

To: Kenilworth School District 38 School Board

From: Joseph Sears Faculty Sustainability Committee & Jessica Bollhoefer, Sears Parent and Principal, JPB Strategies (Sustainability Consultancy)

Date: 3/11/20

Subject: Joseph Sears Sustainability Strategy Summary for Visioning Sessions

Purpose:

The educators on the Sears Faculty Sustainability Committee are dedicated to advancing the Sustainability agenda at Sears and invested in advancing Building Efficiency, Healthy Environments and Environmental Literacy efforts at Sears. Given the substantial time and energy they have invested to date, the Sustainability Committee would like to continue to see a prioritization of sustainability as we enter a strategic visioning for “the current and future educational goals and priorities, and connect them to best practices and possibilities in innovative school facility design”. This memo is intended to provide a high level summary of grassroots initiatives as well as share the goals of the Sears Faculty Sustainability Committee to the School Board.

Background:

The guiding principle of Joseph Sears School since its founding in 1899, *That Youth May Advance*, remains true today as our 2020 vision echoes that motto: “*All students will be prepared to advance and thrive, now and into the future.*” As a school with a sustainability commitment as early as 2002, our guiding principles to “prepare students for a world that is ever-changing, to support learning throughout their lives, to think creatively and critically, and to act with courage, conviction and empathy” must continue to prioritize sustainability. The grassroots sustainability efforts at Sears includes the following initiatives:

- (2002) Paper recycling program, followed shortly by a student-formed green club
- (2008) Eagle Scout composting program that developed into an innovated school-wide waste reduction program including recycling and composting that exists today
- (2012) Outdoor Classroom garden, which raised awareness and brought to the forefront of our school the importance of garden-based learning as it correlates to academic achievement, positive social-emotional outcomes, hands-on experiences and healthy food choices.
- (2017) Hiring of a faculty member as the district Sustainability Coordinator
- (2017 - 2020) Benchmarking study and Sustainability Audit with WOLD Architects
- (2020) Nomination by the Illinois Green Alliance for the U.S. DOE Green Ribbon Schools.

Summary:

The below is a high level summary of the initiatives identified by WOLD in the “Sustainability Audit Report for Kenilworth School District 38” dated October 10, 2019 and initiatives proposed by the Joseph Sears Faculty Sustainability Committee:

Building Efficiency:

- Design/Construction:
 - Develop written goals for renovations and new construction that address energy systems and components within the overall master facility improvement plan, considering standards such as LEED, net-zero, WELL, 2030 Challenge.
 - Develop feedback structure to include building manager, sustainability coordinator, students, teachers, administrators in sustainable design and operations decisions
 - Consider budgeting for the following as proposed by WOLD:
 - Engage a commissioning agent to perform retro-commissioning on all mechanical systems, with results to be incorporated in master facilities plan.
 - Perform thermal envelope study in collaboration with retro-commissioning

- Replacement of three (3) current AHU's serving the center pod with a single central VAV air handler with zone terminal units with hot water reheat coil.
 - Replacement of all lighting (interior and exterior) with LED fixtures.
 - Adding occupancy controls for the lighting where not currently installed.
 - Replacement of the current atmospheric domestic hot water heater with a self-contained tank type sealed combustion condensing hot water heater.
- Operations:
 - Create written data-specific goals for the District's energy reduction in an energy management plan which includes ComEd incentives, Energy Star Certification, renewable energy credits (solar installations) and energy reduction credits.
 - Develop plan for monitoring annual energy reduction progress to improve current systems and meet established sustainable energy goals (Energy Star: Current 35% | Goal: 75%)
 - Incorporate budget for ongoing comprehensive energy analysis and energy conservation measures (ECM) implementation.

Healthy Environments:

- Design/ Construction
 - Perform initial environmental testing for water and air quality (e.g. Lead testing) and develop plan for ongoing testing cadence.
 - Ensure all construction projects include an Indoor Air Quality Plan (collaboration with LEED) for post-construction flush-out and VOC limits on construction materials
 - Perform lighting, acoustic and thermal comfort study and specifically consider additional temperature sensor installation
- Operation
 - Continue to require green cleaning practices and products.
 - Establish policy for use of non-toxic and eco-friendly materials.
 - Develop standards to manage practices, operations and maintenance that improve air quality, lighting, acoustics and building temperature.
 - Include written standards for healthy school environments in district policy and practice that ensure facilities support healthy systems to reduce illness, absenteeism, productive learning and teaching.
 - Integrate the outdoor classroom garden into the curriculum to encourage healthy eating that utilizes local sourced food.
 - Maintain a curriculum that supports physical fitness and healthy lifestyle choices as well as mental and social well being.

Environmental Literacy:

- Ongoing Education:
 - Include environmental literacy and education for sustainability standards as defined nationally and in support of our strategic plan.
 - Implement annual environmental literacy assessment for all grade levels.
 - Provide guidelines for integrating environmental literacy in all grade levels both within existing and new curriculum.
 - Maintain the role of the Sustainability Coordinator and expand professional development for building manager and business staff to continue to support District initiatives.
 - Continue to support and maintain student civic engagement and stewardship.
 - Encourage inquiry, problem and project-based pedagogy to facilitate learning about global systems and relationships.
 - Expand outdoor experiences to support academic growth, provide opportunities for play and exploration, encourage social and emotional growth, and provide school stewardship and service.
 - Continue implementation of FOSS Science at all grade levels including the natural extension of learning into the field to bring the science concepts and principles to life.

Recommendation:

We recommend that the School Board adopt the vision of sustainability across areas of building, healthy environments and environmental literacy as we enter a period of strategic visioning. We believe that a sustainable school is one that supports student voice and leadership, creates global learners and stewards, partners with community, provides a safe and healthy environment for students and staff, protects natural resources, and prepares students for a sustainable future.

Attachments:

[Sustainability Audit](#), Wold Architects, October, 2019

[Board of Education Sustainability Presentation](#), November 14, 2019

[Illinois Green Ribbon Schools Application](#), January 13, 2020