Appendix B

Quality of Instruction

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Classroom Assessment Scoring System (CLASS)

What is CLASS?

The Classroom Assessment Scoring System (CLASS) is a classroom observation tool developed at the University of Virginia's Curry School of Education. It aims to provide a common lens and language focused on classroom interactions that encourage student learning.

CLASS observations break down the complex classroom environment to help educators focus on boosting the effectiveness of their interactions with learners of all ages. Observations rely on categorizing interactions within the CLASS framework.

The CLASS tool organizes teacher-student interactions into three broad domains: Emotional Support, Classroom Organization, and Instructional Support. The upper elementary and secondary tools include an additional domain, Student Engagement. Within all domains except Student Engagement, interactions are further organized into multiple dimensions. **Table 1** lists the domains and dimensions for each level.

Emotional Support: Students' social and emotional functioning in the classroom is increasingly recognized as an indicator of school readiness, a potential target for intervention, and even as a student outcome that might be governed by a set of standards similar to those for academic achievement. Students who are more motivated and connected to others are much more likely to establish positive trajectories of development in both social and academic domains. Teachers' abilities to support social and emotional functioning in the classroom are therefore central to ratings of effective classroom practices.

Classroom Organization: The classroom organization domain assesses a broad array of classroom processes related to the organization and management of students' behavior, time, and attention in the classroom. Classrooms function best and provide the most opportunities for learning when students are well-behaved, consistently have something to do, and are interested and engaged in learning tasks.

Instructional Support: The theoretical foundation for the instructional support domain is based on research on children's cognitive and language development. Thus the emphasis is on students' construction of usable knowledge, rather than rote memorization, and metacognition—or the awareness and understanding of one's thinking process. As a result, the instructional support domain does not make judgments about curriculum content; rather, it assesses the effectiveness of teachers' interactions with students that support cognitive and language development.

Student Engagement: Unlike other domains, student engagement focuses strictly on student functioning, and measures the overall engagement level of students in the classroom.

Table 1: CLASS Domains and Dimensions

Domain	Dimensions			
	Pre-K	**Lower Elementary**	**Upper Elementary**	**Secondary**
Emotional Support	Positive Climate Negative Climate Teacher Sensitivity Regard for Student Perspectives	Positive Climate Negative Climate Teacher Sensitivity Regard for Student Perspectives	Positive Climate Teacher Sensitivity Regard for Student Perspectives	Positive Climate Teacher Sensitivity Regard for Adolescent Perspectives
Classroom Organization	Behavior Management Productivity Instructional Learning Formats	Behavior Management Productivity Instructional Learning Formats	Behavior Management Productivity Negative Climate	Behavior Management Productivity Negative Climate
Instructional Support	Concept Development Quality of Feedback Language Modeling	Concept Development Quality of Feedback Language Modeling	Content Understanding Analysis and Inquiry Instructional Learning Formats Quality of Feedback Instructional Dialogue	Content Understanding Analysis and Inquiry Instructional Learning Formats Quality of Feedback Instructional Dialogue
Student Engagement	n/a	n/a	Student Engagement	Student Engagement

Based on research from the University of Virginia's Curry School of Education and studied in thousands of classrooms nationwide, the CLASS

- focuses on effective teaching
- helps teachers recognize and understand the power of their interactions with students
- aligns with professional development tools
- works across age levels and subjects

CLASS-based professional development tools increase teacher effectiveness, and students in classrooms where teachers are observed to demonstrate and earn higher CLASS scores achieve at higher levels than their peers in classrooms with lower CLASS scores.[1]

[1] Teachstone Inc. http://www.teachstone.org/about-the-class/

CLASS and Program Evaluation

APS conducts CLASS observations for all program evaluation reports, starting in the 2010-11 school year. In the fall of 2010, the Office of Planning and Evaluation recruited retired teachers and administrators to become certified CLASS observers. Certification is managed by the University of Virginia. Trainees undergo in-depth training to help them use the tool effectively in the field. An assessment is used to ensure that the observers have demonstrated reliability with the CLASS tool.

Each observation lasts approximately 30 minutes and observers are instructed to view either the beginning or end of a class. Ten additional minutes are provided for coding of the observation. Self-contained classrooms that serve ESOL/HILT students or students with a disability, as well as mainstream classrooms with ESOL/HILT students or students with a disability, are included.

CLASS Scores

CLASS dimensions are scored on a 7-point scale consisting of Low (1, 2), Mid (3, 4, 5), and High (6, 7) ranges. A score in the low range indicates an absence or lack of the behaviors associated with a given dimension, while a score in the high range indicates a high presence of such behaviors. Scores in the high range are desirable for all dimensions except for Negative Climate. With this dimension, the goal is a low score, or an absence of negativity.

Research Foundations of CLASS

The CLASS framework is derived from developmental theory and research suggesting that interactions between students and adults are the primary mechanism of child development and learning.

Elementary CLASS

Research provides evidence about the types of teacher-student interactions that promote positive social and academic development. The Classroom Assessment Scoring System™ (CLASS) provides a reliable, valid assessment of these interactions[2]

Selected studies demonstrate:

- Higher levels of instructional support are related to preschoolers' gains in pre-reading and math skills.[3]
- High levels of emotional support contribute to preschoolers' social competence in the kindergarten year.[4]
- High levels of emotional support are associated with growth in reading and math achievement from kindergarten through fifth grade.[5]
- High levels of classroom organization are associated with gains in first graders' literacy.[6]
- Kindergarten children are more engaged and exhibit greater self-control in classrooms offering more effective teacher-child interactions.[7]

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[2] Karen LaParo, Robert Pianta, and Meghan Stuhlman, "Classroom Assessment Scoring System (CLASS): Findings from the Pre-K Year," Elementary School Journal, 104:5, pages 409-426.
[3] Mashburn, Pianta, Hamre, Downer et al., Child Development,79, pages 732-749.
[4] Timothy Curby, Jennifer Locasale-Crouch, Timothy Konold, Robert Pianta, Carollee Howes, Margaret Burchinal et al., "The Relations of Observed Pre-K Classrooms Quality Profiles to Children's Academic Achievement and Social Competence," Early Education and Development, 19, pages 643-666.
[5] Robert Pianta, Jay Belsky, Nathan Vandergrift, Renee Houts, Fred Morrison, and NICHD-ECCRN, "Classroom Effects on Children's Achievement Trajectories in Elementary School," American Education Research Journal, 49, pages 365-397.
[6] Claire Cameron Ponitz, Sara Rimm-Kaufman, Laura Brock, and Lori Nathanson, "Contributions of gender, early school adjustment, and classroom organizational climate to first grade outcomes," Elementary School Journal, 110, 142-162.

- First-grade children at risk for school failure perform on par with peers, both socially and academically, when exposed to classrooms with effective teacher-student interactions.[8]

Moreover, studies conducted in over 6,000 classrooms provide evidence that students in PK–5 classrooms with higher CLASS ratings realize greater gains in achievement and social skill development.[9]

Secondary CLASS

Research using the more recently developed secondary CLASS tool has shown that teachers' skills in establishing a positive emotional climate, their sensitivity to student needs, and their structuring of their classroom and lessons in ways that recognize adolescents' needs for a sense of autonomy and control, for an active role in their learning, and for opportunities for peer interaction were all associated with higher relative student gains in achievement.[10]

Alignment with APS Initiatives

Differentiation

The four domains measured by the CLASS are essential in effectively differentiated classrooms. In addition, dimensions such as teacher sensitivity, regard for student/adolescent perspectives, and instructional learning formats specifically address behaviors necessary for effective differentiation.

Teacher Evaluation (Danielson)

The CLASS tool is heavily aligned with Charlotte Danielson's Framework for Teaching[11], which sets forth standards for teaching behaviors in the areas of planning, instruction, classroom environment, and professional responsibility. Danielson's Levels of Performance rubrics are the foundation for all T-Scale staff evaluation in APS.

Cultural Competence

There is strong alignment between Gay's Exemplars of Culturally Responsive Behaviors[12] and classroom behaviors identified in the CLASS tool. The APS Council for Cultural Competence was established in 2003 to develop the framework for permanent, systemwide cultural competence activities including ongoing cultural competence training for all staff. Cultural competence is a set of attitudes, skills, behaviors, and policies that enable organizations and staff to work effectively in cross-cultural situations.

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[7] Sara Rimm-Kaufman, Timothy Curby, Kevin Grimm, Lori Nathanson and Laura Brock, "The Contribution of Children's Self-Regulation and Classroom Quality to Children's Adaptive Behavior in Kindergarten," Developmental Psychology, in-press. See also NICHD ECCRN, "A Day in Third Grade: A Large- Scale Study of Classroom Quality and Teacher and Student Behavior," Elementary School Journal, 105, pages 305-323.

[8] Bridget Hamre and Robert Pianta, "Can Instructional and Emotional Support in First Grade Classrooms Make a Difference for Children At Risk of School Failure?" Child Development, 76, pages 949-967.

[9] Website http://curry.virginia.edu/uploads/resourceLibrary/CLASS-MTP_PK-12_brief.pdf Center for Advanced Study of Teaching and Learning Charlottesville, Virginia, **Measuring and Improving Teacher-Student Interactions in PK-12 Settings to Enhance Students' Learning**

[10] Joseph P. Allen, Anne Gregory, Amori Mikami, Janetta Lun, Bridget Hamre, and Robert C. Pianta, "Observations of Effective Teaching in Secondary School Classrooms: Predicting Student Achievement with the CLASS-S." Submitted.

[11] Charlotte Danielson (2007), *Enhancing Professional Practice: A Framework for Teaching*, Alexandria, VA: ASCD.

[12] Geneva Gay (2000). *Culturally Responsive Teaching: Theory, Research, & Practice.* New York: Teachers College Press.

SIOP

Many of the dimensions of the CLASS are aligned with components of the Sheltered instruction Observation Protocol (SIOP)[13], an approach to teaching that promotes content-area learning and language development for English language learners. SIOP encourages teachers to adapt grade-level content lessons to the students' levels of English proficiency, while focusing on English language development to help students increase their proficiency in academic English.

[13] Website http://siop.pearson.com/about-siop

Alignment of the Classroom Assessment Scoring System (CLASS) With APS Best Instructional Practices

Domain/ Dimension	Grades Observed	Description of CLASS Dimensions	Alignment with			
			Differentiation[1]	Responsive Education[2]	Danielson[3]	SIOP[4]
Emotional Support						
Positive Climate	Pre-K - 12	Reflects the emotional connection and relationships among teachers and students, and the warmth, respect, and enjoyment communicated by verbal and non-verbal interactions.		X	X	
Teacher Sensitivity	Pre-K - 12	Encompasses the teacher's awareness and responsiveness to the academic, social-emotional, and developmental needs of individual students and the entire class. At the younger levels, it also includes the teacher's ability to consistently provide comfort, reassurance, and encouragement.	X	X	X	X
Regard for *Student/Adolescent* Perspective	Pre-K – 3	*Student:* At the younger levels, it captures the degree to which the teacher's interactions with students and classroom activities place an emphasis on students' interests, motivations, and points of view and encourage student responsibility and autonomy.	X	X	X	X
	4-12	*Adolescent:* At the older levels, it focuses on the extent to which the teacher is able to meet and capitalize on the social and developmental needs and goals of (pre)adolescents by providing opportunities for student autonomy and leadership. Also considered are the extent to which student ideas and opinions are valued and content is made useful and relevant to (pre)adolescents.	X	X	X	X
Classroom Organization						
Behavior Management	Pre-K - 12	Encompasses the teacher's use of clear behavioral expectations and effective methods to prevent and redirect misbehavior.		X	X	
Productivity	Pre-K - 12	Considers how well the teacher manages time and routines so that instructional time is maximized.			X	
Negative Climate[5]	Pre-K - 12	Reflects the overall level of expressed negativity among teachers and students in the classroom; the frequency, quality, and intensity of teacher and student negativity are important to observe.		X	X	
Instructional Support						
Concept Development	Pre-K – 3	Measures the teacher's use of instructional discussions and activities to promote students' higher-order thinking skills and cognition and the teacher's focus on understanding rather than on rote instruction.	X		x	X

[1] Differentiation or differentiated instruction is an approach that recognizes that all students must master a common body of knowledge and skills, but each student learns a different way and needs an approach most appropriate to his or her learning needs. Differentiation relates to content (what students learn), process (how students learn), and product (how students demonstrate what they've learned). Students differ in readiness (prior mastery of knowledge, understandings, and skills), interest (curiosity and passion to know, understand, or do more), and how they prefer to learn (Tomlinson, 1999).

