

SECTION 3: SUMMARY OF FINDINGS

Instruction and Student Outcomes

1. The APS Early Childhood Program is committed to increasing access to Pre-K programs for Arlington families, with a particular focus on those who would otherwise not have access to Pre-K; this includes families of lesser financial means and/or limited English proficiency. Student academic outcomes indicate that APS Pre-K programs make a positive difference for participating students in comparison to students with no Pre-K experience. This pattern is strong in fall kindergarten outcomes, while less clear long-term.

PALS PreK scores indicate a high level of growth in the Pre-K year, and fall PALS-K scores show a strong advantage for students who had participated in all APS Pre-K programs in comparison to students who had attended no formal Pre-K program. Both of these measures see a greater impact of Pre-K for LEP and economically disadvantaged students.

Likewise, the Pre-K math assessment shows strong growth from fall to spring, and the kindergarten math assessment shows an advantage for APS Pre-K participants in comparison to those who had no formal Pre-K experience. Similar to literacy measures, the data suggests a greater impact for LEP and economically disadvantaged students.

Short-term outcomes for students who participate in the special education Pre-K program tend to fall into lower ranges than for those who participate in VPI or Montessori, although this is not always true:

- While high, growth in DMA levels and PALS PreK developmental ranges from fall to spring was less pronounced for students in the special education program than for VPI students.
- In 2015-16, students who had attended an APS special education Pre-K program were just as likely as VPI, Montessori, or private preschool students to meet the fall K-PALS benchmark.
- Students who had attended an APS special education Pre-K program had a higher average score on the fall kindergarten math assessment than VPI students, and a lower average score than Montessori students.

Long-term outcomes are less clear. In a report that included longitudinal analyses of two APS kindergarten cohorts, Hanover Research found a pattern of consistently positive outcomes for the earlier cohort of students through 12th grade, suggesting that participating in an APS Pre-K program had had a positive impact on the success of LEP and economically disadvantaged students. Results for the more recent cohort were less conclusive.

2. Four-year-old students across programs show growth in social-emotional indicators from fall to spring.

Students in the VPI program appear to make greater gains in social-emotional outcomes from fall to spring than four-year-olds in Montessori or special education. The primary Montessori program is a three-year continuum and thus students may make these gains in their third year.

In all programs, **Self-Concept** and **Social Problem Solving** had the lowest percentage of students rated as *meeting* in the spring, and in the special education program, the area of **Self-Control** was relatively lower as well. Parents from all programs expressed satisfaction with their child's growth in personal/social skills during the school year.

Generally, the percentage of students in the special education program rated as meeting various social-emotional indicators increased from fall to spring at a lower rate than those in the VPI and Montessori programs.

3. Classroom observations indicate a strong level of emotional support and classroom organization, while also pointing to areas of focus for future professional development.

CLASS observations across programs show a high level of emotional support and classroom organization, while instructional support scores fall into the low-mid range. Regard for Student Perspectives appears to be particularly strong in Montessori classrooms.

Montessori observations found that implementation of Montessori practices fell within a range of high developing to low effective. The strongest dimension was **Respectful Interactions with Children**. The Montessori observer noted with concern that many teachers did not give specific lessons, instead monitoring the room, stopping to assist children as needed.

4. Collaboration among teachers occurs most frequently among teachers at the same school and among teachers within the same program.

The most frequently occurring type of collaboration between Pre-K teachers and specials teachers (art, music, and PE) is **sharing ideas**. Other types of collaboration – co-teaching, co-planning, and team meetings – generally occurred at much lower rates, and Montessori teachers were the least likely to report frequent collaboration with specials teachers in any category, with just 0-8% for any category.

Within Pre-K programs, teachers were far more likely to report that they collaborated frequently with teachers in their program who were **at their school**, rather than at other schools. Frequent collaboration with teachers from other schools was reported by between 0-7% of teachers. All three groups of teachers indicated that their most frequent type of collaboration with their school-based peers were **team meetings** and **sharing ideas**. Special education teachers were the most likely to report that they frequently **co-teach** with other teachers in their program at their school.

Survey responses from all teacher groups indicate that special education teachers are far more likely to collaborate with VPI teachers than with primary Montessori teachers.

Meeting the Needs of the Whole Child

- 5. APS Pre-K programs provide a variety of social-emotional/behavioral and practical/social supports to students and families. Feedback from staff indicates some possible areas for expansion of supports.**

Staff across programs generally feel that APS Pre-K students and their families receive the social-emotional/behavioral and practical/social supports they need. Many staff suggested that additional support could be provided by means of parent meetings and workshops, and counseling and social worker services for students. Special education teachers suggested home visits and counseling services for parents.

