="list-style-type: none"> Help division leaders learn how to use KSD resources, developed by CASTL as a tool for using CLASS® and child assessment data to provide practice-focused, individualized and division-wide PD using freely available, vetted resources. 	<ul style="list-style-type: none"> Division leaders attended the webinar Leader feedback survey asked about usefulness of webinar
CLASS® Data Use Consultation Session	
<ul style="list-style-type: none"> Built foundational knowledge and skills to be able to interpret CLASS® data and use data to plan PD for highest-needs classrooms and overall. Before the Session: Leaders were provided division-level data files and a supporting compendium document to guide interpretation and planning. After the Session, consultants provided notes on PD plans and followed-up with needed resources and additional session for higher-needs division leaders. 	<ul style="list-style-type: none"> Division leaders met with AEII consultants. Consultants took notes during each session 107 sessions completed as of June 1 (91% completed, out of 117) *109 completed as of June 8
Professional Development Questionnaire and Rubric	
<ul style="list-style-type: none"> Leaders completed PD questionnaire based on PD Rubric of Effective Practices 	<ul style="list-style-type: none"> Division leaders completed the questionnaire 121 questionnaires completed and coded (99% of divisions)
PD Consultation Session	
<ul style="list-style-type: none"> Built knowledge about effective PD elements; reflected on current capacities and needs; planned improvements to 1 or 2 Effective elements. Before the Session: Consultants provided PD rubric data and written feedback; prompted divisions to bring ideas for focus to the session. After the Session: Consultants provided notes on improvement planning and followed-up with email check-in or follow-up session for highest-need leaders 	<ul style="list-style-type: none"> Division leaders met with AEII consultants. Consultants took notes during each session; leaders also completed a survey about the questionnaire and consultation process 119 sessions completed (98% completed, out of 122) *120 completed as of June 8
Curriculum Leader Sessions	
<ul style="list-style-type: none"> Webinar provided overview of vetted, evidence-based curriculum supports; promoted collaboration between divisions 	<ul style="list-style-type: none"> Division and state leaders attended the webinars 5 webinars completed for most-used curricula ~70 total leaders attended webinars

Table 2*Overview of Data Sources*

Data Source	Sample Size Information – as of June 1	Process/Context
External CLASS® Observations	<ul style="list-style-type: none"> External observations: 1268 observations out of 1342 classrooms (94% completed) VQ observations: 14 observations Total: 1282 observations of 1356 (95% completed) 	<ul style="list-style-type: none"> External observations completed between Spring 2019 – Spring 2020 VQ observations completed between Fall 2018 – Spring 2020
PD Questionnaire Rubric Scores	<ul style="list-style-type: none"> 121 questionnaires completed by division leaders (out of 122 divisions; 99% completed) 	<ul style="list-style-type: none"> 6 elements of effective PD Data-driven reported overall, and split into data use and data-related resources Coded and scored by consultants and double coders
Additional information from PD Questionnaire	<ul style="list-style-type: none"> 121 questionnaires completed by division leaders (out of 122 divisions; 99% completed) 	<ul style="list-style-type: none"> Double coders pulled relevant qualitative and quantitative data from the questionnaires to analyze
AEII consultant session notes	<ul style="list-style-type: none"> 392 total consultation sessions <ul style="list-style-type: none"> 125 Kickoff session – 100% complete 127 CLASS® data use sessions (including follow-up sessions and combo PD consultation sessions) – 91% complete 140 PD consultation sessions (including follow-up sessions and combo data use sessions) – 98% complete 	<ul style="list-style-type: none"> AEII consultants collected information from consultation sessions in a Google form Information included session participants, strengths/needs of the division, questions/supports, etc.
Introduction to Initiative survey	<ul style="list-style-type: none"> 1567 responses from leaders, teachers, and other attendees in 111 divisions (91% of divisions) <ul style="list-style-type: none"> 1427 responses from in-person sessions 140 responses from webinar sessions 	<ul style="list-style-type: none"> Intro to Initiative participants were invited to fill out an anonymous survey at the end of their Intro session Survey asked how the Intro session went
Teacher feedback survey	<ul style="list-style-type: none"> 257 Year 1 responses (47% of 544 teachers) <ul style="list-style-type: none"> From 42 divisions (84% of 50 divisions) 209 Year 2 responses (40% of 518 teachers who have received the survey) <ul style="list-style-type: none"> From 52 divisions (68% of 77 divisions) 	<ul style="list-style-type: none"> Year 1 teachers received survey in June 2019 Year 2 teachers received survey following completion of their CLASS® observation feedback meeting Survey asked about the observation process, report and feedback process, and demographic information Year 2 data collection is ongoing