[2] Responsive education or culturally responsive teaching is a pedagogy that recognizes the importance of including students' cultural references in all aspects of learning (Ladson-Billings, 1994).

Alignment of the Classroom Assessment Scoring System (CLASS) With APS Best Instructional Practices

Domain/ Dimension	Grades Observed	Description of CLASS Dimensions	Alignment with			
			Differentiation[1]	Responsive Education[2]	Danielson[3]	SIOP[4]
Content Understanding	4-12	Refers to both the depth of the lesson content and the approaches used to help students comprehend the framework, key ideas, and procedures in an academic discipline. At a high level, this refers to interactions among the teacher and students that lead to an integrated understanding of facts, skills, concepts, and principles.		X	X	X
Analysis and Inquiry	4-12	Assesses the degree to which the teacher facilitates students' use of higher-level thinking skills, such as analysis, problem solving, reasoning, and creation through the application of knowledge and skills. Opportunities for demonstrating metacognition, i.e. thinking about thinking, are also included.	X	X		X
Instructional Learning Formats[6]	Pre-K - 12	Focuses on the ways in which the teacher maximizes students' interest and engagement in learning. This includes the teacher's use of interesting and engaging lessons and materials, active facilitation, and clarity of learning objectives.	X	X	X	X
Quality of Feedback	Pre-K - 12	Assesses the degree to which feedback expands and extends learning and understanding and encourages student participation. (At the secondary level, significant feedback may be provided by peers)		X	X	X
Language Modeling	Pre-K-3	Captures the quality and amount of the teacher's use of language-stimulation and language-facilitation techniques.			X	X
Instructional Dialogue	4-5	Captures the purposeful use of dialogue- structured, cumulative questioning and discussion which guide and prompt students- to facilitate students' understanding of content and language development. The extent to which these dialogues are distributed across all students in the class and across the class period is important to this rating.			X	X
Student Engagement	4-12	Intended to capture the degree to which all students in the class are focused and participating in the learning activity presented or facilitated by the teacher. The difference between passive engagement and active engagement is of note in this rating.		X	X	X

[3] Danielson's Domains of Teaching Responsibility frame the APS teacher evaluation process and are based on Charlotte Danielson's Enhancing Professional Practice. The domains are the areas in which T-Scale employees are evaluated and are the foundation for Best Instructional Practices. For classroom based teachers they include: Planning and Preparation, Classroom Environment, Instruction and Professional Responsibilities. For non-classroom-based teachers the domains are: Planning and Preparation, Environment, Delivery of Service, and Professional Responsibilities.

[4] Sheltered instruction Observation Protocol (SIOP) is an approach to teaching that promotes content-area learning and language development for English language learners. Teachers adapt grade-level content lessons to the students' levels of English proficiency, while focusing on English language development to help students increase their proficiency in academic English.

[5] This dimension falls under the Emotional Support domain at the pre-K and lower elementary levels.

[6] This dimension falls under the Classroom Organization domain at the pre-K and lower elementary levels.

Classroom Assessment Scoring System (CLASS) Domain and Dimension Scores

Arlington Public Schools uses the Classroom Assessment Scoring System (CLASS) observation tool to assess the quality of interactions between teachers and students for all program evaluation areas. It was developed by the University of Virginia's Curry School of Education as an early childhood observation tool, and later expanded to include other grade levels.

The CLASS tool is grounded in developmental theory and research that suggest that interactions between students and adults are the primary mechanism for student learning. Multiple research studies have found that students who attend classrooms that rate highly on the CLASS have improved social and academic outcomes (Howes. et al., 2008).

The Pre-K CLASS is organized into three broad domains: Emotional Support, Classroom Organization, and Instructional Support. Each domain contains specific observable dimensions that are appropriate to each grade level. **Table 1** outlines the dimensions included in each domain of the Pre-K CLASS tool. Dimensions are scored on a 7-point scale consisting of Low (1, 2), Mid (3, 4, 5), and High (6, 7) ranges.

Table 1: Pre-K CLASS Domains and Dimensions

Domain	Dimension	Measures
Emotional Support	*Positive Climate*	Warmth and connection shared by teachers and students, verbal and non-verbal
	Negative Climate	Expressed negativity among teachers and students, verbal and non-verbal
	Teacher Sensitivity	Teacher awareness and responsiveness to students' academic and social needs
	Regard for Student Perspectives	Degree to which teachers emphasize students' interests, motivations, and points of view, and promote students' independence
Organization	*Behavior Management*	Teachers' use of clear behavioral expectations and effectiveness at redirecting misbehavior
	Productivity	How well the teacher manages time and routines so instructional time is maximized
	Instructional Learning Formats	Teachers' employment of lessons and materials to support different learning styles, interests, and abilities
Instructional Support	*Concept Development*	Facilitation of students' broader understanding of concepts and ideas
	Quality of Feedback	Degree to which feedback expands learning and understanding
	Language Modeling	Quality and amount of language-stimulation and facilitation techniques

CLASS domains and dimensions are described in detail in **Appendix B1**. The alignment between CLASS dimensions and APS best instructional practices can be found in **Appendix B2**.

Pre-K CLASS observations were conducted in the winter of 2016 at all elementary schools with Pre-K programs. Observers conducted two 30-minute cycles (observations) for each teacher. All 34 VPI teachers were observed, along with 18 out of 19 Montessori teachers and 18 out of 19 Special Education teachers.

Table 2: Sample Size of Early Childhood CLASS Observations

Response Group	Number of Teachers	Number of Observations	Percent Observed	Margin of Error (95% Confidence Level)
Montessori	19	18	95%	5.4
VPI	34	34	100%	n/a
Special Education	19	18	95%	5.4

When interpreting CLASS results, Teachstone advises that typically, half a point to a point difference is considered to be **educationally significant**; in other words, a difference that would impact outcomes for students[1].

Table 3: Average Domain and Dimension Scores for Pre-K Classes

Average Domain and Dimension Scores	Montessori			VPI			Special Education		
	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation
Emotional Support	18	5.9	0.7	34	5.7	0.6	18	5.8	0.4
Positive Climate	18	5.7	1.1	34	5.8	0.9	18	5.8	0.7
Negative Climate[2]	18	1.1	0.4	34	1.1	0.2	18	1.1	0.4
Teacher Sensitivity	18	5.9	1.0	34	5.9	0.8	18	6.4	0.6
Regard for Student Perspectives	18	5.1	1.0	34	4.1	0.9	18	4.0	1.1
Classroom Organization	18	6.1	0.7	34	5.9	0.7	18	6.0	0.7
Behavior Management	18	6.4	0.8	34	6.0	1.0	18	6.1	1.0
Productivity	18	6.3	0.8	34	6.3	0.7	18	6.3	0.5
Instructional Learning Formats	18	5.7	0.8	34	5.6	0.8	18	5.6	0.8
Instructional Support	18	3.1	0.7	34	3.1	0.9	18	2.9	0.8
Concept Development	18	2.6	0.9	34	2.7	0.9	18	2.1	0.8

[1] Teachstone, personal communication, June 13, 2014 and January 5, 2016

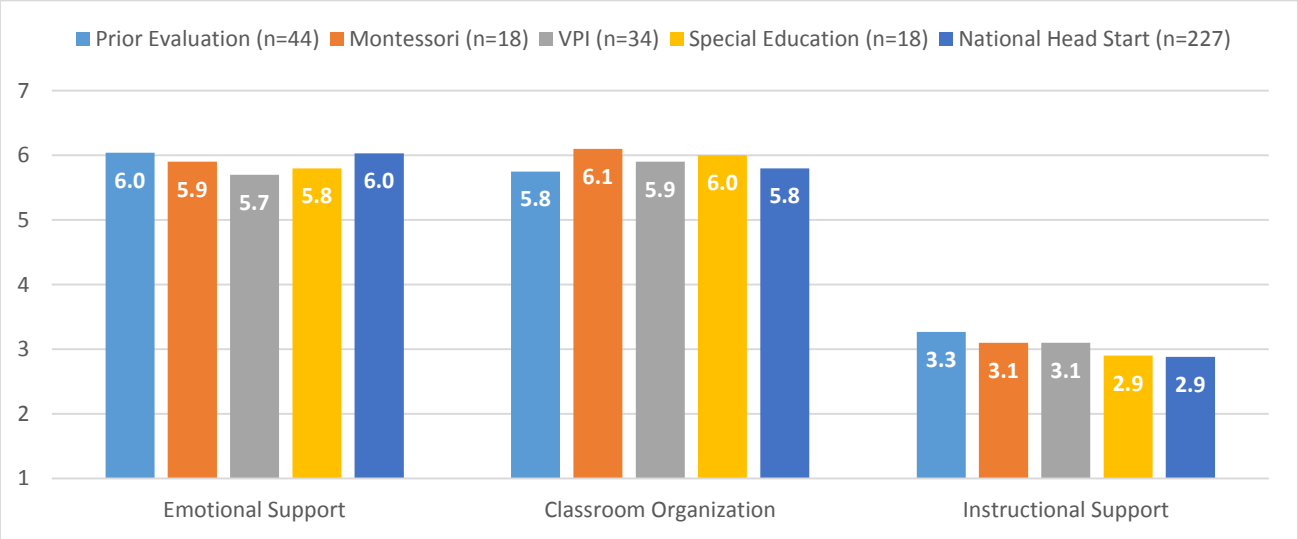
[2] A lower score is desirable for the Negative Climate Dimension. The Negative Climate score is reversed when calculating the Classroom Organization Domain score.

Average Domain and Dimension Scores	Montessori			VPI			Special Education		
	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation
Quality of Feedback	18	3.2	0.9	34	3.1	1.2	18	3.2	1.1
Language Modeling	18	3.5	1.1	34	3.5	1.1	18	3.3	0.9

Figure 1 shows the average CLASS scores for each domain by level. For context, two sets of additional CLASS scores are included in this analysis:

- Mean scores from the prior evaluation of the Early Childhood program. These observations were conducted in 2008-09 in VPI and Montessori classrooms. Mean scores are included here as an average for both programs combined as the prior report did not include a comparison between the two programs.
- Mean scores from a national review of Head Start programs. This review was conducted by the Office of Head Start in 2015, and included a series of CLASS observations conducted in a random sample of Head Start preschool classrooms.[3]

