Memorandum

To Dr. Patrick Murphy, Superintendent, Arlington Public Schools From Superintendent's Advisory Committee on Sustainability

Topic 2018 Annual Memorandum

Date August 2018

Since 2013, the Superintendent's Advisory Committee on Sustainability (SACS) has prepared an annual memorandum with highlights and recommendations for the Superintendent to advance sustainability in Arlington Public Schools (APS). SACS receives feedback on these recommendations and direction for additional research from the Superintendent through meetings held twice each year.

We present four areas of work and two recommendations for the Superintendent's consideration. Appendix A summarizes the Committee's 2017-18 membership.

Work Areas	Summary	Recommendations
2018-Work Area-1:	APS provided stipends for	2018-R-1a: Continue to support and
APS Sustainability	Sustainability Liaisons in fifteen	expand the Sustainability Liaison
Liaison Program	schools. Liaisons created transferable	Program.
	lesson plans and led students in	2018-R-1b: To coordinate and
	implementing projects that promoted	optimize the Liaison program, support
	a culture of sustainability across APS.	the Science Advisory Committee's
	In the 2018-19 school year, SACS is	proposal to create a full-time
	seeking funding to expand the	Sustainability and Outdoor Learning
	program to 20 schools with a focus on	Coordinator.
	waste/recycling.	
2018-Work Area-2:	SACS continued to promote the use of	No recommendation
Communications	#APSGreen, published an enhanced	
and Outreach	website, and tracked several	
	sustainability awards within APS.	
2018-Work Area-3:	SACS has begun developing a high-level	No recommendation
Defining	statement about the purpose and value of	
Sustainability for	integrating sustainability more holistically	
APS	into APS operations and curriculum. SACS	
	plans to complete this work in the 2018-	
	19 school year.	
2018-Work Area-4:	SACS continued to focus on sustainable	No recommendation
Sustainable	materials management—reducing waste	
Materials	through more sustainable procurement,	
Management	material use, and disposal—through	
a.iageineit	group discussion and guest speakers.	

2018-Work Area-1

APS Sustainability Liaison Program

2018-R-1a: Continue to Support and Expand the Sustainability Liaison Program

2018-R-1b: Support the Science Advisory Committee's proposal to create a Full-Time

Sustainability and Outdoor Learning Coordinator

For several years, SACS has recommended the creation of Sustainability Liaison Stipend Positions. We are encouraged that the Sustainability Liaison program was funded for a second time this school year. Stipends were provided to support Sustainability Liaisons in fifteen schools, including two secondary schools (Arlington Career Center, Arlington Community High School), three middle schools (Gunston, Jefferson, Williamsburg), nine elementary schools (Arlington Traditional, Barrett, Claremont, Discovery, Glebe, Jamestown, Long Branch, Oakridge, Patrick Henry), and the Stratford Program.

The liaisons have done exceptional work to build a culture of sustainability in APS through diverse curriculum, operational, transportation, and communication projects (see table below). They led students, faculty, and staff to reduce environmental impacts, improve the whole child, and link sustainability to standards of learning.

Arlington Career Center Rosemary Donaldson

Aquaponics system
Bird boxes
Electronics recycling

Waste audit

Arlington Traditional Monica Hirschberg

Food Bus Donation to AFAC

Claremont Aracely Vance

Outdoor learning
Food Waste Warriors

2017-18 Sustainability Liaison Projects Arlington

Community High School Sharon Ruggieri Elizabeth Minihan

Stream study Recycling debate



Barrett Cara Doherty

Energy Monitors
Sustainability
Superheroes
Water Conservation
ATP Gold Status



Bike Drive Discovery Bikers Two Wheel Tuesday Eco-Action Team





Glebe Toni Wexler

Glebe Green Team Waste audit "Green Scene" video Encouraged reusable water bottles

Long Branch Gregory D'Addario

program



Jefferson Kaila Bell

Schoolyard Habitat Green Jackets Service Club



Incentivized "Walk and Bike to School" Targeted gradespecific education programs: Natural Resources/ Recycling, Growing Food/Tomato Sale, Watershed

