

Memorandum

To Dr. Patrick Murphy, Superintendent, Arlington Public Schools
From Superintendent's Advisory Committee on Sustainability
Topic 2015 Annual Memorandum to the Superintendent of Arlington County Public Schools
Date June 30, 2015

Introduction

Since 2013, the Superintendent's Advisory Committee on Sustainability (SACS) has annually prepared recommendations for the Superintendent of Arlington Public Schools (APS) to enhance sustainability. SACS receives feedback on these recommendations and direction for additional research from the Superintendent through meetings held twice a year.

In 2014-2015, SACS reorganized into six subcommittees, based on SACS member expertise and interest and to align with the Superintendent's priorities for enhancing sustainability in APS. The subcommittees include: 1) Instructional Curriculum and Professional Development; 2) Pathways for Sustainability and Outdoor Learning; 3) Engagement and Communications; 4) Procurement and Materials Management; 5) Energy and Water; and 6) Facilities and Transportation.

This memorandum serves as the Committee's 2015 report to the Superintendent. Sustainability is a wide-ranging topic and the issues explored by individual subcommittees often overlap one another. As such, this memo summarizes SACS's 2015 work by topic, rather than by subcommittee. Under each topic heading, we provide a summary of our 2015 activities and our plans for 2016. Our 2015 activities resulted in our making updates to previous recommendations and the development of new recommendations:

2015 Recommendations

- 2015-SC-1: Create positions of Sustainability Coordinators and a Sustainability Manager
- 2015-SC-2: Support creation of green patrols/teams in every school
- 2015-PS-1: Establish recognition pathways for U.S. Green Ribbon Schools
- 2015-PS-2: Expand APS participation in the Regional Forum NoVA Outside Schools Environmental Action Showcase SEAS at George Mason University
- 2015-PMM-1: Prioritize environmentally preferable purchasing
 - 2015-PMM-1.1: Implement integrated pest management
 - 2015-PMM-1.2: Reconsider synthetic turf
 - 2015-PMM-1.3: Utilize credible standards and eco-labels for sustainable purchasing guidelines
- 2015-PMM-2: Develop APS waste management services on parity with the County as a whole.
 - 2015-PMM-2.1: Standardize waste and recycling receptacles and ensure proper education and signage
 - 2015-PMM-2.2: Obtain metrics for waste management
 - 2015-PMM-2.3: Collaborate with the County to identify other opportunities for measuring and increasing recycling and waste minimization
 - 2015-PMM-2.4: Use recycling and waste management as a teaching opportunity,

- 2015-PMM-2.5: Expand the number of schools reducing food waste while supporting local food pantries by partnering with "Food Bus."
- 2015-EW-1: Sub-meter APS facilities
- 2015-FT-1: Maintain or increase the budget allocated to APS facility maintenance

Appendix A summarizes the Committee's 2015 membership. Appendix B provides supporting information for New Recommendation 2015-SC-2.

Instructional Curriculum and Professional Development

This year, SACS supported sustainability professional development opportunities for teachers, including training on: Teacher at Sea, Earth Force, I-Tree Design, Grasses for the Masses, Amazon River Research, Chesapeake Bay Foundation, Operation Rain Barrels, Seeing Math Patterns in Nature, and Evaluating Sources of Energy. SACS also encouraged APS staff and teachers to use curriculum resources developed by the U.S. Green Building Council and Green Foundation.

SACS supported the development of an electronic science lesson depository, to enable teachers to more readily share information. In addition, SACS continued outreach to the Science, Social Studies, and Health offices. This resulted in the Social Studies office creating one elementary and one secondary Social Studies lesson related to sustainability in Summer 2014.

Plans for 2016

1. Continue to support sustainability-related professional development opportunities for staff
2. Complete the green space inventory for all schools (working with the Science Office)
3. Continue outreach with other curriculum offices

Sustainability Coordination (SC)

New Recommendation 2015-SC-1: Create positions of Sustainability Coordinators and a Sustainability Manager

In 2015, SACS continued to explore the concept of creating Sustainability Coordinator stipend positions at each school, which we originally recommended in 2013 (Recommendation 2013-COL-2: Create Sustainability Coordinator stipend positions at each school). Through our research and discussions, we recommend that APS create new positions of Sustainability Coordinators for each school and one Sustainability Manager. We believe that these positions will also complement the creation of the green patrols/teams as described in Recommendation 2015-SC-2. Specifically, we recommend:

- For FY17:
 - Create a position of Sustainability Coordinator in each school to manage sustainability curriculum initiatives and serve as a point person for communication on school-specific sustainability issues
 - Provide a stipend for each Sustainability Coordinator
 - Host a quarterly meeting for Sustainability Coordinators
- For FY18:
 - Create one position of Sustainability Manager to serve the critical role of overseeing the integration of sustainability practices across the school system. Responsibilities would include coordinating and integrating projects into curriculum and helping demonstrate results from sustainability initiatives.