Figure 1: Average CLASS Doman Scores by Pre-K Program



[3] https://eclkc.ohs.acf.hhs.gov/hslc/data/class-reports/class-data-2015.html

Figure 2: Montessori CLASS Score Distribution for Emotional Support

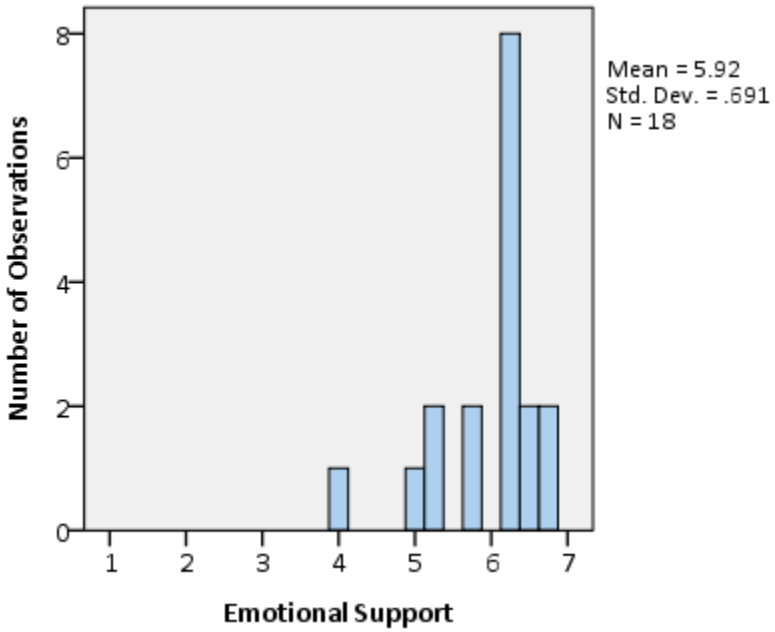


Figure 3: VPI CLASS Score Distribution for Emotional Support

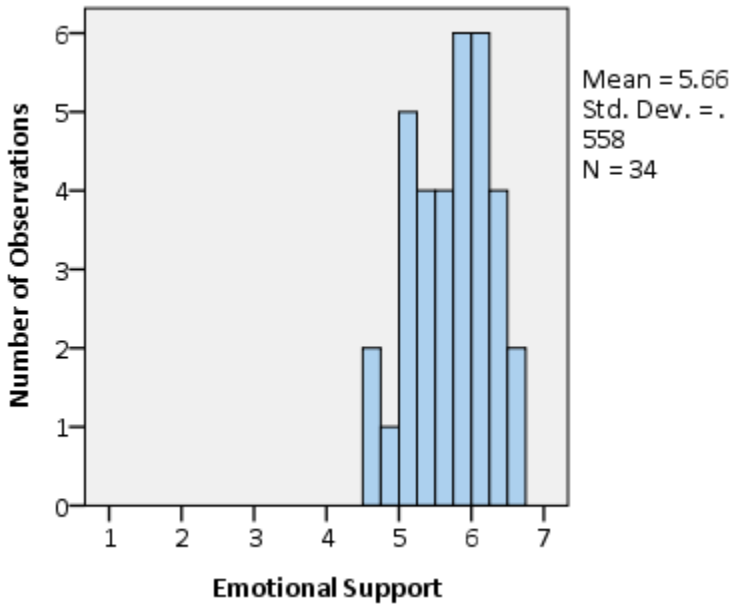


Figure 4: Special Education CLASS Score Distribution for Emotional Support

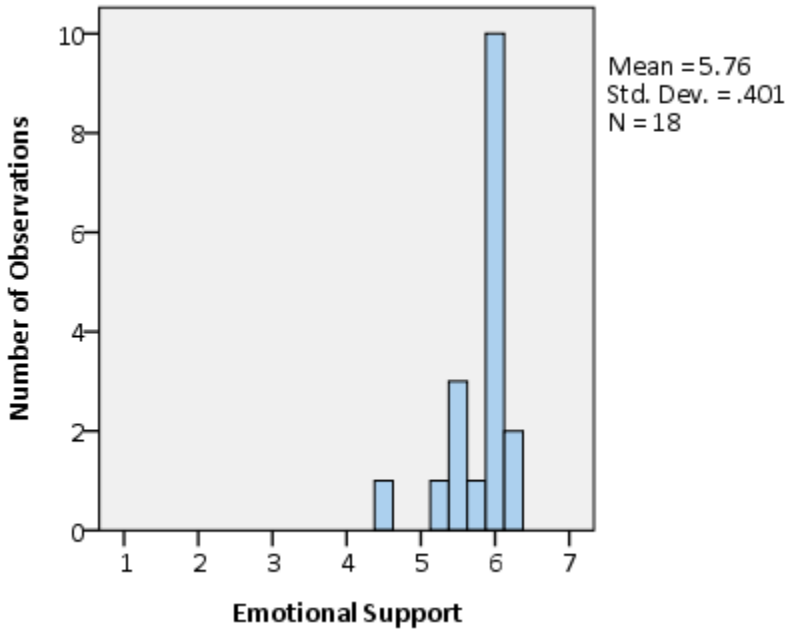


Figure 5: Montessori CLASS Score Distribution for Classroom Organization

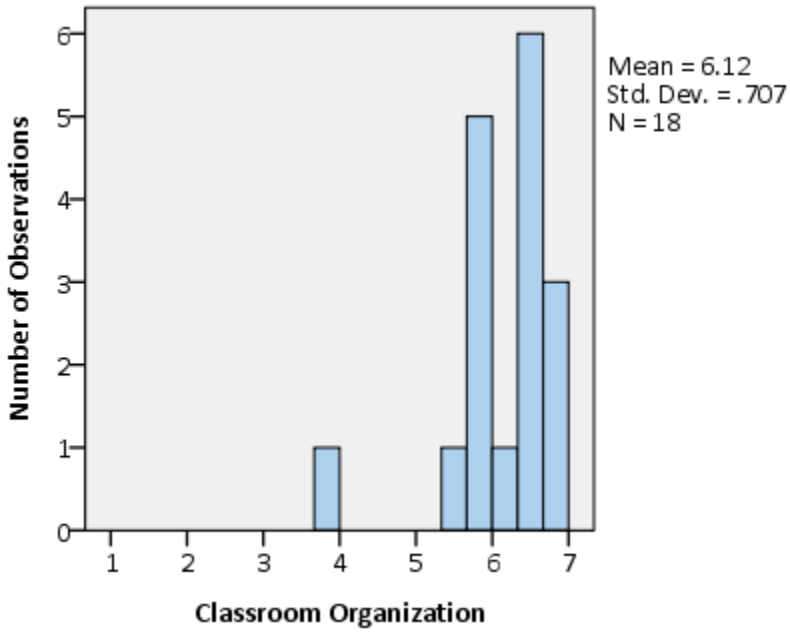


Figure 6: VPI CLASS Score Distribution for Classroom Organization

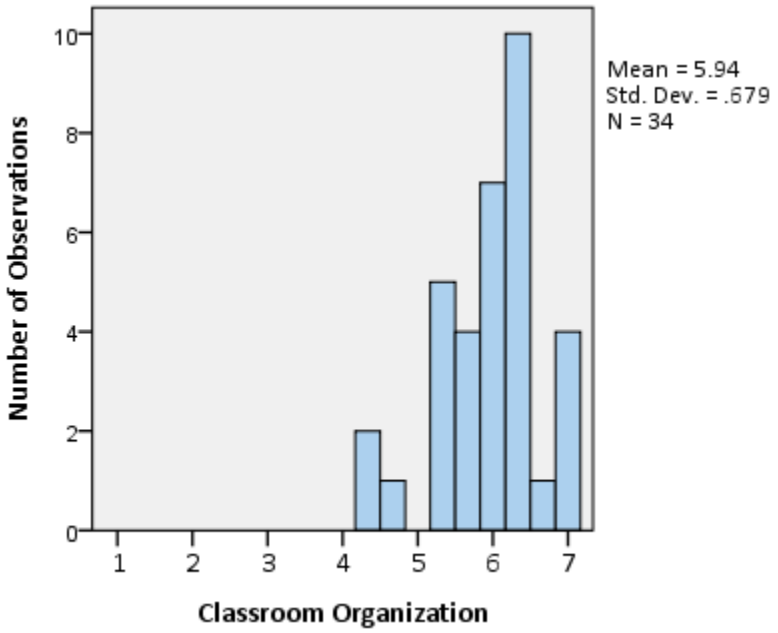


Figure 7: Special Education CLASS Score Distribution for Classroom Organization

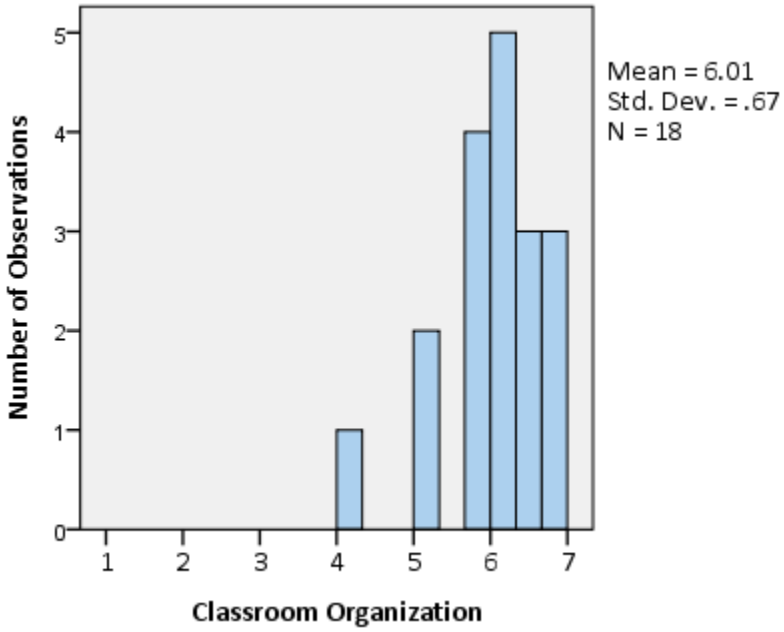


Figure 8: Montessori CLASS Score Distribution for Instructional Support

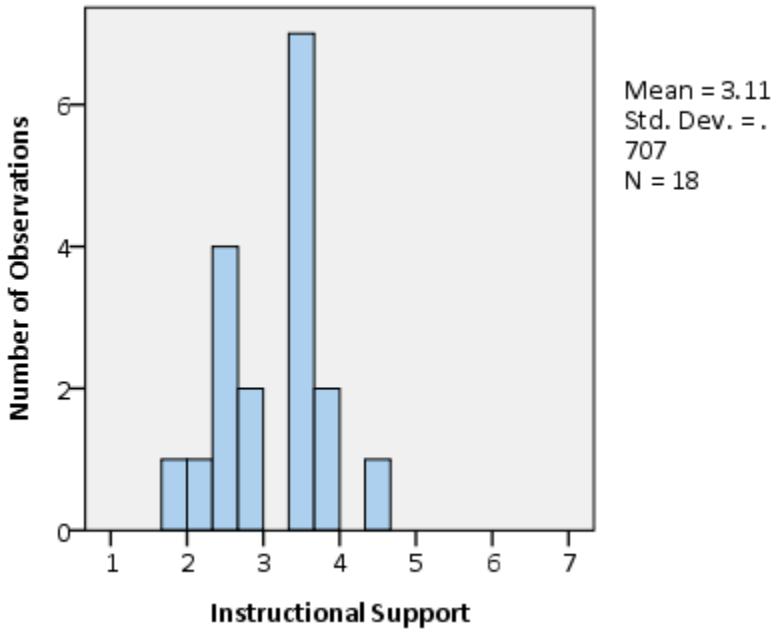


Figure 9: VPI CLASS Score Distribution for Instructional Support

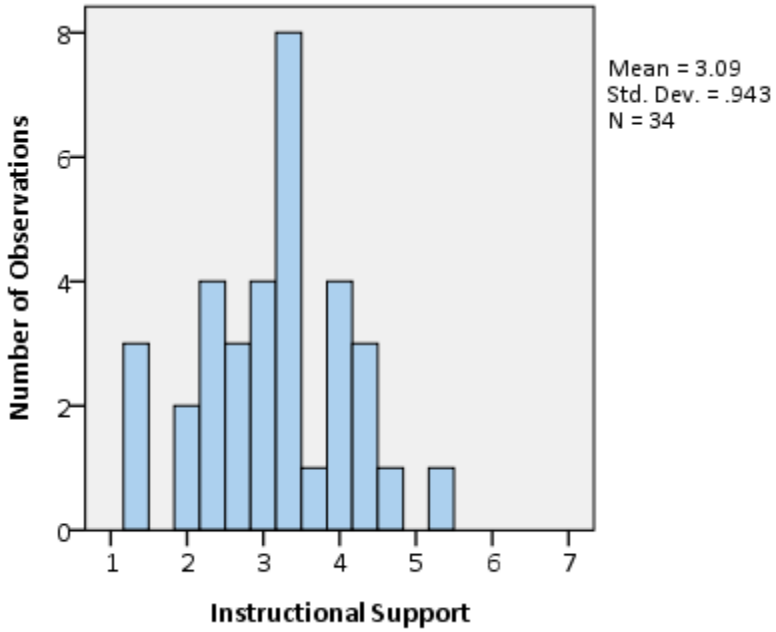
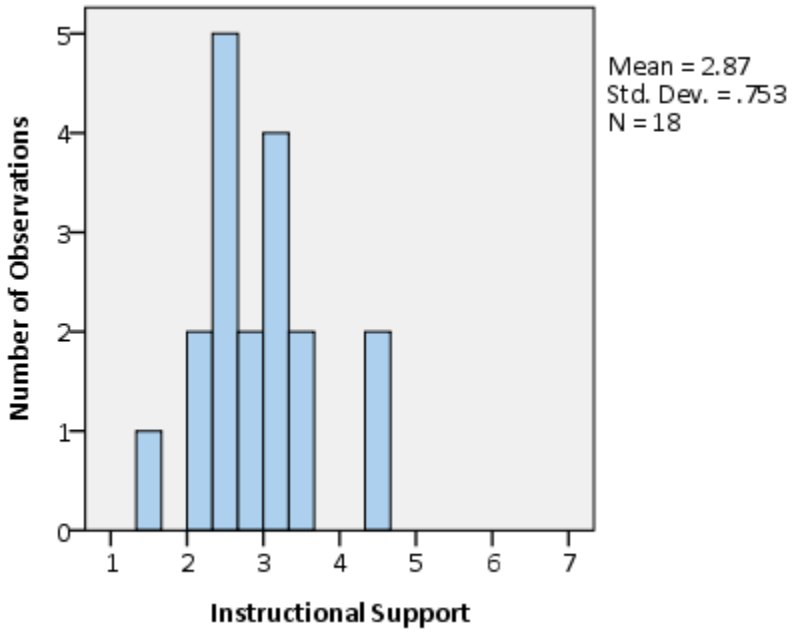