Williamsburg Jill Mentch

Electronics and shoe recycling Bake sale for plants

2017-18 Sustainability Liaison Projects



Gunston Topher Paterno

Permaculture garden aligned with technical education



Jamestown Dani Greene

Green Team Gardening Lunch Bunch Sustainability lessons Outdoor classroom

Oakridge Sean Jones

Walk/bike to school program Erosion prevention garden



Stratford Program Nicholas Gorman

Reusing in art Student recycling helpers





In the 2017-18 school year, SACS has supported this program by engaging with the liaisons through a buddy system, where a SACS committee member was paired with a Sustainability Liaison to provide support, guidance, and connections to deeper sustainability expertise. SACS also continued to refine the reportable metrics that would be used to capture the liaisons' work. This school year, the Sustainability Liaison program touched hundreds of students, created transferable lesson plans, added to the inventory of sustainability activities across APS, and generated energy among APS teachers to build sustainability into the curriculum. A report summarizing the accomplishments of the Sustainability Liaisons will be delivered in summer 2018.

Another area of focus for SACS in the 2017-18 school year was to refine the objectives of the Sustainability Liaison program for future years. In the 2018-19 school year, the Sustainability Liaison program will require the Sustainability Liaisons to complete a waste/recycling site assessment and implement one project based on the site assessment results. The project may relate to improving recycling and/or composting, reducing waste, and improving procurement practices. The Sustainability Liaison would provide support to his/her school's recycling coordinator by identifying areas of potential improvement and implementing a project to help the school improve its waste management practices.

By aligning the Sustainability Liaison program with the increased focus APS has on waste and recycling following implementation of the enhanced county/school waste contract, the Sustainability Liaison program can help APS improve its waste and recycling practices, reduce waste generation, and creatively engage students, faculty, and staff. SACS has updated all of the data collection tools underlying the Sustainability Liaison program to make them easier to use and compile data, and to reflect this evolving program focus.

SACS strongly **recommends** that APS continue to support and expand the Sustainability Liaison program, allowing APS to document and enhance school-based sustainability activities, including waste and recycling. In the 2018-19 school year, SACS is seeking funding to support Sustainability Liaisons in 20 schools, as well as continue to improve liaison communication tools, emphasize external communication, and standardize liaison reporting. SACS recommends that APS plan for full, system-wide implementation of the Sustainability Liaison program at all schools for the 2019-20 school year, bearing this in mind during budget and planning meetings.

Following up on our 2015-16 and 2017-18 year-end memoranda, SACS again **recommends** that you support the Science Advisory Committee's proposal to create a Full-Time Sustainability and Outdoor Learning Coordinator. Together, the Sustainability Coordinator and Stipend Positions would create a tiered and integrated approach to sustainability within our schools. The Coordinator position would play a critical role supporting APS's commitment to sustainability in daily instruction and school operations, and communicating that message within and outside APS, which cannot be accomplished in the current staffing and responsibility structure.

2018-Work Area-2

Communications and Outreach

SACS continued to make progress on using the #APSGreen hashtag on social media channels this year and in particular on Twitter. Some of the dozens of topics and events promoted by #APSGreen included bike to school day, energy monitoring, water bottle fillers, aquaponics, waste audits, composting, ecoaction days, pollinator gardens, and sustainability curriculum. The Sustainability Liaisons have increased the use of the #APSGreen hashtag, sharing updates on the sustainability projects they implemented, as well as other sustainability activities and coursework ongoing in their schools.

We anticipate that in the next year we will get even more traction, as our followers and content grow, and as the sustainability liaison program expands and includes more specific social media tasks.