New Recommendation 2015-SC-2: Support creation of green patrols/teams in every school

Using the safety patrol program as a model, we recommend creating “green patrols” or “green teams” at each school to leverage ongoing student activities related to the environment and sustainability. The green patrols/teams would also provide a practical conduit for communication and coordination for the proposed Sustainability Coordinators. See Appendix B for a proposal for “Green Patrols” developed by Lucy Robinson, a 7th grader who is starting a Green Patrols Club at Thomas Jefferson Middle School.

Plans for 2016

1. Develop a memorandum providing more detailed information on the creation of the Sustainability Coordinator and Sustainability Manager positions, including job descriptions and recommended stipend amounts.

Green Ribbon Schools and Pathways for Sustainability (PS)

The National Green Schools Conference is a national conference that seeks to influence sustainability throughout K-12 schools and school districts, and includes sessions related to Green Ribbon Schools. It was held in March 2015 Virginia Beach and APS was represented in several sessions related to SACS’s work including:

- A session presented by Elenor Hodges featuring a case study about the creation of the APS sustainability committee
- A session co-presented by Mike Cruse, Career and Technical Education Teacher, on strategies to engage senior leaders
- A session presented by Principal Erin Russo and VMDO Architects on the Discovery School design

Update on Recommendation 2014-COL-1: Create a road map for APS schools to be recognized as Green Ribbon schools, including the implementation of a short online survey

In 2015, SACS has supported this recommendation with the following efforts:

- Hosted a successful inaugural *Growing Green Schools Event* on April 6, 2015, in partnership with the County’s Healthy Community Action Team (HCAT) Garden Subcommittee. Dr. Murphy keynoted with Gail Ammons (Campbell ES teacher), students from TJMS Community Garden, and Joan Horwitt (Reevesland Learning Center nonprofit). Results included:
 - Enthusiastic information sharing among 60 participants and 12 exhibitors with displays
 - A ceremony awarding schools with Arlington Green School Champions certificates for participating schools that submitted photos as “evidence of learning” about sustainability projects including health, nutrition, and outdoor science projects
- Completed an initial survey compiling name and contact information for outdoor learning and sustainability champions in the schools. Results show gaps that need to be filled in 2015-2016.

New Recommendation 2015-PS-1: Establish recognition pathways for U.S. Green Ribbon Schools

We recommend that APS pilot the adoption of Eco-Schools USA as a pathway to U.S. Green Ribbon Schools.

New Recommendation 2015-PS-2: Expand APS participation in the Regional Forum NoVA Outside Schools Environmental Action Showcase SEAS at George Mason University

We encourage APS to participate in the April 2016 NoVA Outside SEAS event, providing funding for substitute teachers as needed.

Plans for 2016

1. Develop focus areas, judging criteria, a recognition program and ceremony for the 2015-2016 Green School Champions program
 - i. Summer - Develop rubric for Green School Champions.
 - ii. Fall - Advertise Green School Champion Program with deadline in February 2016.
 - iii. April - Recognize Green School Champions at School Board meeting.
2. Host a meeting of existing APS green patrols/teams to strategize the creation of a green patrols/teams network system-wide

Outdoor Learning

SACS initiated APS School Garden Meetups, discussion forums for outdoor learning, and piloted a sustainability interest group at Jamestown Elementary School.

Plans for 2016

1. Continue to host School Garden Meetups as discussion forums for outdoor learning and sustainability interest group, monthly October 2015 - June 2016
2. Coordinate with the Science Office regarding use of green space inventory as a green space management tool

Engagement and Communications

SACS started a new subcommittee in 2015 to address sustainability engagement and communications within APS on both a tactical and strategic level. We recognize that engagement and communications are essential core elements in our mission to educate APS students, staff, parents, and the local community and encourage model behavior in the area of sustainability.