Figure 10: Special Education CLASS Score Distribution for Instructional Support



Observation Summary of Arlington Public Schools Montessori Primary Classrooms

CREC
Expert Solutions

Arlington Public Schools

Prepared by: Montessori Training Center Northeast
Observations Conducted February 17 - 19, 2016
Report Submitted: March 21, 2016

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1. Explanation of Process

Arlington Public Schools (APS) recognized the need to incorporate a Montessori component to their classroom observation protocols designed for early childhood settings within their district. A need for a "Montessori lens" was identified to review the district's 19 Montessori Primary Classrooms.

Arlington Public Schools contacted Capitol Region Education Council (CREC), an agency that had in the past provided APS professional development, coaching and strategic planning through its Montessori Training Center Northeast (MTCNE). APS provided MTCNE an itemized observation list that was previously generated by some APS administration and staff. This list was then incorporated and correlated with a Montessori Framework and accompanying observation rubric designed to provide objective feedback and ratings based on major Montessori tenets (See Appendices A and B).

Over the course of 3 consecutive days in February 2016, an MTCNE observer visited 18 of the 19 APS Montessori primary classrooms. One classroom did not participate because of a classroom teacher's absence. Each classroom was visited for thirty minutes and the MTCNE observer made observational notes and later used these sources of evidence to rate the twenty components across 4 framework domains.

The MTCNE team reviewed all the data and comments to complete this report for Arlington Public Schools. The report contains the classroom ratings along with a synthesis and analysis of this data. The report will address both the key program strengths and areas for growth. It also suggests some recommendations and possible follow up activities that can assist the district Montessori staff to improve instructional practices.

It should be noted, like all single observations, the analysis is a snapshot based on the dates of the observation and preponderance of evidence across all the APS primary classrooms. The process and the data are not to be used to measure individual classrooms but provide a broad perspective on the successful implementation of key Montessori principles and practices within Arlington Public Schools primary classrooms.

2. APS/Montessori Observational Framework and Rubric

"The Montessori classroom is a quiet, active and peaceful environment where children are able to concentrate and work independently. It is characterized by the kindness, cooperation and focus of our Montessori children and is designed to facilitate maximum independent learning and exploration by the child."

Maria Montessori

Using the APS Montessori Observation Item List a framework was developed to address these items by rephrasing or identifying their connection to an MTCNE Observational Framework. The framework and its accompanying rubric are designed to describe the characteristics of practice at different levels of performance related to 4 domains that reflect the key Montessori tenets:

1. The Prepared Environment
2. The Work of The Child
3. The Work of The Adults
4. The Community of Children

Each of these 4 domains is further defined by 20 components that reflect significant observable evidence within the classroom setting during a primary work cycle.

The rubric is designed to help educators and evaluators (1) develop a consistent shared understanding of what effective performance looks like in practice, (2) develop a common terminology and structure to organize the evidence and (3) make informed professional judgments about the performance ratings on each component,

domain and overall program effectiveness. Components are rated using a 4 scale rubric similar to other ratings used by APS. The 4 scale ratings are identified in the table below.

Score	Level of Practice
1	Ineffective
2	Developing
3	Effective
4	Highly Effective
N/O	Not Observed

The data is to be reviewed from a program perspective and is not intended as a tool to evaluate individual teachers.

3. DOMAIN NARRATIVES

DOMAIN 1: The Prepared Environment

"*The objects surrounding the child should look solid and attractive to him, and the 'house of the child' should be lovely and pleasant in all its particulars. It is almost possible to say that there is a mathematical relationship between the beauty of his surroundings and the activity of the child; he will make discoveries rather more voluntarily in a gracious setting than an ugly one."*

Maria Montessori

In addition to being a child-centered community, the Montessori primary classroom is also a "prepared environment." The prepared environment is Maria Montessori's concept that the environment should be attractive and designed so that optimal engagement and learning takes place. It is designed to allow the child freedom to choose work for a minimum of 3 uninterrupted hours. All but 1 classroom allowed children to choose work in an uninterrupted manner for 3 hours.

The Montessori primary classroom is a Children's House. All the furniture is child sized and all of the materials are scaled to fit the physical dimensions of a preschooler's body. The space is divided into 4 distinct areas: practical life, sensorial, mathematics and language. Montessori materials should be complete, in appropriate sequence and presented in an appealing way. Each area can have a specific look with beautiful objects, plants and materials to entice the child to explore and learn. The room as a whole should be beautiful, welcoming and practical.

Most of the Arlington Montessori classrooms had an attractive and inviting appearance. The rooms were clean and materials presented in a neat manner. Almost all of the classrooms had beautifully maintained Montessori materials. It was significant to see this, especially in rooms where Montessori materials are clearly in constant use and for several or more years. For the most part, Montessori materials were in proper sequence. However, there was a pattern, in the sensorial area, that cylinder blocks and knob-less cylinders were sequenced together. In several rooms, other sensorial material was also out of order. This could be due, in part to how children were returning materials, training on a teacher's part and or a lack of attention to order when preparing the shelves. Some attention should be given to this to insure consistency of the program across all classrooms. In a few classrooms, not all materials were present. This may be due to a classroom being a start-up classroom. However, it is important for the children to see and be inspired by all the lessons and for the materials to be readily available when the child is ready.

Two classrooms presented materials in unusual boxes or in a manner that was especially appealing visually. In these rooms, aprons, cloths and other practical life materials were also prepared in beautiful and inviting ways. The attention to detail (color-coding or layout) made the process of the lesson very clear. These environments could be used by others in the district for modeling and coaching. In most rooms (10), the materials were typically displayed in their original containers or in plastic boxes. Materials were usually in sequence and easily accessible to

small children. The rooms, as a whole, looked attractive and neat. In half of the rooms, plants added to the interest and attractiveness of the room. Plants also provide the opportunity to present lessons on how to water a plant. Cultural and/or science materials were observed in 7 classrooms. This material supports the Montessori lessons and philosophy of providing children with "keys to the world."

In 8 rooms, non-Montessori materials were out, either on the Montessori shelves or on separate shelves. Some of this material appeared to be teacher-developed work to extend a lesson. However, other non-Montessori materials included worksheets, floor puzzles, games, blocks and toys. In a few rooms, materials for learning money, was on display.

Upon closer observation, it became apparent that in some rooms, plastic storage boxes were stored under and behind shelves or in corners of the rooms. In 4 rooms, these boxes and crates detracted from the appearance of the environment and in a few cases created an obstacle to movement. In addition, in 4 rooms, teacher books and materials were out and often in piles on a table or desk that was accessible to the children. This could be a distraction and poor model of the order asked of the child when handling and returning materials to the shelf and caring for the environment.

The layout of most rooms allowed children freedom of movement but also controlled the flow of movement throughout the room. Several rooms had evidence of tables placed to reduce distraction. It was difficult in many rooms to display framed art at child level because the rooms had 1 or more walls of bulletin boards. This is an opportunity to use the Montessori philosophy to prepare the bulletin boards with a few meaningful pictures or displays. In some rooms, the walls were covered with charts, posters, children's work, etc. This use of wall space distracted from the attractiveness of the room and the key element of drawing one's eyes to the Montessori materials on the shelves.

There was not an opportunity to ask about gardens for 5 of the classrooms and 3 classrooms do not have access to gardens. However, it was observed that 11 classrooms had access to gardens. Of these, 7 appeared to make good use of the gardens. The gardens provide an extension to the Prepared Environment and a rich opportunity for exploration and learning.

Six rooms displayed cultural and/or science materials. This added to the interest and attractiveness of the rooms. Cultural and science materials help extend the Montessori curriculum and provide interest and motivation to the child. More classrooms could benefit from these additions.

Domain 2: The Work of the Child

"Let us discover the child. Let us awaken the mind and touch the heart. Let us prepare the child for life."
Maria Montessori

In the Montessori Classroom, children are supported to select, engage and complete work with focus. The components of this domain reflect the characteristics related to this goal. Though there are rhythms that often occur in the selection and flow of the children's work, it is expected that, in an effective Montessori classroom, children are independently selecting work with Montessori materials from all 4 areas. In addition, children would be observed working with the materials appropriately and respecting the work of others by walking around work rugs, returning materials carefully to their place on the shelf and refraining from interrupting the concentration of others.

In 6 of the classrooms, children frequently exhibited good focus and concentration and were able to complete work without distraction. However, in other classrooms, children, who were working, were distracted by other children who interrupted them to chat. In other cases, children stopped working for other reasons and then returned to work.

It is interesting to note that in the 6 rooms where children were not distracted, children had also selected work from all 4 Montessori areas and in 2 rooms there was also evidence of advanced work and thoughtful exploration of Montessori materials. Conversely in 7 of the classrooms where children had difficulty sustaining focus, the Montessori materials that were selected came from only 1 or 2 Montessori areas.

Most children (11 rooms) selected work that was appropriate for their age and skill level. In two of these classrooms, the children generally selected lessons that were challenging for their age or skill level. Some examples of the materials that were selected in those two rooms were: addition strip board, writing sentences on a moveable alphabet, phonogram alphabet, teen boards, advanced exploration of the triangle box, classifying vertebrates.

It was also observed that, although, almost all classrooms had a full set of Montessori materials, many went untouched. Instead, children selected non-Montessori materials such as: non-Montessori puzzles, games, traditional materials, coloring and work sheets. Specific data on the number of Montessori materials out at any given time was not noted. However, in 7 classrooms, some older children often selected puzzles, coloring and non-Montessori material that did not have an observable learning purpose and were inappropriate for their age and skill.

Child driven choice and concentration are key components of the work of the child in a Montessori classroom. In 8 of the rooms, it was observed that children frequently went to adults for help. In 8 classrooms, many activities were teacher directed. In other words, the children either frequently asked for help from the adults or the teacher directed children to specific work. Some children in those rooms also had difficulty sustaining focus.

On the other hand, in 10 rooms, children chose work independently most of the time. In 2 of these classrooms children not only chose work independently but were able to initiate explorations and projects independently. Also, in most classrooms children were observed completing the three-part work cycle of selecting, completing and returning work to the shelf.

Domain 3: The Work of the Adults

"The greatest sign of a success for a teacher is to be able to say, the children are now working as if I did not exist."
Maria Montessori

The teacher's primary goal is to observe, understand and protect each individual child as they pursue their own choices and as they learn to work alone or with others without interruption and with concentration and focus. The teacher's role is to observe in order to connect each child to lessons that motivate and engage them and to create a culture that is characterized by high expectations and respect. To this end, the Montessori teacher sets clear expectations for behavior, strategically reinforces positive behavior and is able to efficiently prevent or address inappropriate behavior so each child can pursue work that will address their highest level academic pursuit.