- 6. While parents are generally satisfied with their child's specials teachers, specials teachers vary by program area in their level of confidence in providing developmentally appropriate instruction to Pre-K students.**

Among specials teachers, PE teachers were most likely to feel confident in their ability to provide developmentally appropriate instruction to Pre-K students, though open-ended responses show they are also the most likely to feel they receive no support in their instruction for Pre-K students. Montessori and VPI parents generally expressed a high level of satisfaction with their child's specials teachers, particularly parents of VPI students. Montessori parents' lower satisfaction ratings seem to be less of an indication of dissatisfaction than lack of familiarity.

Community and Parent Engagement

- 7. Feedback from parents indicates that the Early Childhood Program is doing a good job engaging parents across demographic groups.**

Most students served by the VPI program are LEP and qualify for free or reduced-price meals. The reverse is true for the Montessori program. The percentage of primary Montessori students who qualify for free or reduced price meals has decreased by 14 percentage points in the last five years, and was 35% in 2015-16.

Survey responses indicate that parents feel that APS does a good job of keeping them informed of their child's progress and of opportunities to be involved in their child's education. Parents also reported that they feel comfortable interacting with staff at their child's school. Differences among demographic groups were minor; where there were differences, the satisfaction level tended to be higher among groups that might be considered to be at a disadvantage, such as those who speak a language other than English or those with lower levels of education.

Survey responses and data collection from teachers both indicate that most parents participate in a school-based activity such as conferences, field trips, or classroom events. Those with higher incomes and higher levels of education were the most likely to have volunteered in the classroom.

8. While most parents find the Pre-K application and registration process to be easy, feedback from parents and staff suggests some areas for improvement, though there was contradictory feedback about the benefits of centralized registration.

Most parents find the Pre-K application and registration process to be easy, and this is generally true across demographic factors such as home language, education level, and household income. The two most commonly recommended improvements frequently went hand in hand: Allow parents to apply and register online and centralize the application process. Staff responses about the registration process were more varied. Among staff, there was little agreement on whether school-based or centralized registration is preferable.

Resources

9. Per-student staffing costs are higher for VPI than for Montessori, even while the average salary and benefit cost for primary Montessori teachers is higher than for VPI teachers.

Due to slightly higher average salary and benefits costs for VPI assistants and lower student-staff ratios, per-pupil staffing costs are higher for VPI (\$8,702) than for primary Montessori (\$7,331). At the same time, average salary and benefits costs for primary Montessori teachers are higher than for VPI teachers. Startup costs at the individual classroom level, including furniture and instructional material purchases, are considerably higher for the primary Montessori program than for VPI.

10. The primary Montessori fee schedule appears to have a disproportionate impact on some families.

Tuition fees required for the primary Montessori program vary widely by household income level and make up a greater percentage of a family's income at the middle income levels than at higher income levels.

11. All VPI and primary Montessori teachers meet criteria to be considered highly qualified. Administrators involved in recruitment generally have an easier time hiring VPI teachers than primary Montessori or special education Pre-K teachers.

All teachers in the VPI and primary Montessori programs hold one or more endorsement related specifically to early childhood education. Primary Montessori teachers had an average of 20.6 years of teaching experience, compared to 14.4 years for VPI teachers. Most administrators find the process of recruiting and hiring VPI teachers to be easy, while most find the process of hiring primary Montessori teachers to be difficult. Administrators are more split on the ease or difficulty of hiring special education

Pre-K teachers. The primary difficulty cited in recruiting and hiring both primary Montessori and special education Pre-K teachers is the limited number of applicants with the necessary credentials and experience.

12. VPI teachers have a higher level of satisfaction with services and resources provided by the Early Childhood Office.

VPI teachers were the most likely to express satisfaction with support from the Early Childhood Office in any area: resources, advocacy, communication, professional development, and curriculum. They were also far more likely than Montessori teachers to report that professional development offered by the Early Childhood Office was relevant to their work, and that they frequently apply what they learn in professional development offered by the Early Childhood Office.

SECTION 4: FINDINGS AND ACTIONS

Primary Montessori Program

Finding #1: As the planning process to move the countywide elementary Montessori program from Drew Model School to a new location begins, several findings from this evaluation point to opportunities for possible restructuring:

- There are some key differences between the countywide and satellite programs:
 - Observations suggest that the centralized site is more likely than satellite sites to use Montessori materials without supplementing with non-Montessori materials.
 - Kindergarten discontinuation occurs at a greater rate at the satellite sites than at Drew.
- Kindergarten discontinuation appears to be more about convenience than dissatisfaction.
- Families in the middle range of household income pay a larger percentage of their income in Montessori fees than those in the highest range.
- Primary Montessori programs appear to be under-enrolled, with an average class size of 21.5 and a maximum class size of 23.
- There has been a decrease in the past three years in the percentage of primary Montessori students who meet eligibility requirements for free or reduced-price meals.
- Administrators report that recruitment and hiring of primary Montessori teachers is difficult.

Recommendation #1: Review and recommend changes to the structure and delivery of APS primary Montessori options in the context of capacity and crowding decisions.