In 2015, SACS focused on tactical engagement efforts by facilitating the following high school activities:

1. Yorktown energy infrastructure tour for the AP Environmental Science Classes (Cathy Lin, APS Energy Manager)
2. Yorktown student lighting experiments with compact fluorescent (CFL) and light emitting diode (LED) lightbulbs
3. Washington Lee water bottle filler project. SACS engaged with the Washington Lee Parent Teacher Association, Washington Lee Environmental Club and APS to fund the installation of three water bottle fillers in summer 2015. The Environmental Club plans to do an educational campaign around the launch of the equipment.
4. Washington Lee student participation in the Arlington Energy Masters Volunteer program (4 students). This effort to improve energy efficiency at affordable housing units was featured in the January 2015 APS Green Scene (at <http://www.apsva.us//site/Default.aspx?PageID=28832>)

To increase communication and transparency with the public, SACS is creating a SACS landing page within the existing APS Goes Green site. The webpage is targeted for completion in early Fall, and will include who we are, what we do, reports and memos, meeting minutes, ways for the community to get involved, a list of current members, as well as links to sustainability resources and green student activities.

Plans for 2016

1. Continue to engage the high schools, adding contacts from HB Woodlawn and Wakefield, and sharing best practices and lessons learned.

2. More actively engage the high school PTAs.
3. Complete the SACS landing webpage. Longer term, work with Linda Erdos of APS Communications in conjunction with the overhaul of the APS website. We will take a strategic look at how to effectively communicate and share sustainable best practices, activities and resources available across APS and our community.
4. Engage student volunteers to help the committee on sustainability content for the SACS webpage.

Procurement and Materials Management (PMM)

In late 2014, the Arlington County Department of Environmental Services/Arlington Initiative to Rethink Energy (AIRE) and the Department of Management and Finance (DMF) presented an Environmentally Preferable Practices & Purchasing (EPPP) Work Plan to the County Board. Key goals of the County, as expressed through a number of specific “current & on-going practices” and “aspirational” targets, include:

- Buying less through conservation, extending product life, and smarter buying
- Considering total cost of ownership not just the first costs
- Minimizing toxic hazards
- Reducing greenhouse gas emissions
- Increasing recycled and sustainably harvested content
- Supporting vendors with product take-back systems and sustainable packaging
- Identifying opportunities to increase our regional buying power
- Utilizing eco-labels to support third-party verification of environmental benefits

SACS has provided input to the EPPP Work Plan and has sought ideas from the County staff regarding opportunities for collaboration with APS.

We see further opportunities in the following areas for APS, building on the County’s procurement and materials management efforts, as described in the following new recommendations.

New Recommendation 2015-PMM-1: *Prioritize environmentally preferable purchasing*

We recommend APS prioritize environmentally preferable purchasing activities based on volume of purchases and environmental/human health impact. The Sustainable Purchasing Leadership Council (www.sustainablepurchasing.org), of which the County is a new member, provides guidance and recognition to institutional purchasers (including school districts) seeking to better understand their spending and reduce associated environmental impact. Based on priorities and taking into account other procurement related recommendations, such as energy and facilities, in this memo, our specific recommendations for environmentally preferable purchasing include:

2015-PMM-1.1: *Implement integrated pest management*

We recommend a coordinated effort by Arlington County and Arlington Public Schools to implement integrated pest management (IPM) throughout the county, focusing on pest prevention and on non-chemical controls, with targeted, judicious use of synthetic pesticides only as a last resort. The US EPA Office of Pesticide Programs, based here in Arlington VA, has an extensive program for School IPM that includes useful tools and resources found at <http://www2.epa.gov/managing-pests-schools>. Model contracts and control plans are available. SACS members would be happy to assist APS in identifying useful school IPM resources from other localities that could be of interest to APS pest control managers, e.g., addressing rat and

mouse control, mosquito prevention in stormwater management, etc.