SACS also enhanced its web presence this year by building out the SACS web page. The web page documents the committee's accomplishments and shares resources with county residents, including a summary of the Sustainability Liaison program, Green Action Awards, year-end reports, and our committee membership: https://www.apsva.us/aps-goes-green/superintendents-advisory-committee-sustainability/

We are pleased to note that APS earned several national and regional sustainability awards and recognition, including:

- <u>US Green Building Council (USGBC) National Capital Region Connect the Dots Green Schools</u> Challenge
 - o Discovery Elementary School Honor Award Winner
 - Glebe Elementary School Data and Verification Award Winner
- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Energy Design Guide and Journal Vol. 60, No. 5, May 2018 (<u>link</u>) inclusion of Discovery Elementary School
- John C. Chadwick, AIA, Assistant Superintendent, Facilities and Operations is noted for his work on the <u>Achieving Zero Energy Advanced Energy Design Guide for K-12 School Buildings</u>, which was developed through a collaboration of ASHRAE, the American Institute of Architects (AIA), the Illuminating Engineering Society (IES), and the U.S. Green Building Council (USGBC), with support from the Department of Energy (DOE)

Next school year, SACS will explore the ability to list awards such as these on the SACS web page to increase visibility of APS sustainability achievements.

2018-Work Area-3 Defining Sustainability for APS

In the 2017-18 school year, SACS had several discussions about the value sustainability offers to APS in supporting more efficient, cost-effective, and healthy operations. Sustainability offers a natural learning framework to support APS's strategic goals (including the Strategic Plan's Core Value of Stewardship) and develop the whole child. To better articulate this message within APS and to Arlington County, SACS has begun developing a high-level statement about the purpose and value of integrating sustainability more holistically into APS operations and curriculum. SACS plans to complete this work in the 2018-19 school year.

2018-Work Area-4 Sustainable Materials Management

SACS continues to value the role of sustainable materials management in advancing sustainability within APS operations and curriculum. It provides a measurable, visible method to engage students, teachers, and faculty on a variety of sustainability topics and is a simple way for APS to reduce its impact on the environment. We had several discussions about methods to reduce waste through more sustainable procurement, material use, and disposal, with special emphasis on the new County/APS waste and recycling contract, which will enhance waste collection and reporting for APS. We hosted a presentation from the World Wildlife Fund's Food Waste Warriors program, which led to the program conducting a pilot with one of APS's Sustainability Liaisons this school year. Most notably, SACS recommends that the Sustainability Liaison program focus on waste and recycling in the 2018-2019 school year (see 2018-Work Area-1).

Appendix A: SACS 2017-18 Membership

SACS meets on the third Tuesday of each month, except for July and August. All meetings are open to the public. Members are appointed to two year terms and participate on a volunteer basis.

Appointed Members

Alison Kinn Bennett MUEP, Senior Advisor for Sustainable Products and Purchasing, U.S. Environmental

Protection Agency

Michael Cruse Resource Teacher, Arlington Career Center

Heather Dantzker MS, PhD, Owner and Principal, Dantzker Consulting, LLC

Barbara Englehart MBA, CPA, Financial Management Consultant, Englehart Consulting

Elenor Hodges M.Ed., Executive Director, <u>EcoAction Arlington</u>

Rachel Lang MS, PLT Program Coordinator, Sustainable Forestry Initiative, Inc.

Gregory Lloyd CCM, LEED AP BD+C, TRUE Advisor, Senior Construction Manager, Capital Brand

Group

Karen Luz Vice President, Markets and Food, World Wildlife Fund

Kate Marshall MURP, Workplace Sustainability, GDIT

Pam Nagurka Secondary STEM Teacher Specialist, Arlington Public Schools

Levi Novey MS, Outreach & Education Specialist, International Affairs, U.S. Fish and Wildlife

Service

Cynthia Palmer JD, MPH, Convener, Sports for the Earth

Robin Puttock LEED AP BD&C, AIA Architect, Architecture Faculty at Catholic University

Andrew Soles BS, Financial Advisor, K Street Financial

Laura Watchman LEED AP Neighborhood Development, Principal, Watchman Consulting

Arlington County Liaison

Joan B. Kelsch LEED AP BD+C, Green Building Program Manager, Office of Sustainability and

Environmental Management, Arlington Department of Environmental Services

Staff

Cathy Lin CEM, APS Energy Manager
Dat Le Ph.D., APS Science Supervisor

Student Liaisons

Rose Duane Yorktown High School

Class of 2019

Olivia Kennett Washington-Lee High School

Class of 2019

Liaisons to Other Committees

Gregory Lloyd Advisory Council on School Facilities and Capital Programs