All teachers interacted with children in a respectful way. Raised voices or negative interactions between children and teacher were not observed. In addition, it was observed that 5 teachers demonstrated unusual warmth, understanding and respect for their students. This was demonstrated by the language used, the tone of voice, the meeting of the child at eye level and the observed connection/relationship that the teacher demonstrated with each child. Teachers set a model for respectful interactions. In most of the classrooms, children confidently took materials from the shelf and easily interacted with the adults. This, in part, is the result of the work of the teacher to set a foundation for the culture of the room.

It is also the work of the adult to connect children to lessons and to work. Many of the teachers did not give specific lessons but roamed the room, stopping to assist children as needed. Though review or assistance may be helpful to the child, of significant note were very few new lessons were presented during the three observation days. Two lessons were given that were not Montessori lessons. In light of the previously mentioned observation,

lack of Montessori materials being chosen, this observed pattern should be examined by the APS Montessori teaching staff.

Reconnecting children to work and managing student behavior are interrelated. There was a range of ability of teachers to redirect students to productive activity and or motivate them to deepen the challenge of the work. There was evidence that some teachers skillfully reconnected students or showed a child how to "extend" the challenge of the material or concept at hand. However, teachers demonstrated inconsistency in their ability to engage students who were not focused or who were distracting others by socializing. These are opportunities to connect students to productive work, to demonstrate high expectations and to employ the use of the other adult in the classroom.

The assistant does not provide lessons but protects the guide and child as a lesson is being given. She insures that the lesson is not interrupted. When the guide and assistant have a good working relationship, the assistant is well utilized and supports the children in ways that assists their independence, concentration and respect for others. Eleven of the fifteen classroom assistants, who were observed, appropriately redirected students to productive work. Though assistants were able to redirect students, it is not their responsibility alone. It is important that teachers manage student behavior and engagement as well.

It was observed that 2 of the teachers and their assistants conferred and worked as partners on behalf of the children. In those 2 rooms, there was also a high level of engagement and use of Montessori materials.
In order to meet the individual needs of each child, the teacher must have an effective method of regularly monitoring and recording student lessons and progress. Due to the timing of the observations and their length Component 3f (Lesson and Assessment Record Keeping) was not readily observed. Two teachers were observed logging student data following a given lesson. This component average rating on the graphs presented later in this report do not necessarily reflect actual practice since it is only based on what was observed on the dates of the observations. Interviews with teachers would be additional information needed to truly measure this component accurately.

DOMAIN 4: The Community of Children

The Montessori prepared environment respects and protects the child's rhythm of life. It is a calm, ordered space constructed to meet the needs and match the scale of children's activity. Here, the child experiences a blend of freedom and discipline in a place especially designed for her development.

Maria Montessori

The Montessori classroom is a community of children. The children participate in the care of the environment and show respect for the materials. The mixed age group allows students to learn from one another and to help one another. Children learn to respect the work of others by carefully walking around rugs and furniture and by not interrupting the concentration of those who are engaged.

In 6 rooms, it was observed that even the youngest children handled the materials with precision and care. Those rooms also had an effective or highly effective rating for another component, 2a: Engagement. Most children across all classrooms cared for the environment. They used the Montessori materials as tools for academic growth and worked with them appropriately. It was also observed that overall children spoke politely to one another.

There was little evidence (4 classrooms) of older children working with or helping younger children. Typically, children who worked together were the same age. Classroom practices that actively engage the mixed age groups in lessons or demonstrations may be helpful to build such relationships.

In several classrooms children working together distracted one another to socialize. Yet, in other rooms, there was a tendency for students to work near one another and to chat as they worked side by side. Talking while coloring or completing a simple puzzle may be possible, however, social banter, while working on challenging lessons, prevents a child from deeply exploring the material. Conversely in some classrooms, when children spontaneously

chose to work together on Montessori material, the children who were working together led one another to a deeper exploration of the materials and a shared problem solving approach to the work at hand.

4. Presentation of Data

Evidence was collected during eighteen classroom observations in Arlington Public Schools during a 3- day period in mid-February 2016. Twenty components from the 4 APS Montessori Framework Domains were rated for each classroom following the observations. The rating data is presented in a variety of manners in this report's appendix. The presented data includes, anonymous component scores for all 18 observed classrooms, average ratings for all domains and components, comparative data by total average scores, averages from classrooms at Drew school and average rating scores from all other APS Primary Montessori Classrooms. To examine the meaning of all ratings the reader should refer to the APS/MTCNE Montessori Observation Framework Rubric also included in the appendix. Additionally, frequently recorded evidence comments are summarized in a table provided. The table lists the comments by domain and indicates frequency of the comment as related to the number of classrooms to which the comment references.

Overall, a wide range of ratings is evident for each of the components. The average scores however when combined in a domain fall between 2.6 and 2.9 as indicated on the table below. Therefore based on these rating the overall program rating would be considered within a high developing or lower effective range.

APS Montessori Domain	Total Average
Domain 1: Prepared Environment	2.81
Domain 2: Work of the Child	2.61
Domain 3: Work of the Adults	2.88
Domain 4: Community of Children	2.67

Graphs to depict comparative scores for each domain and component have been provided in the appendix. Overall average scores ranged between 2 and 3 on all components with the exception of Respectful Interactions with Children (2a) and Children Respect the Environment (4a) which averaged a rating of 3 and above.

The total average scores for 3d Role of the Assistant range from 2.5 to 3.33. Though it was observed that assistants were strong at being able to redirect students, the other characteristics of the component lowered the overall scores.

While observing for Component 4c ,mixed age group, 2 classrooms, for unknown reasons, did not consist of the three age groups. In addition, rooms that were observed in the afternoon often had only third year students awake and working. Therefore, mixed age groups working together could not be observed in these classrooms. Despite these am/pm differences little mixed age group work was observed taking place throughout the day resulting in a lower component ratings in general.

When one looks at the wide range of scores for the components, 1 indicating ineffective and 4 indicating highly effective, a few components stand out for a variety of reasons. For instance, Domain 3, Component 3f was difficult to measure due to a lack of access or ability to observe lesson plans and record keeping. It is not to be suggested that record keeping does not occur but it was not observed during this period of time. Depending on the class observed domains 1, 2 and 4 demonstrated ratings from the lowest, 1, to the highest of 4. In Domain 3, the range is 2 - 4. These ratings indicate that based on the observations; there is a wide range of effective Montessori implementation within the Arlington Public Montessori Schools.

5. COMMENDATIONS AND RECOMMENDATIONS

COMMENDATIONS:

Prepared Environment

- Most classrooms were observed to have a full set of Montessori materials that were beautifully maintained
- The 3-hour work cycle was honored throughout the district as schedules were prepared
- Most classrooms had an attractive and inviting appearance
- Several schools made good use of gardens as an extension to the classroom.

Work of the Child

- Children chose to work independently most of the time

Work of the Adults

- All teachers demonstrated positive, respectful interactions with children
- Many assistants were observed appropriately redirecting students to productive work

Community of Children

- Overall, children demonstrate their use of the Montessori materials as tools for academic growth and purposeful activity
- In most classrooms, children spoke kindly to one another

RECOMMENDATIONS:

Prepared Environment

- Have staff review the proper sequence of sensorial materials and make adjustments as needed
- Have staff review their albums against the materials on their shelves to insure that all materials are available on the shelves
- Find an attractive and practical way for teachers to keep their notes and store resource books and materials
- Have staff discuss the use of wall space and its meaningful use in the classroom so as to reduce unnecessary distractions from the materials
- Teachers should share with each other their purposeful use of the outdoor space and gardens to benefit their students

Work of the Child

- Read about how concentration is facilitated in Angeline Stoll Lillard's book, Montessori, The Science Behind the Genius (p.106)
- Give more Montessori lessons and set high expectations for work choice
- Teachers should observe their own classrooms for 15 uninterrupted minutes. Take notes and use this data to identify steps to increase student engagement.
- Provide additional grace and courtesy lessons that model expectations for concentration and respect for those who are working
- Staff need to discuss and assess the use and effect of non-Montessori materials in the classroom (coloring materials, puzzles, games and work choices)

Work of the Adults

- Future observations might allow time for the observer to speak with the teachers and also to review their record keeping system
- Teacher should review their Montessori lesson records to insure that each student receives weekly Montessori lessons.

- Teachers need to purposefully plan to give at least 5 new Montessori lessons each day.
- Discuss the role of the assistants and ways to optimize use of the 2 adults.
- Consider hosting an AMI Assistants Training Course
- Ask assistant to record observation of students in regards to work choices and social interactions, analyze data from the observations to plan daily and weekly lessons

Community of Children

- Provide additional grace and courtesy lessons related to respecting the work of others
- Encourage and model how older children can help younger children
- Purposefully plan lessons that engage students of mixed ages

6. Summary and Next Steps

Eighteen Arlington Public Primary Montessori Classrooms were observed based on a Framework that reflects 4 domains related to essential Montessori tenets. Twenty components in all were rated for all observed classrooms. Collectively the program was rated between the developing and effective range. There is wide scatter in the scores for many components as evidenced on the table provided in the appendix. This display of data demonstrates an inconsistency of delivery of Montessori instruction that is not related to any one location within the district.
In general, the foundation for good Montessori delivery in Arlington Public Schools is present. All schools provided an extended period work cycle for their Montessori classrooms, rooms were well equipped with quality well maintained Montessori materials and there was an overall attention to the prepared environment. Teachers and assistants demonstrated respectful and appropriate interactions with the students and a culture of caring was evident.

A key focus for growth should be attention to strategies to increase purposeful engagement of the students with the Montessori materials. Several components in domains 2, 3 and 4 can be selected as program goals. Opportunities for teachers to share best practices and continued professional development regarding the quality of delivering Montessori lessons frequently and purposefully should be provided.

Arlington Public Schools should be commended for providing the primary classroom teaching staff a Montessori lens as part of their program review. If MTCNE can provide any further assistance with report information or suggested recommendations we would be pleased to assist the district and staff in their continued pursuit of quality public Montessori education for the young students of Arlington.

7. Appendix

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Arlington Public Schools Montessori Observation Tool

Arlington Montessori Observation Items Crosswalk with MTCNE Observation Framework Domains

Number	Source	Observation Item	Category	Domain
1	1	The teacher shows respect for the children.	Climate	3
2	1	Children are respectful of the teacher and the environment, including other children's workspaces.	Climate	2
3	2	The sound level is low enough to encourage concentration.	Climate	4
4	2	Adults speak in a low voice using respectful language with close proximity to the child.	Climate	3
5	2	Student concentration is evident during work, reflection, and observation.	Climate	2
6	2	Adults use the language and behaviors of the grace and courtesy lessons they teach.	Climate	3
7	2	Children practice grace and courtesy.	Climate	4
8	2	Adults address children at eye level.	Climate	3
9	1	The classroom is organized and aesthetically pleasing.	Physical Space	1
10	2	The workspace is designed to optimize concentration and engagement.	Physical Space	1
11	2	Classroom layout enables teachers to monitor students working in all areas of the room.	Physical Space	1
12	2	Teachers model language of Montessori self-assessment and self-reflection.	Instruction	3
13	2	Children primarily work in small groups or individually.	Instruction	4
14	2	Children have the freedom to choose work and follow their interests.	Instruction	2
15	1	The emphasis is on learning by doing and social development.	Instruction	4
16	2	Adults offer assistance when needed and limit unnecessary interference.	Instruction	3
17	1	Children are encouraged to teach, collaborate, and help each other.	Instruction	4
18	1	The children have a regular opportunity to work with children of different ages.	Instruction	4
19	2	Rich and authentic practical life activities are available, presented, and utilized.	Instruction	1
20	2	Children complete work chosen.	Instruction	2
21	2	Teachers initiate and model developmentally appropriate lessons using the materials.	Instruction	3
22	2	A full spectrum of Montessori materials is available in every area.	Instruction	1
23	2	A variety of literature is provided to enhance oral and written experiences.	Instruction	1
24	2	Observation, reflection, and social interactions are valuable learning activities.	Instruction	4
25	2	The teacher observes classroom and students regularly; has a recording system.	Instruction	3
26	2	Most students are engaged in their work in a focused and appropriate manner.	Instructions	2
27	2	Non-Montessori materials serve an explicit purpose and are aligned with Montessori principles and/or APS curriculum.	Materials	1
28	2	Materials are attractive and arranged in a logical sequence.	Materials	1