2015-PMM-1.2: *Reconsider synthetic turf*

In its draft plan, the County makes note that it has replaced the turf on four synthetic fields – Gunston CC, Virginia Highlands Park, Barcroft Park, and Wakefield HS. While we recognize that the County often provides synthetic turf fields to APS, limiting the school's ability to influence this purchase decision, we recommend scrutiny and coordination by APS and Arlington County in the monitoring and replacement of synthetic turf playing fields and playgrounds used by APS students. Typically, synthetic turf consists of both crumb rubber, which serves to absorb impact, and artificial blades of grass, raising the following concerns:

- Crumb rubber is made from ground up car and truck tires. It derives from hydrocarbons that super-heat and off-gas on warm days, releasing such chemicals as benzothiazole, an acutely toxic respiratory irritant and dermal sensitizer, and carbon black, a known carcinogen.
- The artificial blades of grass contain plasticizers (to make them pliable), stabilizers (to prevent photo-degradation from the sun) and fire retardants (to make the surfaces non-flammable) - each of these chemical classes warrant human exposure concerns.
- In addition, there are questions about sanitation, since synthetic turf cannot break down body fluids, bird droppings, etc.

The extent to which these play surfaces affect children's health is not yet clear. However, in light of the uncertainties about health risks, nationally there is a movement away from using recycled tires in children's playgrounds and playing fields. Instead of crumb rubber, the infill can be made instead from natural materials. New York City uses natural ingredients in its new turf installations, for example, and the Los Angeles Unified School District has removed crumb rubber from play areas for kids, replacing them with natural fibers. Several jurisdictions use Geo Turf, which is made from coconut fiber and cork. See more detail at <http://www.geoturfusa.com/>

2015-PMM-1.3: *Utilize credible standards and ecolabels for sustainable purchasing guidelines*

In other priority product and service categories, we recommend APS follow the lead of many other institutional purchasers in utilizing standards and ecolabels to support more sustainable purchasing (per SACS Recommendation 2013-WP-3). Examples of credible standards and ecolabels that have demonstrated sustainability results include:

- Carpet – NSF/ANSI 140
- Cleaning Products – EPA Safer Choice
- Clothes Washers – EnergyStar; AHAM 7003-2013
- Commercial Furnishings Fabric – NSF/ANSI 336
- Computers – IEEE 1680/EPEAT Gold
- Delivery Services – EPA SmartWay
- Doors – UL-E 102
- Furniture – NSF/BIFMA E3/Level
- Gypsum Boards and Panels – UL-E 100
- Lighting – ENERGY STAR
- Mobile Phones – UL-E 110
- Plumbing Fixtures – EPA WaterSense
- Refrigeration Appliances – EnergyStar; AHAM 7001

- Resilient Floor Coverings – NSF/ANSI 332
- Single Ply Roofing Membranes – NSF 347
- Wallcovering Products – NSF/ANSI 342

In 2015, we revisited SACS Recommendation 2014-WP-1 and Recommendation 2014-WP-2. We continue to encourage APS to designate a liaison to work with DES/AIRE and DMF to take advantage of the strides being taken per the County's EPPP Work Plan. We also continued discussions about the need to track waste amounts and establish waste reduction targets. Building from our 2014 recommendations and staying within budgets, SACS makes the following new recommendations related to waste and material management strategies:

New Recommendation 2015-PMM-2: *Develop APS waste management services on parity with the County as a whole*

2015-PMM-2.1: *Standardize waste and recycling receptacles (co-locating them where appropriate) and ensure proper education and signage to maximize recycling opportunities in every classroom, facility, and office.* Ensure proper management of light bulbs, chemicals, electronics, and cleaning items, as well as shop materials for vehicles and equipment.

2015-PMM-2.2: *Obtain metrics for waste management.* These can be economical, such as requesting a different pick-up day for waste and recycling (so one can parse out schools vs. county tonnages and materials).

2015-PMM-2.3: *Collaborate with the County to identify other opportunities for measuring and increasing recycling and waste minimization,* including procurement opportunities that include take backs, requiring recycled content, consolidating materials for better pricing.

2015-PMM-2.4: *Use recycling and waste management as a teaching opportunity,* working with County staff to develop waste characterization studies of schools and facilities. This can offer a teaching opportunity at the elementary, middle, and high school level.

