

MEMORANDUM

To: Arlington School Board
From: Early Childhood Advisory Committee
Date: January 26, 2011
Subject: Recommending Year Report

Background

The Early Childhood Advisory Committee (ECAC) studies issues related to the instruction of the Arlington Public Schools' youngest students.

In addition to APS Special Education preschool programs, which serve roughly 250 three and four year olds, APS currently has two Pre-Kindergarten (Pre-K) programs: 17 classrooms serving approximately 250 3, 4 and 5 year olds in the Montessori program, and 32 classrooms serving approximately 500 4 year olds as part of the Virginia Preschool Initiative (VPI), which uses a more traditional approach to curriculum. At risk children who benefit most from Pre-K make up a significant portion of APS Pre-K enrollment, as 2/3 of the slots in the Montessori program are reserved for families who make less than \$82,800 (80% of the median income for a family of four in Arlington County) and all of the slots in the VPI program are for families who make less than \$82,800. Both programs enjoy strong interest from the community.

Early childhood education, however, is not limited to the Pre-K years, but spans early elementary school. Young children between the ages of three and eight think and learn in ways which are related to their stages of development and which differ somewhat from those of older children and adults. The foundation that is laid during these years can profoundly shape what happens in later life. A strong early childhood education program based on research and knowledge about how young children think and learn enriches development and enables later achievement. ECAC offers three recommendations at this time that we believe will help ensure all our students have that strong foundation.

Recommendation #1:

The Office of Early Childhood should review instructional practices related to social and emotional learning, particularly classroom management techniques, in early childhood classrooms across the district in order to determine the extent and consistency of best practices. As a part of that review, data from the CLASS assessments completed for program evaluations should be disaggregated to analyze such instructional practices.

Rationale:

Social and emotional learning is a fundamental element of high quality early childhood classrooms. Intuitively, instruction is most effectively delivered in a positive classroom climate, and more learning occurs when classroom management techniques are effective. A positive sense of self, as well as caring relationships with teachers and other students, increases students' desire to learn. A wide body of research shows, however, that positive social and emotional development is not only important to young children's current capacity to learn, but also provide an essential foundation for later cognitive development and future academic achievement. For example, students who have participated in programs that specifically address social and emotional learning score significantly higher on achievement tests than those who had not participated in such a program¹ and children with poor self-regulation skills test significantly lower on measures of reading and math skills². The early childhood years are a key period for establishing positive attitudes and behaviors about learning like self-regulation, attention and persistence, which are closely related to social and emotional development. "Approach to learning" is, in fact, one of the five components of school readiness as defined by The National Education Goals Panel (1997) and social and emotional skills such as self-control and the ability to resolve conflicts positively are included in the Virginia Department of Education's definition of school readiness. Social and emotional learning continue to play an important role in academic success throughout the elementary school years.³

Despite their critical importance to academic achievement and positive outcomes such as the reduction of bullying, social and emotional learning are areas that have not undergone systematic review in the APS. Members of the ECAC have received enough feedback anecdotally from parents across the district about teachers using classroom management techniques that are unhelpful to students' social and emotional learning to feel that there is real indication of inconsistency in the use of developmentally appropriate practices in this area in early childhood classrooms. The lack of data makes accurate assessment of the situation difficult and impedes the Department of Instruction from effectively providing resources and planning appropriate professional development to support teachers in this critical area of their instructional practice.

¹ Durlak, J.A., Weissberg, R.P., Dymnicki, A.B., Taylor, R.D., and Schellinger, K. (2008). *The Positive Impact of Social and Emotional Learning for Kindergarten to Eighth-Grade Students*. Chicago: CASEL, University of Illinois.

² McClelland, N.M., Acock, A.C., and Morrison, F.J. (2006). *The impact of kindergarten learning-related skills on academic trajectories at the end of elementary school*. *Early Childhood Research Quarterly* 21 (4):471-90.

³ Zins, J.E., Weissberg, R.P., Wang, M.C., and Walberg, H.J. (ed.). (2004). *Building Academic Success on Social and Emotional Learning: What Does the Research Say?* Columbia: Teachers College Press, NY, NY.