	<ul style="list-style-type: none"> • 466 total responses (44% of teachers who have received survey) 	
Data Source	Sample Size Information – as of June 1	Process/Context
Leader feedback survey	<ul style="list-style-type: none"> • 40 Year 1 responses (15% of 273 survey recipients) <ul style="list-style-type: none"> ◦ From 33 divisions (66% of 50 divisions) • 58 Year 2 responses (60% of 96 survey recipients) <ul style="list-style-type: none"> ◦ From 47 divisions (61% of 77 divisions) • 98 total responses (27% of 369 survey recipients) 	<ul style="list-style-type: none"> • Year 1 leaders and feedback providers received survey in summer 2019 • Year 2 division leaders and feedback providers received a survey after giving teachers feedback on CLASS® observations • Survey asked about CASTL supports, the observation process, report and feedback process, and demographic information <ul style="list-style-type: none"> ◦ Some questions were only asked in Year 2 • Year 2 data collection is ongoing
PD consultation survey	<ul style="list-style-type: none"> • 125 responses (78% of 160 survey recipients) <ul style="list-style-type: none"> ◦ From 109 divisions (89% of divisions) 	<ul style="list-style-type: none"> • Division leaders received a survey after completing their PD feedback consultation session • Survey asked about the PD questionnaire and consultation process

What are Quality Interactions & Instruction and How Did We Measure Them?

Table 3

CLASS® Domain Descriptions

Domain	Description
Emotional Support	The degree of warmth, respect, and evidence of close relationships; sensitivity and responsiveness to children's needs; support for children's autonomy; and lack of negativity.
Classroom Organization	The teacher's management of class time and attention to get the most learning out of every day; efficient routines and transitions; proactive behavior management; and active facilitation of learning.
Instructional Support	The teacher's use of strategies that support higher order thinking and connections between concepts; use of scaffolding (hints) and individual feedback to support learning; and use of strategies to promote language.

Table 4

CLASS® Dimension Descriptions

Domain	Dimension	Description
Emotional Support	Positive Climate	Considers the comfort, warmth, and respect displayed in teachers' and students' interactions with one another and the degree to which they display enjoyment during learning activities.
	Negative Climate	Reflects the level of expressed negativity such as anger, hostility, or aggression demonstrated by teachers and/or children.
	Teacher Sensitivity	Encompasses teachers' awareness of and responsiveness to students' individual academic and social-emotional needs.
	Regard for Student Perspectives	The degree to which teachers' interactions with students emphasize students' interests and ideas and promote child autonomy rather than being very teacher-directed.
Classroom Organization	Behavior Management	Encompasses teachers' use of effective methods to prevent and redirect misbehavior by communicating clear behavioral expectations and minimizing time spent reacting to behavioral issues.
	Productivity	Considers how well teachers manage instructional time, transitions, and routines so that students have maximal opportunities to learn.
	Instructional Learning Formats	The degree to which teachers maximize students' engagement by providing clear learning objectives, interesting materials, and facilitation.
Instructional Support	Concept Development	The degree to which instructional discussions and activities promote students' higher-order thinking skills versus rote learning.
	Quality of Feedback	Involves how teachers provide feedback focused on expanding children's learning and understanding versus correctness.
	Language Modeling	Involves teachers using language-facilitation techniques including: self- and parallel talk, open-ended questions, repetition and extension, and use of advanced vocabulary.

VPI CLASS® Observer Requirements

Item 1. Observer Requirements

Prior to conducting Pre-K CLASS® observations in VPI classrooms, CASTL-AEII worked with Teachstone, an education services company focused on the improvement of teacher performance in the classroom using the CLASS® methodology, to develop a set of requirements for external, independent observers that ensured standardized observations with high quality data integrity. First and foremost, observers had to be certified on the Pre-K CLASS® tool, which involves a multi-day training followed by participation in ongoing reliability checks, calibrations, and re-certifications (all involve watching preschool classroom video and providing codes that closely match a gold standard). Additionally, Teachstone set several other expectations for observers working in VPI classrooms, including the following qualifications:

- B.A. degree in relevant field, ideally Child Development or Education
- Experience using the CLASS® tool to conduct live observations (preferred)
- Experience conducting observations or administering assessments in school settings
- Experience in quantitative or qualitative data collection
- Fluent in English
- Complete Mandated Reporter and Human Subjects training

VPI CLASS® external observers are required to recertify on the CLASS® tool more frequently and at a higher standard than typical observers. If observers are within 60 days of their window for recertification, they will take a recertification test and must pass with a score of 85% overall and 80% at the domain level. If the observer does not meet these requirements, they will not be selected to observe.