2015-PMM-2.5: *Expand the number of schools reducing food waste while supporting local food pantries by partnering with "Food Bus."* In the 2013-2014 school year, the 12 schools that work with the Food Bus provided 13,502.6 pounds of food to their local food pantries. The organization works with school cafeterias to collect/recover any pre-packed foods or drinks that cannot be returned home or are not being eaten as part of purchased lunches (e.g., packaged peanut butter and jelly sandwiches, bananas and apples, yogurt, string cheese, containers of apple sauce and sliced peaches, granola bars, and cartons of milk). At Tuckahoe Elementary, Food Bus provides "cold" and "dry" food collection bins and a refrigerator and helps to organize volunteers to take the food donations to the Arlington Food Assistance Center (AFAC) every week.

Plans for 2016

SACS will continue to explore and facilitate actions to reduce the environmental and health impacts associated with APS purchasing and materials management.

Energy and Water (EW)

In 2013, SACS recommended establishing a Green Revolving Fund as an innovative, ongoing financing mechanism for energy and water savings projects (Recommendation 2013-EW-1). In 2014, we recommended that the initial, high-return lighting retrofit project at Thomas Jefferson Middle School be the first project in this portfolio (Recommendation 2014-EW-1). SACS still feels that a Green Revolving Fund is in the best interest of APS especially in the current economic environment. This fund will be self-sustaining after the initial funds are established by using utility savings to fund future projects.

In 2015, SACS focused on alternative financing mechanisms to seed the Green Revolving Fund.

1. Cathy Lin continues to meet with alternative financing firms to find opportunities to fund energy and water efficiency projects. She has met with two firms, The Efficiency Network (TEN) and SparkFund.
2. Cathy Lin continues to work closely with the County Energy Manager on joint efforts for funding energy and water efficiency projects.

New Recommendation 2015-EW-1: *Sub-meter APS facilities*

In 2013, SACS recommended reducing energy use from lighting and appliances (SACS Recommendation 2013-EW-4). However, energy reductions and their associated benefits cannot be quantified unless energy use is measured. SACS recommends that APS gradually add sub-meters in APS facilities to monitor electricity use, as well as natural gas and water use. Possessing real-time data on electricity, natural gas and water provides greater insight into potential savings when closing schools during holidays, breaks, and summertime. Real-time data also provides faster response to potentially expensive maintenance problems.

Plans for 2016

1. Monitor the Thomas Jefferson Lighting Retrofit Project, which has made it in the FY2016 MCM budget and is scheduled for August 2016.
2. Submit to the Superintendent a formal recommendation that includes a return on investment analysis of the Thomas Jefferson lighting project.

Facilities and Transportation (FT)

APS projects that student enrollment will increase almost 30% in less than ten years. To prepare for this enrollment growth, APS will need to renovate, expand, or build many new school facilities. The forthcoming siting decisions and resulting new schools will have direct long-term impacts on the sustainability of APS operations.

In 2015, SACS formed a subcommittee to explore APS facility and transportation issues. The subcommittee has focused on liaising to other groups that provide direct input to APS siting, construction, or design decisions, to ensure that sustainability is considered in these decisions. In addition, SACS has developed several memoranda to formally provide input to the Superintendent and other committees and planning processes. In 2015, SACS:

1. Served as a liaison to APS Advisory Council on School Facilities and Capital Programs
2. Served as a liaison to Arlington County Environment and Energy Conservation Commission (E2C2)
3. Attended meetings of the Community Facilities Study as a member of the Residents Forum, reporting back to SACS

4. Attended meetings of the Western Rosslyn Area Planning Study (WRAPS)
 - a. Submitted the "Wilson School" memorandum to the Superintendent on February 25, 2015
5. Submitted memorandum outlining "Sustainability Principles for Planning New APS Facilities" to the Superintendent in June 2015

New Recommendation 2015-FT-1: *Maintain or increase the budget allocated to APS facility maintenance*

SACS discussed extensively the importance of maintaining APS facilities and their operating systems despite a constrained budget. Reducing the APS maintenance budget can provide short-term cost savings. However, it can result in much higher long-term costs resulting from deferred maintenance, disruption of critical operating systems, and even premature equipment failure. In April 2015, SACS submitted the "Proposed Budget Cuts to Maintenance Positions" memorandum to the Superintendent to underscore this point. APS maintenance needs will become even more pronounced as APS continues to expand its square footage. As noted in the *Superintendent's Proposed Budget* for Fiscal Year 16, "new construction and renovation projects require higher levels of maintenance." SACS will continue to explore this issue and make additional recommendations to the Superintendent as needed.