The Classroom Assessment Scoring System (CLASS), developed by the Center for the Advanced Study of Teaching and Learning, University of Virginia, is an assessment tool that rates the effectiveness of observed teacher-child interactions in classrooms.⁴ Four of the nine dimensions of the CLASS assessment relate directly to classroom management: Positive Climate, Teacher Sensitivity, Regard for Student Perspectives and Behavior Management. Because of its usefulness in both assessing teaching practice and as a professional development tool, the CLASS was used by APS in the Pre-Kindergarten Program Evaluation (2010), and is currently being used by APS as a component of the Math Program Evaluation and the World Languages Program Evaluation. It would provide useful information about classroom management in APS classrooms to disaggregate the data in the four relevant dimensions. As a starting point for understanding the strengths, areas for growth and any potential inconsistencies in teaching practices related to classroom management, use of the CLASS data is compelling from a number of standpoints. CLASS is a reliable, valid and normed standardized instrument; it has versions of the tool for Pre-K as well as elementary aged students; it is based on observation of the classroom rather than teacher self-assessment. As the tool is already in use as part of program evaluations, the data is readily accessible, and it would fit coherently into the broader discussion of other instructional goals and practices in APS, such as differentiating instruction.

To reiterate, the CLASS data would be the beginning of a larger discussion of effective instructional practices relating to social and emotional learning in APS, and further assessment or study may be warranted. It would powerfully support the APS strategic plan goals of responsive education and rising achievement for all to ensure that the structures are in place for all children in APS to have access to the social and emotional supports that are the underpinnings of their future academic success. It may be that a more coherent, systematic approach to classroom management is warranted and/or that heightened attention to this area of instructional practice would result in gains in student achievement and preparedness to thrive in all facets of life in the twenty-first century. To this end, ECAC recommends that the Office of Early Childhood review classroom management practices in APS with consideration of effective social and emotional learning and developmentally appropriate practice.

Budget Implications:

The direct budget cost would be zero, although it should be noted that the recommendation would require allocation of staff time.

Recommendation #2:

⁴ For a brief overview of the CLASS, visit <http://www.teachstone.org/about-the-class/>.

Despite increasing budget constraints, APS should maintain the size of its Pre-K programs. Inclusion of at risk children, as defined by qualification for free and reduced lunch, should continue to be the priority.

Rationale:

There is ample research to support the educational benefit of Pre-K experience. Kindergarten children in APS who had attended preschool had significantly higher pass rates on the K-PALS than children who did not attend Pre-K.⁵ The difference in pass rates was most pronounced for at risk children. Furthermore, at risk children and Limited English Proficient (LEP) students who had attended PreK continued to outperform those at risk children and LEP students who had not attended Pre-K through the fifth grade, as evidenced by SOL scores and Degrees of Reading Power.⁶ These APS findings are consistent with numerous longitudinal studies that have demonstrated Pre-K for at risk children results in such benefits as significantly increased high school graduation rates, decreased rates of placement in special education and decreased rates of being retained in a grade.⁷ Providing Pre-K may be an expensive endeavor, but unlike many educational interventions, it is an investment that brings significant returns. A major study by the Rand Corporation that analyzed economic returns from investing in Pre-K education in California found that every dollar spent resulted in \$2.62 of direct, tangible returns.⁸ Other studies have found returns as high as \$9 for every dollar spent.⁹ It is important to view the cost of maintaining APS Pre-K programs as an investment – one that unlike many other budget initiatives has been proven to provide maximum value.

Increasing the proportion of children completing Pre-K and demonstrating readiness for learning in kindergarten, and decreasing the gap in the proportion of children in identified groups completing Pre-K and demonstrating readiness for learning are clearly articulated objectives in reaching the APS strategic plan goals of rising achievement and eliminating the achievement gap. Because research has demonstrated the outcomes of Pre-K education are significant in

⁵ Children who attended preK had a pass rate of 93%; those who had not attended PreK, 83%. Further, those students who qualified for Free and Reduced Lunch Programs had a pass rate of 90% when they had attended APS preK, 71% when they had attended a non-APS preK, and 59% when they had not attended preK. APS Pre-Kindergarten Program Evaluation Report, 2010.

⁶ APS Pre-Kindergarten Program Evaluation Report, 2010.

⁷ Schweinhart, I.J., Weikart, D., et al (1993). *Significant Benefits: The High/Scope Perry Preschool study through age 27*. Monographs of the High/Scope Educational Research Foundation No.10. Ypsilanti, MI: High/Scope Educational Research Foundation; Campbell, F.A., Ramney, C.T. et al. (2002). *Early childhood education: Young adult outcomes from the Abecedarian Project*. Applied Developmental Science, Volume 6, Number 1, pp.42-57; Reynolds, A.J., Temple, J.A., Robertson, D.L. & Mann, E.A. (2002). *Age 21 cost-benefit analysis of the Title I Chicago Child-Parent Centers*. Discussion Paper no. 1245-02. Madison, WI: Institute for Research on Poverty.