ARLINGTON PUBLIC SCHOOLS MONTESSORI OBSERVATION FRAMEWORK

Developed by the Montessori Training Center Northeast

DOMAIN 1: PREPARED ENVIRONMENT	DOMAIN 2: WORK OF THE CHILD
1a: Uninterrupted Work Cycle. **1b: Full Spectrum of Materials in Good Condition** **1c: Layout of Classroom and Materials.** **1d: Order, Cleanliness and Beauty of the Classroom**	**2a: Engagement** **2b: Work is Evident in All Montessori Areas** **2c: Work is Developmentally Appropriate** **2d: Three-Part Work Cycle is Completed** **2e: Choice is Child Directed** **2f: Control of Movement with Materials and throughout Environment**
DOMAIN 3: WORK OF THE ADULTS	**DOMAIN 4: COMMUNITY OF CHILDREN**
3a: Respectful Interactions with Children **3b: Connecting Children to Appropriate Lessons and Work** **3c: Evidence of High Expectations** **3d: Role of the Assistant** **3e: Managing Student Behavior** **3f: Lesson and Assessment Record Keeping**	**4a: Children Respect the Environment** **4b: Kind and Respectful Social Language and Movement** **4c: Appropriate Mixed Aged Groups** **4d: Spontaneous, Productive Work Groups**

APS OBSERVATION DATA

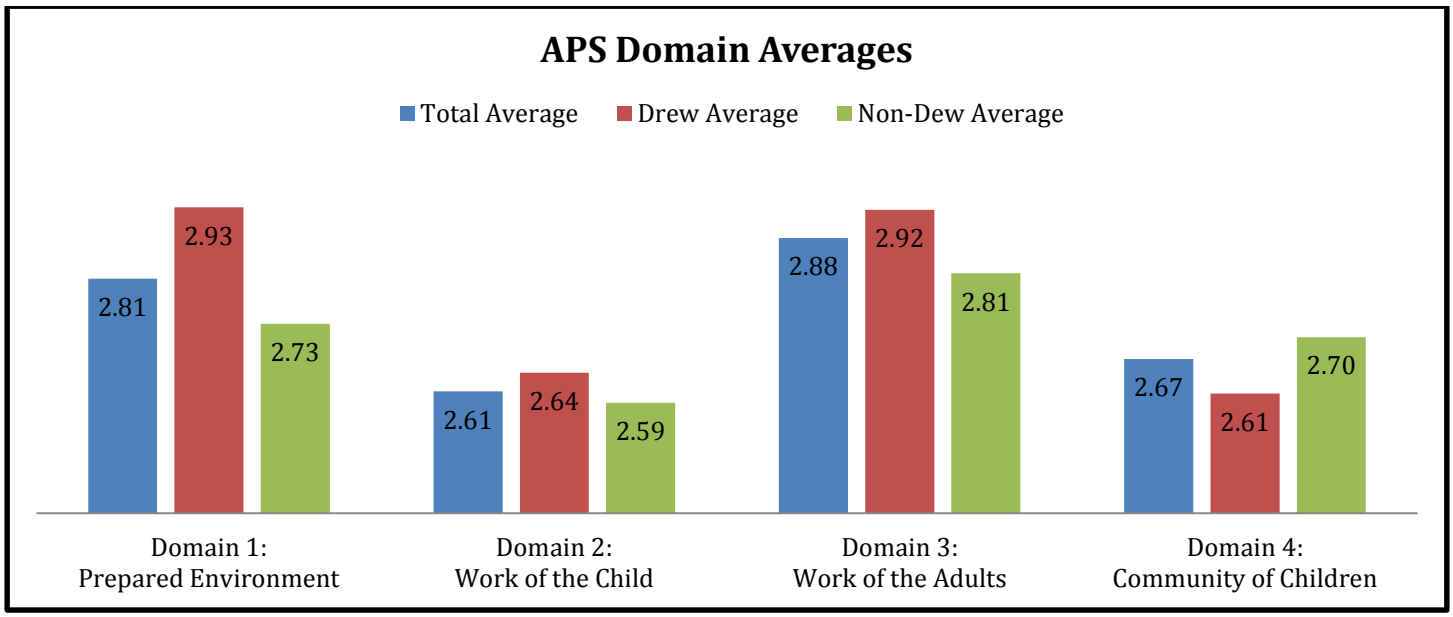
Domain 1: Prepared Environment																			
Teachers		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**
1a:	Uninterrupted Work Cycle	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3
1b:	Full Spectrum of Materials in Good Condition	3	4	3	3	3	3	3	3	4	1	2	2	3	3	2	3	3	3
1c:	Layout of Classroom and Materials	2	4	2	3	3	2	3	3	3	1	3	2	4	3	2	3	3	3
1d:	Order, Cleanliness and Beauty of the Classroom	2	4	2	3	3	3	3	3	3	1	4	2	3	3	2	3	3	2

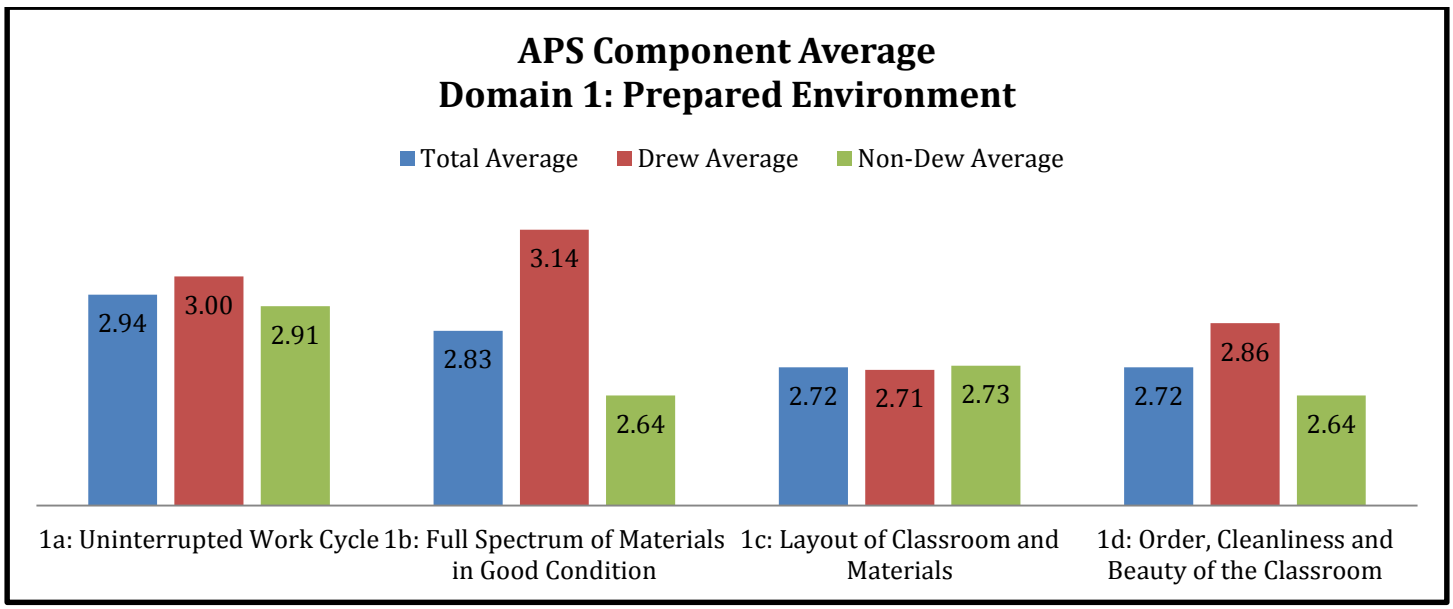
Domain 2: Work of the Child																			
Teachers		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**
2a:	Engagement	2	3	2	2	3	2	3	1	3	2	4	2	3	3	2	2	2	2
2b:	Work is Evident in All Montessori Areas	3	3	3	3	3	2	2	2	4	1	3	1	4	3	1	3	2	2
2c:	Work is Developmentally Appropriate	2	3	3	2	3	3	3	2	3	1	4	2	4	3	2	3	3	2
2d:	Three-Part Work Cycle is Completed	3	3	3	2	3	3	3	2	3	2	3	2	3	4	2	3	3	2
2e:	Choice is Child Directed	3	3	2	2	3	2	3	3	4	1	3	2	3	4	2	3	2	2
2f:	Control of Movement with Materials and Throughout Environment	2	3	1	3	4	2	3	2	3	3	3	3	4	3	2	3	3	3

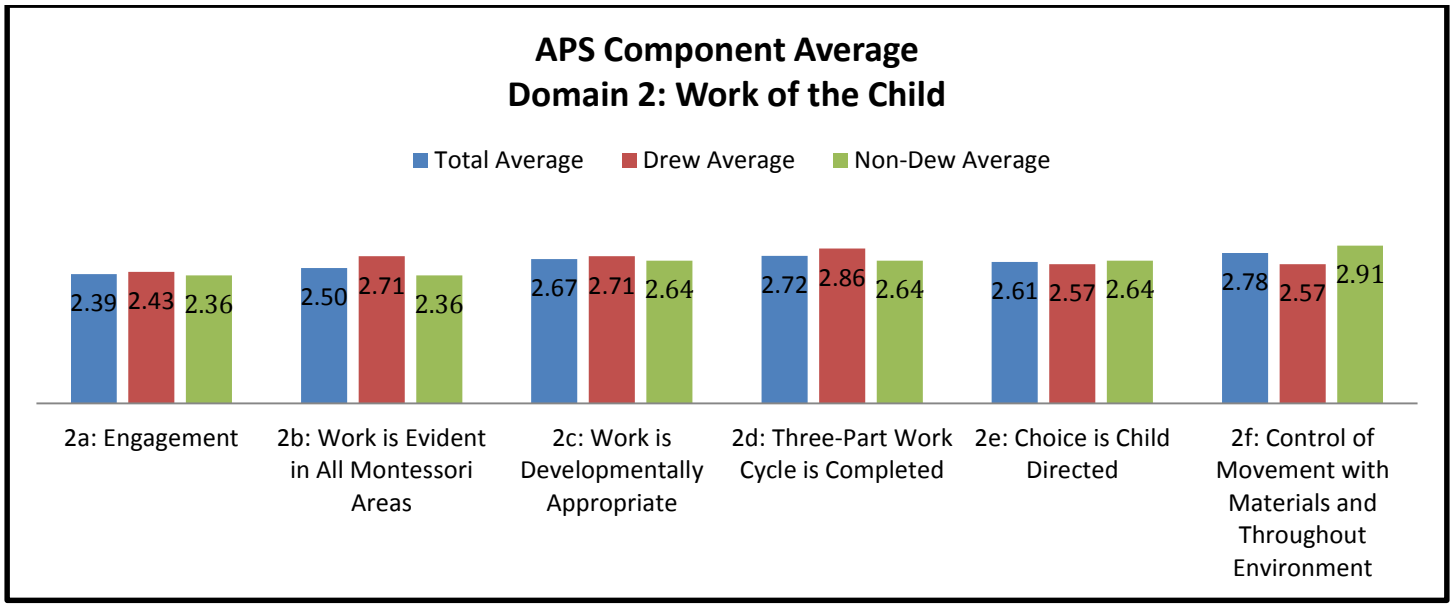
Domain 3: Work of the Adults																			
Teachers		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**
3a:	Respectful Interactions with Children	3	4	3	4	3	3	3	3	4	3	4	3	3	3	3	3	3	4
3b:	Connecting Children to Appropriate Lessons and Work	2	3	2	3	3	2	3	2	4	2	3	3	3	3	2	3	3	3
3c:	Evidence of High Expectations	3	3	3	3	3	3	4	2	4	2	4	2	4	4	2	3	3	3
3d:	Role of the Assistant	3	3	2	3	3	N/O	3	3	N/O	2	4	3	4	3	2	3	N/O	2
3e:	Managing Student Behavior	2	3	2	3	3	2	4	2	4	2	3	3	4	4	2	3	3	2
3f:	Lesson and Assessment Record Keeping	N/O	3	N/O	N/O	N/O	N/O	N/O	N/O	N/O	N/O	N/O	N/O	N/O	N/O	N/O	2	N/O	N/O