Plans for 2016

1. Liaise to the APS Advisory Council on School Facilities and Capital Programs
2. Liaise to the Community Facilities Study
3. Liaise to Building Level Planning Committees (BLPC) as appropriate
4. Liaise to Arlington County Environment and Energy Conservation Commission (E2C2)
5. Develop memorandum to describe the importance of funding adequate facility maintenance and provide more detail to New Recommendation 2015-FT-1
6. Develop other memoranda to provide input to school siting, design, construction, operation and maintenance, and/or transportation issues

Appendix A: Superintendent’s Advisory Committee on Sustainability Membership

Appointed Members

Diane Allard
Alison Kinn Bennett
Gabriel Calvo
Gregory D’Addario
Barbara Englehart
Elenor Hodges
Gregory Lloyd
Kate Marshall
Kathy Molina
Stephen Offutt
Cynthia Palmer
Amy Sharp
Dann Sklarew
Debbie Spiliotopoulos
Mary Van Dyke

Liaisons

Joan Kelsch, County Liaison

Staff

Cathy Lin, Energy Manager
Dat Le, Science Supervisor

Committee Liaisons to Other Committees

Advisory Council on School Facilities and Capital Programs: Gregory Lloyd
Environment and Energy Conservation Commission (E2C2): Kate Marshall
Western Rosslyn Area Planning Study (WRAPS): Gregory Lloyd

Appendix B: Recommendation 2015-PS-1, Proposal for Green Patrol

Prepared by Lucy Robinson, a 7th grader at Thomas Jefferson Middle School

A Green School is a clean, toxin free environment that uses resources sustainably and encourages students to have healthy connections with the environment and the people around them. My idea for a Green Patrol would have similar attributes to a Green School and focus on three topic areas: gardening, recycling, and energy conservation. The Green Patrol would be a volunteer, student-run advocacy group that informs teachers, faculty, and students about these three important topics. I got the idea for this club from some of my experiences in elementary and middle school. In elementary school at Long Branch, we had a club called Recycle Rangers. The Recycle Rangers worked every day after school and collected recyclable products from around the school (classrooms, offices, and cafeteria) and put them in appropriate containers outside the building for the county to collect. I loved the Recycle Rangers because it taught me responsibility to keep my school clean and green. It was also really fun because I got to make a difference while working with my friends. Without the Recycle Ranger program, the school would not have been able to recycle nearly as much waste. The club also taught me responsibility to keep track of my schedule. At Thomas Jefferson Middle School I joined the gardening club and have learned about growing fruits and vegetables and how reliant they are on the elements like rain and sun. I love working in the garden and would like to educate others at school about the benefits of making healthy eating choices. Eating fresh fruits and vegetables is so important for a healthy life. In middle school I have noticed that there are lots of easy ways that students and teachers could conserve energy at home and at school if we were reminded. We can turn off lights and water faucets, and encourage others to do so as well, both at home and at school.

All of these experiences led to my idea of starting a county wide club called Green Patrol. The Green Patrol could be an advocate group for these particular green issues. This initiative could be expanded countywide and would encourage and remind everyone to get excited about green living. The Patrol would be student organized with a teacher representative. There could be several members of the patrol at each school. They could meet monthly to create posters, set up informative meetings with classes, schedule special activities in the garden, or work with the existing recycling club. The topics could change every month, and posters and bulletin boards could be updated promoting the topic of the month. In order to keep fresh ideas circulating there will be a student representative from every school who that meet monthly and discuss new ideas, ways to improve the activities of the club. The club meetings could take place during ta for middle school students and for expanding purposes it could happen during a free period in high school or during lunch or recess in elementary school. The Green Patrol Club could be an advocate group for these particular issues. This initiative could be expanded countywide and would encourage and remind everyone to get excited about green living.

The costs for this club would be minimal. I think the Green Patrol member should have a t-shirt with a Green Patrol logo that they could purchase or fundraise to obtain (the cost is roughly \$15 per shirt). We could also arrange for the club to have a bulletin board to promote the topic of the month. That would be the only cost besides using the Ed Center or a central location for the representative meeting.

The Green Patrol Club could be an advocate group. This initiative could be expanded countywide and would encourage and remind everyone to get excited about green living. I think students in Arlington care very much about the environment and using resources sustainably. I think students would be interested in the topics of gardening, recycling and energy efficiency and in implementing new ideas for sustainability into their daily lives, both at school and at home.