⁸ Karoly, L.A. (2005) *The economics of investing in universal preschool in California*. The Rand Corporation.

⁹ Meier, 2004; Belfield, C.K. (July 2006) *Fiscal Impacts of Universal Pre-k: A Case Study Analysis for Three States*. Queens College, City University of New York.

comparison to other educational interventions for children at risk¹⁰ these objectives are, in fact, critical to reaching the strategic plan goals. Maintaining the current level of enrollment in APS Pre-K programs, and increasing enrollment as need in the community dictates, is the surest and most direct way to ensure the greatest number of children, especially those at risk, attend Pre-K.

The School Board's Early Childhood Policy recognizes the importance of early learning, stating that every prekindergarten-aged child should experience a high quality setting that promotes success in school. ECAC believes that APS Pre-K programs are absolutely critical to ensuring that children in Arlington, especially those at risk, have that opportunity. As APS Pre-K programs have grown, increasing the number of students served by 50% since 2002, the gap among students entering kindergarten with Pre-K experience has been decreasing. The number of students at risk who could be served, but are not, as identified by the state of Virginia * has been diminishing; it should be noted, however, that this data should be closely monitored, so that the program can be expanded to meet any increased future need. Further, due to the fact that Arlington is an area with a relatively high overall cost of living which makes it more difficult for even middle-income families to afford the relatively limited Pre-K options outside of APS, determination of eligibility for APS pre-K programs may need to be revisited in the future.

We recognize that there are many competing demands on increasingly limited resources, and the Arlington School Board faces some difficult decisions. Given that context and the added pressure of mounting capacity issues, we are concerned that Pre-K programs are vulnerable to cuts because they fall outside the mandate of educating children from elementary through high school. As study after study has demonstrated, however, the early childhood years remain absolutely fundamental to later school achievement, so we urge the School Board to maintain Arlington Public Schools' commitment to its youngest learners, and in so doing, affirming its commitment to rising achievement for all students and eliminating the achievement gap .

Budget Implications:

The recommendation is to maintain current level of funding for Pre-K programs, so the budget implication would be zero.

Recommendation #3:

APS should dedicate resources to strengthen APS Montessori programs by adding a Montessori specialist to the Early Childhood Office as soon as resources allow.

¹⁰ Isaacs, J., Roessel, E. (2008) *Impacts of Early Childhood Programs*. Brookings Institution.

Rationale:

The APS Montessori program is taught in 17 Pre-K classrooms at 9 different Arlington County schools and in 8 elementary classrooms and a pilot middle school program at Gunston Middle School. A total of approximately 600 students are enrolled in APS Montessori classrooms throughout the district.

The program is supported by the Early Childhood Office, but lacks an essential component to ensuring excellence: coordination and oversight by an experienced, Montessori trained educator specifically dedicated to nurturing the Montessori program. A specialist who can coordinate curriculum, inventory supplies, oversee professional development and parent education and promote the program is recommended by The Montessori Foundation, based in Alexandria¹¹, and is an element of other successful Montessori programs in public school systems such as the Milwaukee Public Schools. Adding a Montessori Specialist would also support the development of best practices outlined in the APS Montessori Best Practices document, written in 2006 by the Office of Early Childhood in collaboration with the Montessori professional community to provide guidelines to support the development of a consistent countywide program. A specialist with a thorough grounding in Montessori teaching methods, materials and curriculum is significantly better able to ensure the program is promoting academic achievement and fully meeting students' needs than a non-Montessori trained educator or administrator, so securing this position is key to successfully meeting the objectives enumerated in the APS Strategic Plan regarding readiness of Pre-K students for kindergarten and rising achievement for all students, eliminating gaps in achievement and responsive education for children in the Montessori program. While the principal of Drew Model School, where 13 of the Montessori classes are housed has participated in National Montessori training, Arlington still has no principal with a Montessori background or certificate. That puts principals without Montessori training in the position of evaluating classrooms, hiring teachers, and determining whether their Montessori employees are adequately implementing the program.