During external CLASS® observations in Spring 2019, multiple approaches were used to ensure that observers were reliable (e.g., if two observers were in the same classrooms, then they would provide the same CLASS® scores) and adhered to the standardized observation protocol. Before beginning live observations, all observers were required to recertify with a pass rate of 85% overall, which is higher than the standard set by the creators of the tool. Additionally, during the first two weeks of data collection, all observers participated in a paired double coding observation with a Teachstone staff member. If the observer was not in 80% agreement with the Teachstone double coder, the observer would not observe the following week and would receive additional reliability support and score 80% on another calibration video before returning to live observations. Across the remainder of the observation window, inter-rater reliability checks occurred through regular double-coding sessions as well as weekly video coding calibrations, and 10% of the Spring 2019 CLASS® observations were double-coded. Altogether, these robust approaches promoted inter-rater reliability, safeguarding the value and utility of baseline external CLASS® ratings.

VPI CLASS® Observation Protocol

Item 2. External Observation Protocol

CLASS® observers followed a standardized observation protocol during the Spring 2019 observations, which included specified steps for observers to take before, during, and after each observation. The observation protocol was developed taking into account best practices from other large-scale observation projects, including input from CASTL-AEII, Teachstone and the VDOE. The VPI Observation Protocol is similar to the protocol used for the Virginia Quality ratings, such that scores from either can serve as external CLASS® observation data. The full VPI observation protocol was adapted into a set of frequently asked questions that have been made available to division leadership and teachers. Key items from the FAQs are highlighted in Figure 1 below.

Figure 1

Sample items from the observation FAQ shared with division leaders and teachers

External observer observation window:

- There is a window of 2 weeks for each classroom observation.
- Teachers receive an email from their observer a week ahead of the 2-week observation window notifying them of the window (VPI coordinators and site leaders are copied on these emails).

Teachers present during observation:

- The lead teacher (not a short-term substitute) must be present. Any new lead teacher or substitute lead teacher that has been in the classroom for 10 consecutive school days may be observed. Substitute teaching assistants may be observed.

Teachers observed impacting scores:

- CLASS® observations provide a classroom-level score that includes overall teacher-child interactions including the lead teacher and any other adults (e.g., assistant, paraprofessional). Observers follow the CLASS® manual, which states that observers watch children's interactions with all teacher/adults in the room/area. The focus on each teacher's interactions are weighed based on the number of students with whom they are working, the amount of time they spend with the students, and their responsibility for the activities.

Rescheduling an observation:

- Observations will be rescheduled in the case of inclement weather or if the lead teacher or more than 50% of children are absent.

Activities observed and not observed:

- Observed - activities, transitions and routines in the morning or afternoon.
- NOT observed – “specials” outside of the classroom (e.g., PE, music class, library visit), cafeteria-based meals, toileting where whole group visits the restroom, and recess.

Length of observations:

- Observations are approximately 2 hours long. CLASS® data is collected in four 20-minute observation cycles followed by 10-minute coding sessions. An observer may be present longer than 2 hours if an activity occurs that may not be observed or if additional breaks are needed for the observer.

Observer steps:

- There will typically be one observer per classroom, except in the cases of paired/double coding – which is used to ensure reliability.
- After checking in at the school/center, observers will enter the classroom, briefly check in with the teacher, and find a place in the room to sit where they are able to see and hear without being disruptive. They will move discretely as needed to see and hear interactions.
- Observers will try to minimize their interactions with teachers and children in order to remain focused and objective and minimize any disruptions to the classroom.

Process after the observation:

- Within three weeks of the observation, CASTL-AEII will compile scores and notes into a classroom-level observation report and send to the VPI Coordinators. The VPI coordinator, and any other team leaders who serve as feedback providers, will provide teachers individualized feedback within three weeks of receiving the classroom-level observation report.