STAFF RESPONSE:

Staff has developed the following plan to address the findings and implement the recommendations of the Early Childhood program evaluation. If any policy changes and/or budget requests are necessary during this process, staff will present them during the budget process or policy review process as appropriate.

Action Plan for Recommendation #1			
Recommendation #1	Goal	Measures of Success	Action Steps
Recommendation #1 Review and recommend changes to the structure and delivery of APS primary Montessori options in the context of capacity and crowding decisions.	Centralized registration	Accessible and convenient registration process for families	<ul style="list-style-type: none"> Review current structures Develop plan for centralized processes
	Revised fee structure	Consistent and fiscally responsible fee structure	<ul style="list-style-type: none"> Review fee structure Identify changes Implement changes
	Program delivery	Montessori program that meets student needs and addresses system-wide capacity issues	<ul style="list-style-type: none"> Review current structure of Montessori program at Drew Model, satellite Pre-K classes, and MS Montessori at Gunston Make recommendations in context of move to Henry site in 2019

Pre-K Instruction and Student Outcomes

- Finding #2:** Student outcomes indicate that APS Pre-K programs make a positive difference for participating students in comparison to students with no Pre-K experience. This pattern is strong for short-term outcomes, while less clear long-term. Observational data points to areas of focus for future professional development including instructional support for all programs, and work of the child in Montessori classrooms. In addition, Montessori teachers are less likely than VPI teachers to be satisfied with professional development and other support from the Early Childhood Office.

Recommendation #2: Provide professional development that offers:

- A Montessori-certified trainer, specifically in the area of *Work of the Child*, for Montessori teachers.**

Early Childhood Evaluation Report: Summary of Findings and Actions

- **More opportunities for the development of professional learning communities among Montessori staff and more support for collaborative walks and observation.**
- **Training for all Pre-K staff on factors essential to strong instructional support, including quality of feedback, language modeling, and most importantly, concept development.**

STAFF RESPONSE:

Staff has developed the following plan to address the findings and implement the recommendations of the Early Childhood Program Evaluation. If any policy changes and/or budget requests are necessary during this process, staff will present them during the budget process or policy review process as appropriate.

Action Plan for Recommendation #2			
Recommendation #2	Goal	Measures of Success	Action Steps
Recommendation # Provide professional development targeted to the findings	Pre-K teachers will be provided targeted professional learning to improve instruction.	All Montessori teachers trained in Work of the Child	Provide Montessori teachers with a Montessori-certified trainer specifically in the area of Work of the Child
		Eliminate discrepancy between the countywide and satellite sites	Provide more opportunities for the development of professional learning communities among Montessori staff and support collaborative walks and observation
			Provide training for VPI and special education Pre-K staff on factors essential to strong instructional support, including quality of feedback, language modeling, and most importantly, concept development.

Special Education

Finding #3: Outcomes for students who participate in the special education Pre-K program tend to fall into lower ranges than for those who participate in VPI or Montessori, although this is not always true:

- While high, growth in DMA levels and PALS PreK developmental ranges from fall to spring was less pronounced for students in the special education program than for VPI students.
- In 2015-16, students who had attended an APS special education Pre-K program were just as likely as VPI, Montessori, or private preschool students to meet the fall K-PALS benchmark.
- Students who had attended an APS special education Pre-K program had a higher average score on the fall kindergarten math assessment than VPI students, and a lower average score than Montessori students.
- Generally, the percentage of students in the special education program rated as meeting various social-emotional indicators increased from fall to spring at a lower rate than those in the VPI and Montessori programs.
- Special education teachers appear to collaborate frequently with VPI teachers and less frequently with primary Montessori teachers.

Recommendation #3: Continue efforts to increase inclusive practices in APS Pre-K programs through:

- **Continued collaboration between the Office of Early Childhood and the Office of Special Education**
- **Continued strategic placement efforts for students in the special education program**
- **Continued opportunities for joint professional development with Special Education Pre-K, VPI and Montessori staff**

STAFF RESPONSE:

Staff has developed the following plan to address the findings and implement the recommendations of the Early Childhood Program Evaluation. If any policy changes and/or budget requests are necessary during this process, staff will present them during the budget process or policy review process as appropriate.

Action Plan for Recommendation #3			
Recommendation #3	Goal	Measures of Success	Action Steps

Early Childhood Evaluation Report: Summary of Findings and Actions

<p>Recommendation #3</p> <p>Continue efforts to increase inclusive practices in APS Pre-K programs</p>	<p>Increase in the documented hours students in the special education Pre-K program spend in general education settings.</p>	<p>Increased performance on Pre-K PALS, DMA, and other measures of development including IEP goal mastery</p>	<ul style="list-style-type: none"> • Continued PD on differentiated instruction, strategies to meet the needs of SWD and co-teaching and collaboration • Targeted technical assistance to specified school sites implementing or planning for co-teaching models
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