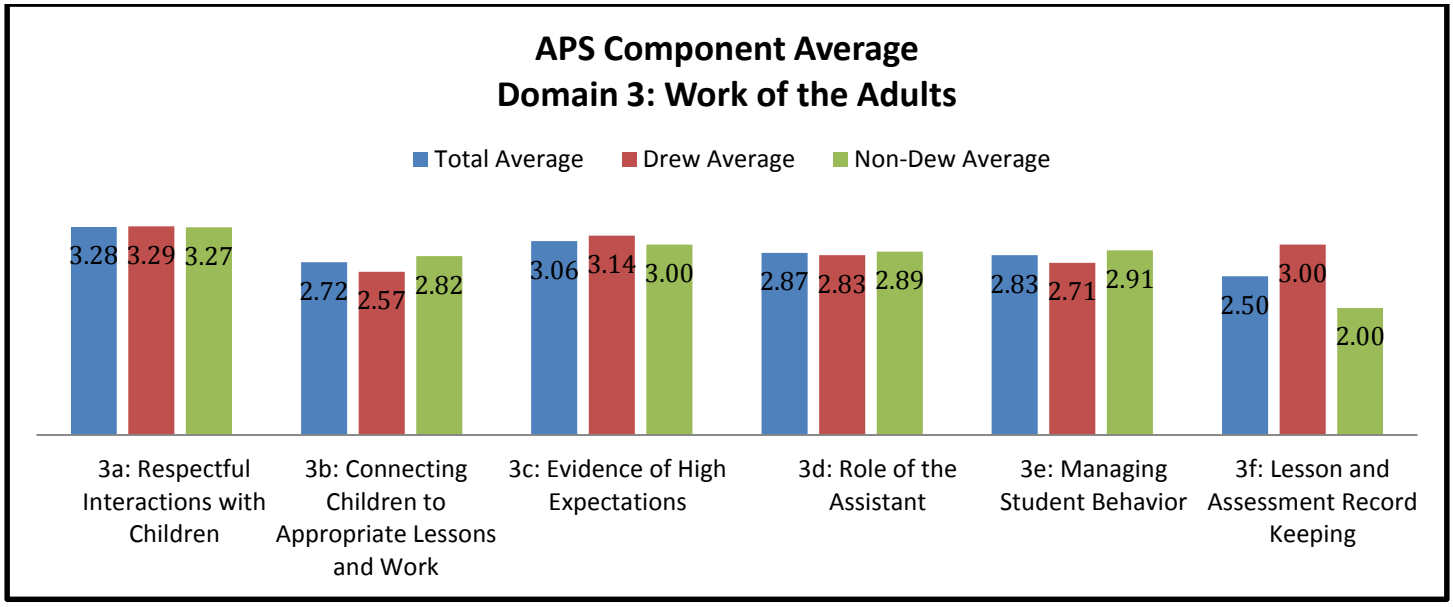
Domain 4: Community of Children																			
Teachers		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**
4a:	Children Respect the Environment	3	4	2	3	3	3	3	3	4	3	3	3	4	3	2	3	3	3
4b:	Kind and Respectful Social Language and Movement	3	3	3	3	3	2	3	2	3	1	3	3	4	3	3	3	3	3
4c:	Appropriate Mixed Aged Groups	2	2	2	2	2	2	2	3	3	2	2	2	2	3	2	1	1	3
4d:	Spontaneous, Productive Work Groups	2	3	2	3	3	2	3	3	3	2	3	2	3	4	2	2	3	3

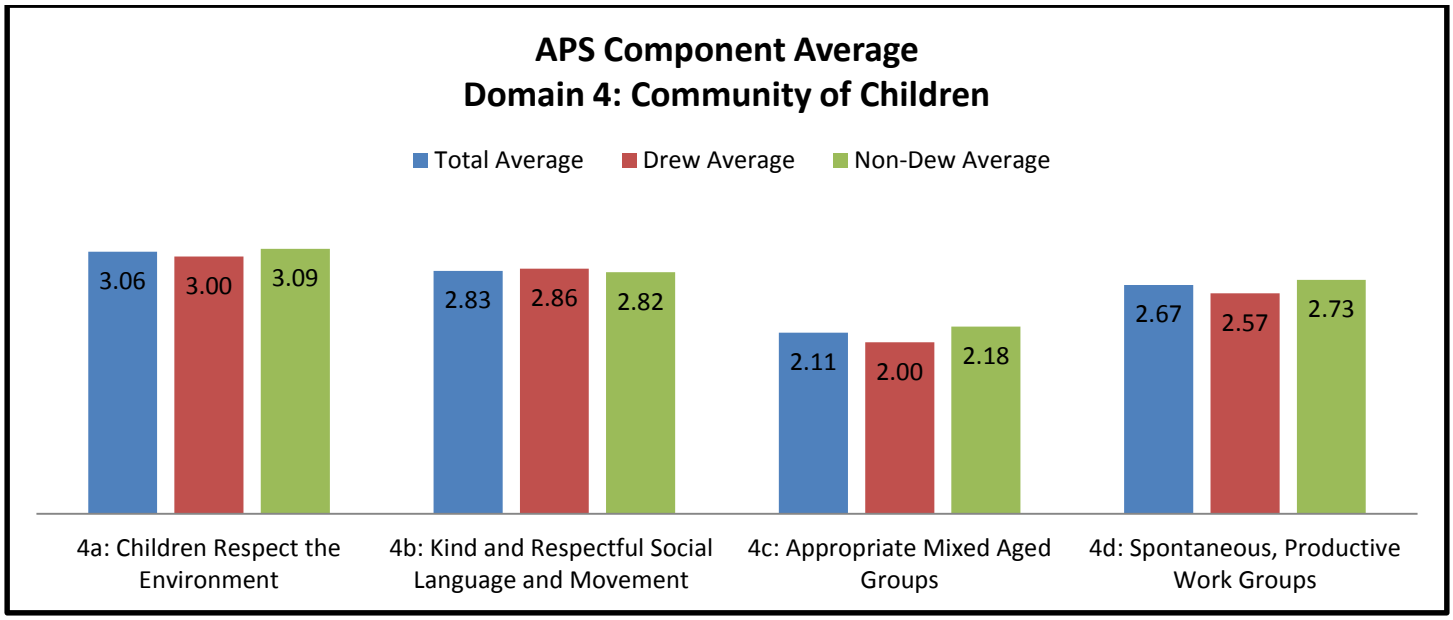
COMPARATIVE ANALYSIS OF DOMAINS AND COMPONENTS



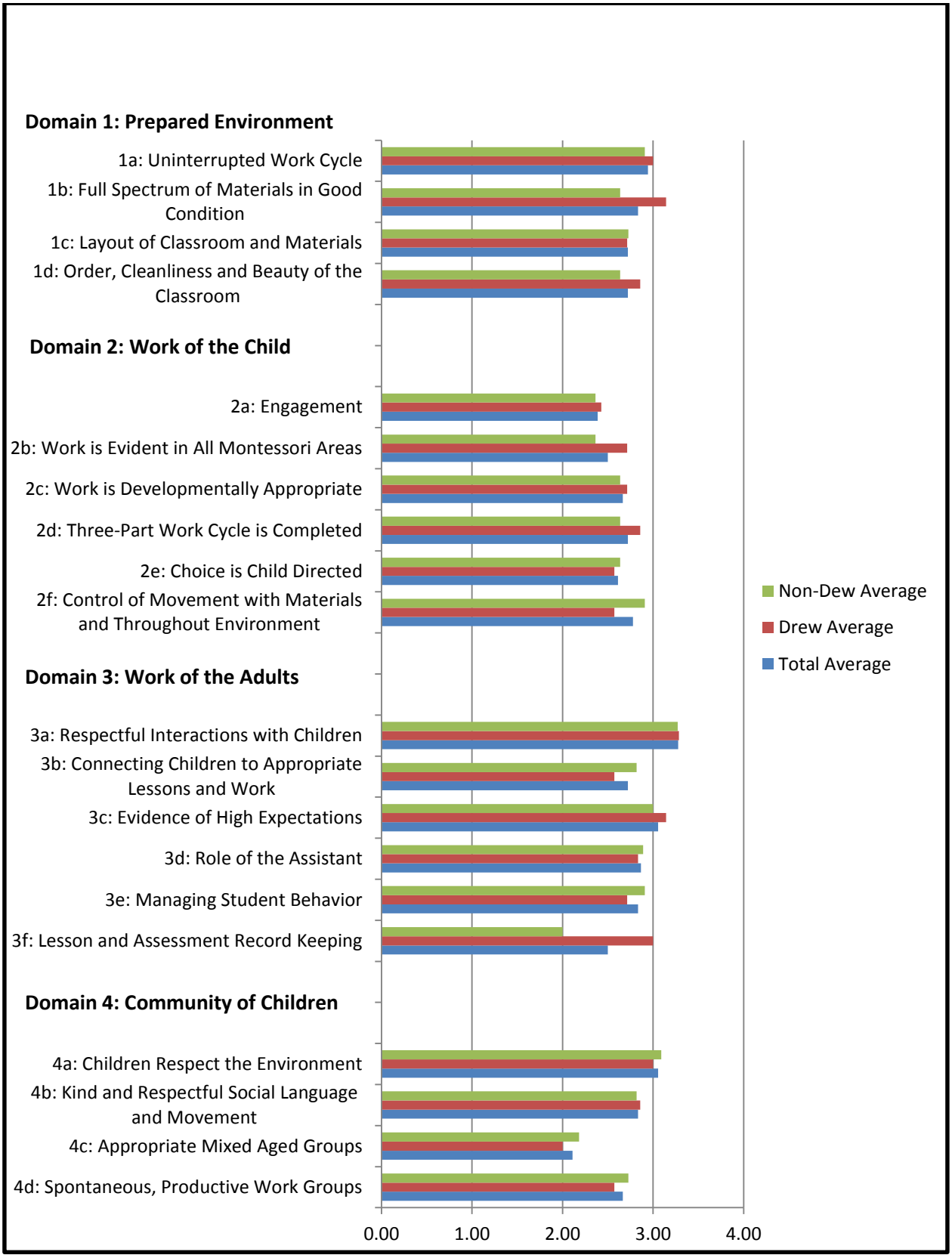



APS Component Average
Domain 2: Work of the Child
Total Average
Drew Average
Non-Dew Average
2.39 2.43 2.36
2.50 2.71 2.36
2.67 2.71 2.64
2.72 2.86 2.64
2.61 2.57 2.64
2.78 2.57 2.91
2a: Engagement
2b: Work is Evident in All Montessori Areas
2c: Work is Developmentally Appropriate
2d: Three-Part Work Cycle is Completed
2e: Choice is Child Directed
2f: Control of Movement with Materials and Throughout Environment


APS Component Average
Domain 3: Work of the Adults
Total Average
Drew Average
Non-Dew Average
3.28 3.29 3.27
2.72 2.57 2.82
3.06 3.14 3.00
2.87 2.83 2.89
2.83 2.71 2.91
2.50 3.00 2.00
3a: Respectful Interactions with Children
3b: Connecting Children to Appropriate Lessons and Work
3c: Evidence of High Expectations
3d: Role of the Assistant
3e: Managing Student Behavior
3f: Lesson and Assessment Record Keeping


APS Component Average
Domain 4: Community of Children
Total Average
Drew Average
Non-Dew Average
3.06
3.00
3.09
2.83
2.86
2.82
2.11
2.00
2.18
2.67
2.57
2.73
4a: Children Respect the Environment
4b: Kind and Respectful Social Language and Movement
4c: Appropriate Mixed Aged Groups
4d: Spontaneous, Productive Work Groups