The concern on the part of the Arlington Montessori Action Committee (AMAC)¹², as well as some teachers and others in the APS community generated by the continued lack of this central resource has led ECAC to advocate for the creation of this position for many years. Members of our committee believe that the absence of a specialist has ultimately had an adverse effect on the overall quality, cohesion, and consistency of the Montessori program. Adding a Montessori Specialist as a way to address some of the challenges that the program faces is also currently under consideration by the Montessori Steering Committee. The need of a coordinator is not new. The Spanish Immersion

¹¹ Excerpt from document detailing steps for establishing Montessori Programs in Public Schools. See appendix. Written by The Montessori Foundation. More information can be found at <http://www.montessori.org/>.

¹² The Arlington Montessori Action Committee is an independent, not-for-profit organization dedicated to fostering high quality Montessori programs, public and private, in Arlington.

program could not have been so successful without the help of a full time immersion specialist serving 3 schools and without principals specifically qualified to meet the needs of their students' unique educational experience. With a capacity of 550, as great as our largest elementary schools, Montessori deserves the same attention. As soon as resources allow APS should consider acting on our recommendation that ACI has endorsed since 2004.

Budget Implications:

A full time P-scale position would cost \$131,320.00 including benefits (Estimate based on P Scale Step F, Grade 14) or half-time would cost **\$65,660.00**.

If resources do not allow, the immediate budget implication would be zero, of course.

Committee Members

The Early Childhood Advisory Committee (ECAC) has seven citizen members (4 returning; 3 new): Carolyn Fuqua, Nathalie Hernandez, Janalee Jordan Meldrum, Tracey Kretzer, Monique O'Grady, Fielding Winters and Sandra Redmore, committee chair.

Our APS Staff Liaison is Dr. Michelle Picard, Director of Early Childhood and Elementary Education. The committee would like to thank Michelle for all her invaluable assistance and input this year.

Appendix A

Essential Elements of Successful Montessori Schools In the Public Sector

Montessori Teachers

- Employ Montessori teachers who have Montessori credentials for the levels they teach
- Maintain an active and open recruitment for Montessori credentialed teachers.
- Budget for future Montessori teacher education for non Montessori-credentialed teachers.
- Provide professional Montessori in-service by experienced credentialed Montessori educators.
- Contract for on-going internal and periodic external Montessori consultation and/or professional support as follow up to Montessori teacher education.
- Employ one paraprofessional per classroom, each having received Montessori orientation for that role.

Administration

- Employ an experienced Montessori teacher to serve as curriculum coordinator.
- Employ a building principal/educational leader who has knowledge of Montessori principles and curriculum through Montessori coursework, Montessori Administrator Credential and annual conference exposure.
- Maintain commitment to the core Montessori curriculum and instruction even with changes in administrative staff.
- Sustain the support of the central administration through high profile communications about program development.
- Recognize that the best implementation process is to begin with the 3-6 age group and add one age at a time for gradual progression.

Recruitment/Parent Education

- Provide Montessori parent education programs that promote understanding of Montessori principles and curriculum.
- Develop and admission process that informs parents about the nature of Montessori and seeks the necessary commitment to the program.

Curriculum/Environment

- Offer a full complement of Montessori materials (about \$25,000 per classroom) purchased from Montessori dealers.
- Develop a classroom design that is compatible with Montessori” prepared environment” principles.
- Create uninterrupted daily work periods of 90 minutes to 3-hours, considering the 3-hour work cycle as ideal.
- Integrate specialty programs (music, art, physical education, etc.) around the uninterrupted work periods.
- Apply the appropriate multi-age groupings: 3-6, 6-9, 9-12, 12-15, necessary for the diversity, flexibility, and reduced competition integral to Montessori.

Assessment

- Use a process of reporting student progress that is compatible with Montessori and includes parent conferences and authentic assessment tools such as observation, portfolio, performance assessment with rubric, etc.
- Implement state mandated assessment in such a way that the character of the Montessori program is not compromised.

Professional Development

- Budget for continuing education through Montessori workshops and conferences.
- Maintain membership with one or more of the professional Montessori organizations and seek Montessori accreditation to assure consistent quality.

Endorsed by the following organizations:

- American Montessori Society (AMS)
- Association Montessori Internationale (AMI)
- North American Montessori Teachers’ Association (NAMTA)
- National Center for Montessori Education (NCME)
- Montessori Education Programs International (MEPI)
- Southwestern Montessori Training Center

Center for Contemporary Montessori Programs