The Professional Development (PD) Rubric

Table 5

The 6 PD Elements

6 PD Elements	Not Yet	Emerging	Effective	Exemplary
 <p>Data-Driven <i>A data-driven approach to PD ensures that the content is relevant, amount is sufficient, and ultimately that the PD is effective.</i></p>	<p>Data are used:</p> <ul style="list-style-type: none"> • Not at all, or • To plan the broad focus area(s) of PD only, or • In other ways but not to plan the broad focus area(s) of PD <p>No resources exist such that data collection, analysis, and data-driven decision-making are impossible</p>	<p>Data are used to plan the broad focus area(s) of PD and one of the following:</p> <ul style="list-style-type: none"> • Determine appropriate amount of ongoing PD, tailor the focus of PD to meet teachers' needs, or • Track intended outcomes <p>Insufficient resources exist such that data collection, analysis, and data-driven decision-making are limited or inefficient</p>	<p>Data are used to plan the broad focus area(s) of PD and two of the following (or all if from one data source):</p> <ul style="list-style-type: none"> • Determine appropriate amount of ongoing PD, • Tailor focus of PD to meet teachers' needs, or • Track intended outcomes <p>Sufficient resources exist such that data collection, analysis, and data-driven decision-making are feasible and efficient</p>	<p>Data from two distinct sources are used to plan the broad focus area(s) of PD and all of the following:</p> <ul style="list-style-type: none"> • Determine appropriate amount of ongoing PD, • Tailor focus of PD to meet teachers' needs, and • Track intended outcomes <p>Sophisticated resources exist such that data collection, analysis, and data-driven decision-making are systematic and highly efficient</p>
 <p>Specific, Articulated Objectives <i>Specific, articulated objectives clearly delineate what teachers should gain from PD. Objectives should be limited to a few key areas so teachers are repeatedly exposed to PD content and have sufficient time to develop new knowledge and skills.</i></p>	<p>PD objectives are absent or very vague</p> <p>Alternatively, PD objectives are not related to early childhood</p>	<p>PD objectives suggest some knowledge or skills to be gained but lack precision</p> <p>Alternatively, PD objectives are precise but are too extensive and/or varied (e.g., 6-10 objectives/area or >3 areas) to sustain focus on a few key areas</p>	<p>PD objectives delineate the precise knowledge and skills to be gained</p> <p>PD objectives are a reasonable quantity and sufficiently connected (e.g., 3-5 objectives in 1-3 areas) to sustain focus on a few key areas</p>	<p>PD objectives meet "effective" and are ALSO drawn from a framework that clearly defines expectations for quality teaching (e.g., rubric)</p>

6 PD Elements	Not Yet	Emerging	Effective	Exemplary
 Practice-Focused <i>Practice-focused PD intentionally builds teachers' skills to improve their practice. It can but does not have to include feedback and analysis loops.</i>	<p>Across all PD, teachers spend 75-100% of their time passively receiving information and/or generally discussing practice and 0-24% of their time intentionally building skills to improve practice</p>	<p>Across all PD, teachers spend 50-74% of their time passively receiving information and/or generally discussing practice and 25-49% of their time intentionally building skills to improve practice</p>	<p>Across all PD, teachers spend 25-49% of their time passively receiving information and/or generally discussing practice and 50-74% of their time intentionally building skills to improve practice</p>	<p>Across all PD, teachers spend 0-24% of their time passively receiving information and/or generally discussing practice and 75-100% of their time intentionally building skills to improve practice</p>
 Feedback and Analysis Loops <i>Feedback and analysis loops provide teachers with the opportunity to implement a new practice, receive feedback on their practice, and analyze their practice with a colleague.</i>	<p>Teachers never or rarely receive feedback on their practice and analyze their practice with a colleague (e.g., 0-1 time/year)</p>	<p>Teachers infrequently receive feedback on their practice and analyze their practice with a colleague (e.g., 2-3 times/year)</p>	<p>Teachers somewhat frequently receive feedback on their practice and analyze their practice with a colleague (e.g., 4-8 times/year)</p>	<p>Teachers frequently receive feedback on their practice and analyze their practice with a colleague (e.g., more than 8 times/year)</p>
 Coherence <i>Coherence is defined as an intentional approach to integrating curricula (what teachers teach), assessments (e.g., child outcomes), and classroom observation (e.g., CLASS® scores) with the PD that teachers receive as well as removing miscellaneous or unrelated materials.</i>	<p>Curricula, assessments, and classroom observation are disjointed and not at all aligned/integrated with PD. There is no clear rationale that describes how each component informs and supports PD</p>	<p>Curricula, assessments, and classroom observation are superficially aligned/integrated with PD. This is generally not intentional such that there are significant gaps in the rationale (i.e., illogical or incomplete) that describes how each component informs and supports PD</p>	<p>Curricula, assessments, and classroom observation are somewhat intentionally aligned/integrated with PD. There are some gaps in the rationale (i.e., illogical or incomplete) that describes how each component informs and supports PD</p>	<p>Curricula, assessments, and classroom observation are very intentionally aligned/integrated with PD. A logical and comprehensive rationale describes how each component informs and supports PD</p>

6 PD Elements	Not Yet	Emerging	Effective	Exemplary
 Access for All Teachers <i>Access refers to the extent to which PD is provided to all full-time teachers across various types of preschool programming.</i>	<p>PD is provided only to VPI-funded lead teachers</p>	<p>PD is provided to all lead teachers across most programming but not instructional aides</p>	<p>PD is provided to all lead teachers across all programming but not instructional aides</p> <p>Alternatively, PD is provided to all teachers (lead and instructional aides) across most programming</p>	<p>PD is provided to all teachers (lead and instructional aides) across all programming</p>