APS Component Averages



APS Observation Comment by Domain

Domain 1: Prepared Environment	
Comment	**Frequency**
The room has few plants or pictures attractively placed	9
Some materials are out of sequence on the shelves	7
There is evidence of Science and Cultural activities	7
Teachers make good use of gardens	7
Plastic storage boxes are obvious and distracting or add a messy appearance	4
Teacher's materials are messy and obvious	4
Bulletin boards are full and distracting	3
Language material is presented in a beautiful manner	1

Domain 2: Work of the Child	
Comment	**Frequency**
Children are engaged in Non-Montessori materials or coloring activities	8
Children frequently ask for help from adults	8
Children interrupt the work of others to socialize	6
Many teacher-directed activities	6
Several children are engaged with worksheets	5
Children walk on the work rugs of others	4

Domain 3: Work of the Adults	
Comment	**Frequency**
Assistant effectively redirects students back to productive work	11
No Montessori lesson is given by Teacher, guides and assists	7
Teacher's lesson is interrupted by a child/children	6
Teacher sets high expectations by encouraging children to increase challenge of their work	5
Teacher assists others near her while giving a lesson	5
Teacher records lesson given after turning work over to the child	3
Evidence of classroom routines	3
Teacher models grace and courtesy lesson	3
Guide and assistant confer together	3

Domain 4: Community of Children	
Comment	**Frequency**
Children who are working together, distract one another	7
Even youngest children take great care to replace materials properly into boxes and onto shelves	6
Evidence of older children helping younger children	4

Arlington Public Schools Montessori Observation Tool

FRAMEWORK RUBRIC

DOMAIN 1: PREPARED ENVIRONMENT				
Components	**Ineffective**	**Developing**	**Effective**	**Highly Effective**
1a: Uninterrupted Work Cycle.	There are many interruptions to the work cycle.	The work cycle is less than 3 hours.	The classroom has a 3 hour work cycle.	Children make independent choices for 3 hours in the morning and 2 - 3 hours in the afternoon.
1b: Full Spectrum of Materials in Good Condition	Materials are incomplete with many missing pieces. Many materials are in need of paint, repair or replacement.	Montessori materials are mostly complete. Some materials need repair or replacement.	Montessori materials are complete in all areas. Materials are in good condition and well maintained.	Materials are complete and include appropriate sets of extension materials. Materials are in perfect condition and well maintained.
1c: Layout of Classroom and Materials	The classroom layout does not encourage fluid, controlled movement and student concentration. Some materials are not in sequence and/or accessible to the children. When available, an outdoor environment is not utilized.	Arrangement of furniture encourages some control of movement and student concentration. Most materials are appropriately sequenced. The layout of some materials interferes with student accessibility and engagement of the materials When available, an outdoor environment is rarely used by the children/	Space is well utilized to encourage control of movement and student engagement of the materials with concentration. Materials are organized sequentially and are easily accessible to children. When available, an outdoor environment is prepared with work options and a plan for access	Arrangement of classroom and materials encourages a high level of student engagement for all students including those with special needs. When available, an outdoor environment is well organized, attractive, safe and utilized. It is an extension of the classroom that allows fluid movement between the two environments. There are opportunities for gardening and exploration of nature.
1d: Order, Cleanliness and Beauty of the Classroom	The environment has a disorderly, unattractive appearance. Many shelves and tables need dusting or washing. Materials are displayed simply. Cultural materials are not present.	Some areas of the environment are not neat and orderly. Some shelves and tables need dusting or washing. Few materials are presented in an inviting or attractive way. There are a few plants and/or pictures on the wall. Little evidence of cultural enrichment.	Overall, the classroom is neat, orderly and clean. It is attractive and free of distractions. Appropriate pictures are at child's eye level. Plants and some cultural objects are attractively placed.	Classroom is very beautiful and inviting. Materials are displayed in attractive and inviting ways. The pictures on the wall and plants are connected to the Montessori lessons. Cultural materials, Geography, History and Science studies are available and implemented.

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FRAMEWORK RUBRIC

DOMAIN 2: WORK OF THE CHILD				
Components	**Ineffective**	**Developing**	**Effective**	**Highly Effective**
2a: Engagement	Engagement and focus are easily broken. Students are easily distracted. Most students return work uncompleted with little evidence of repetition.	Some students are engaged and others complete the initial task with some or no degree of repetition. Focus and concentration occur are short lived. Sometimes, students are distracted but return to complete tasks.	Students are engaged with work and frequently display good focus and concentration. Most students repeat lessons without distraction to the completion of the task.	The majority of students are engaged in activities with a high level of focus and concentration. Children repeat lessons and use extensions and games. There is evidence of thoughtful exploration of materials.
2b: Work is evident in all Montessori Areas	Student work is primarily limited to one or two Montessori areas. No evidence advanced work.	The majority of work is from one or two area. Little evidence advanced work. Many materials are seldom used.	Children choose work from all Montessori areas, including some advanced math and language.	Children choose work from all Montessori areas, including advanced math and language. Children engage in independent projects, science and cultural work.
2c: Work is Developmentally Appropriate	Many children make inappropriate work choices.	Some children make appropriate choices.	Most children choose work appropriate for their age and ability.	Children select work that is both appropriate and challenging for their age and ability with very little adult assistance.
2d: Three-Part Work Cycle is Completed	Work is taken out and put back before completion. Children often sit with materials without engaging.	Some children complete three-part work cycle appropriately while others engage the materials in inappropriate ways.	Most children complete three-part work cycle appropriately with repetitions.	Children complete three-part work cycle appropriately and extend the lesson with exploration or many repetitions.
2e: Choice is Child Directed	Children are dependent on adults for work choices, clean up and problem solving.	Children initiate some work but need help with other choices and transitions.	Children choose work independently most of the time with little assistance.	Children choose work independently and initiate projects and explorations. They seek help when needed from adults and classmates.
2f: Control of Movement With Materials and throughout Environment	Movements are noisy and lack grace and control. Children do not respect the work of others and are not careful with materials.	Movement is somewhat noisy. Most children walk around the work of others. Control of movement with materials requires some reminding.	Children move with control, are able to walk on the line, move tables and chairs carefully and use the materials with purpose.	All movements observed are very well controlled by all children.

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FRAMEWORK RUBRIC

DOMAIN 3: WORK OF THE ADULTS				
Components	**Ineffective**	**Developing**	**Effective**	**Highly Effective**
3a: Respectful Interactions With Children	Classroom interactions, between the teacher and students are negative, inappropriate, or insensitive to students' cultural backgrounds and developmental differences. Some interactions are characterized by sarcasm, put-downs, or conflict.	Classroom interactions, between the teacher and students, are generally appropriate and free from conflict and negativity. Some interactions are characterized by occasional displays of insensitivity or lack of responsiveness to developmental and cultural differences of students.	Most classroom interactions between the teacher and students are polite and respectful, reflecting general warmth and caring, as well as an understanding of the children. Teacher interactions are appropriate to the cultural and developmental differences of students	All classroom interactions between the teacher and individual students are very respectful, reflecting not only genuine warmth and caring but also sensitivity to students' cultures and levels of development.
3b: Connecting Children to Appropriate Lessons and Work	Presentations are not clear and engaging. Teacher responds to several interruptions during the lesson.	Presentations are clear and engaging some of the time. Teacher is sometimes distracted and/or responds to interruptions during the lesson. Teacher interrupts children during concentration to re-direct Teacher re-direction inconsistently results in increased focus and concentration.	Presentations are clear and uninterrupted most of the time. Consistently uses techniques and practices that motivate and engage most students during the lesson. Teacher appropriately re-directs with the frequent result of increased focus and concentration.	All presentations are consistently clear, exact and uninterrupted. Analyzed movements are exact and graceful. Teacher re-directs only as needed with the consistent result of increased focus and concentration.
3c: Evidence of High Expectations	The classroom culture conveys a negative culture for learning, characterized by low teacher commitment, low expectations for students and little or no student pride in work.	The teacher's attempt to create a culture for learning is partially successful, with moderate teacher commitment to the subject, little evidence that students believe they can succeed modest expectations for student and little student pride in work.	The classroom culture is characterized by high expectations for most students and students demonstrate pride in their work.	Consistently defines high expectations for quality work and effectively supports students to set high expectations for one another. Encourages all students , including English learners and students with disabilities, to persevere, to set goals for themselves and to produce high-quality work

3d: Role of the Assistant	Guide and Assistant demonstrate inconsistent expectations. Assistant is not well utilized. Assistant does not interact well with children.	Guide and assistant have a working relationship are inconsistent with expectations. Assistant is not well utilized some of the time. Assistant does not interact well with children some of the time.	Guide and Assistant appear to have a good working relationship and communicate well. Assistant is well utilized Assistant has a supportive relationship with children	Teacher and assistant work collaboratively as partners on behalf of the children. Assistant is well utilized and takes initiative on behalf of the children and the Guide.
3e: Managing Student Behavior	Teacher does not reinforce positive behavior. Inappropriate and challenging behavior is not addressed efficiently. Children have difficulty solving most problems.	Teacher seldom reinforces some positive behavior. Some inappropriate and challenging behavior is addressed efficiently. Children often go to adults for help.	Teacher strategically reinforces positive behavior. Teacher efficiently addresses most inappropriate and challenging behavior. Provides clear instructions and directions. Teacher inconsistently demonstrates when to intervene and when to step back. The children show an understanding of the expectations for behavior.	Teacher strategically reinforces positive behavior and efficiently addresses all inappropriate and challenging behavior. There is evidence that children control their own actions and make positive choices regarding personal behavior. Children also support one another to make good choices. Children are encouraged to solve problems on their own. Teacher is aware and responds only when needed.
3f: Lesson and Assessment Record Keeping	System for recording student lessons and progress is not well managed or is non-existent. There is no Assessment record keeping.	System for recording student lessons and progress is incomplete and/or inconsistently maintained. There is limited assessment recordkeeping.	Method of monitoring and recording student lessons and progress is efficient and maintained regularly. Most lesson plans are based on recorded observations. An effective system for recording Assessment data is up to date.	Record keeping is very efficient, consistently completed for both lessons and assessments. All recorded data influences lesson planning.

Arlington Public Schools Montessori Observation Tool
FRAMEWORK RUBRIC

DOMAIN 4: COMMUNITY OF CHILDREN				
Components	**Ineffective**	**Developing**	**Effective**	**Highly Effective**
4a: Children Respect the Environment	Most children show a lack of care for the materials, furniture and equipment. Classroom materials are used inappropriately with demonstrated lack of care.	Some children show a lack of care for the materials, furniture and equipment. Children do not clean after themselves and return materials inappropriately.	Children demonstrate their use of the Montessori materials as tools for academic growth and purposeful activity. Children spontaneously care for the environment.	Children readily participate in care of environment All children show a high level of care of Montessori materials.
4b: Kind and Respectful Social Language and Movement	Children engage in idle chatter and make negative comments to one another. Most movements are noisy and careless. Children frequently seek adult approval and need constant adult prompting.	Some children speak kindly and politely with one another, with little adult prompting. Some movements are noisy and careless.	Most children speak kindly and politely with one another, with little adult prompting. Classroom has a low buzz of activity that is not distracting.	Most children speak kindly and politely with one another, without adult prompting. Children move about with excellent control, enjoy walking on the line and move furniture and materials carefully.
4c: Appropriate Mixed Age Groups	No evidence of mixed age work.	Little evidence of mixed age work.	Many lessons and interactions of the children involve mixed age groupings.	Most of the lessons and interactions of the children involve mixed age groupings. There is concern and care demonstrated by older students with their younger classmates.
4d: Spontaneous, Productive Work Groups	There is little to no student directed work without adult prompting. Children who are working together are often distracting to one another.	Children form some small groups but require teacher's presence to sustain focus and productivity. Children work cooperatively with teacher present.	Teacher brings students together in collaborative activities to foster teamwork, responsibility, self-discipline and respect. Occasionally, children spontaneously work together in pairs and small groups. Children help one another without prompting.	Children spontaneously and cooperatively work together with respect. They are self-disciplined and independent.

8 CONTACT INFORMATION

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