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**EDUCATION FOR SUSTAINABILITY**

**PHENND K-16 | SUMMER INSTITUTE**

May 31, 2019 • 9 AM - 4 PM  
School District of Philadelphia

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# SCHEDULE OF EVENTS

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**9:00 AM Breakfast & Networking**

**9:30 AM Welcome and Morning Plenary**

Jaimie Cloud - Cloud Institute for Sustainability Education

**11:45 AM Concurrent Sessions I**

Education for Sustainability in Schools

**1:00 PM Lunch Discussion**

Implications for Teachers and Pre-Service Teacher Candidates

**2:05 PM Concurrent Sessions II**

Leadership in Sustainability

**3:30 PM Closing Reflection**

**3:45 PM Lindy Award Presentation and Ice Cream Social**

## EVENT ORGANIZERS

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Philadelphia Higher Education Network for Neighborhood

Development | <http://phennd.org/>



Office of Environmental Management & Services at the School District  
of Philadelphia | <https://www.philasd.org/greenfutures/>



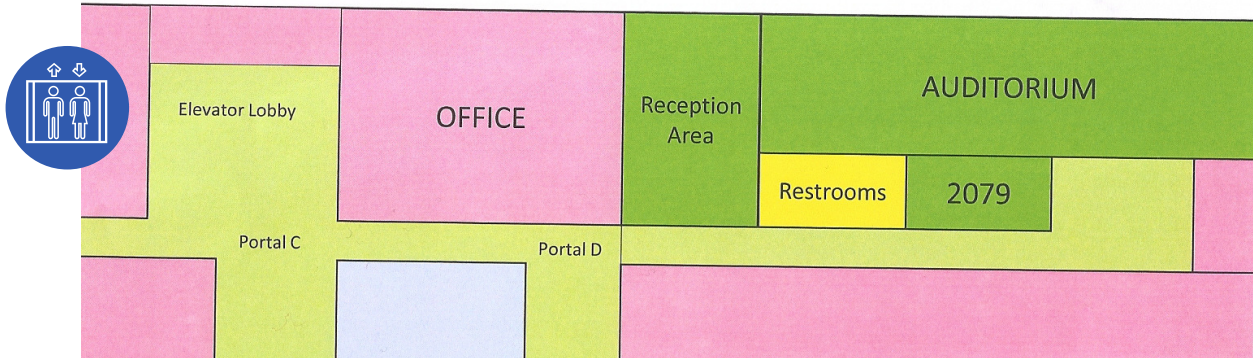
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# EVENT MAPS

Education Center 440  
2nd Floor Conference Center

Breakfast, Morning Plenary,  
Lunch, Closing and Lindy  
Award are in the Auditorium

15th Street



Concurrent Sessions are in room  
1080, 1179, 1069, and 1172

Office
Conference Rooms
Hallways
Other

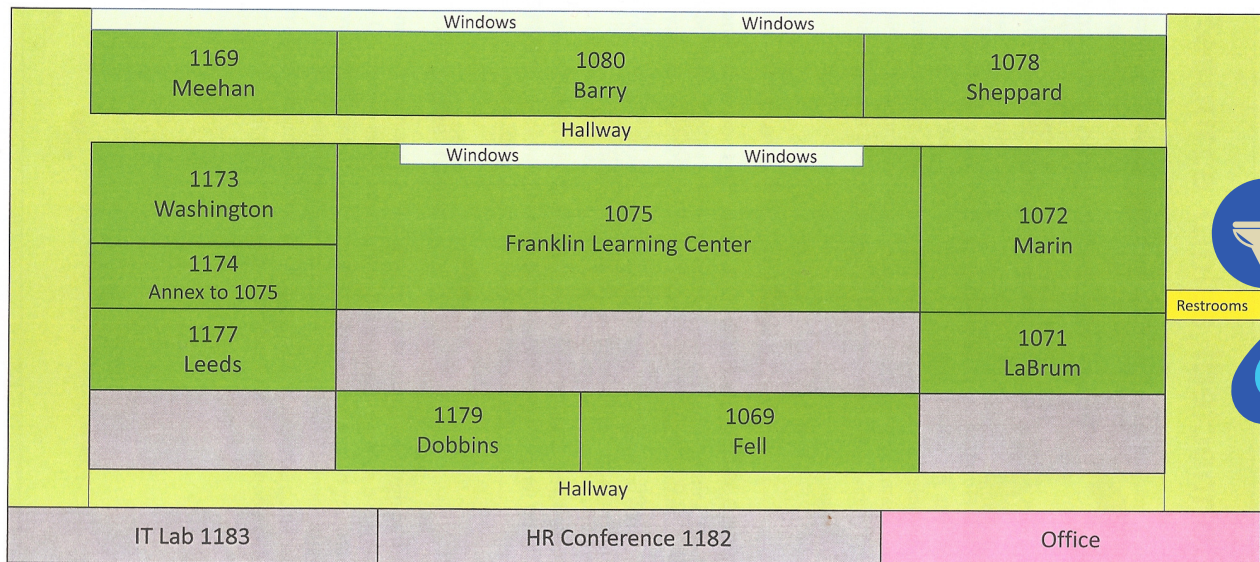
Education Center 440  
1st Floor Conference Center



< Broad Street

ATRIUM

15th Street >



# BREAKFAST AND LUNCH

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Our zero waste breakfast and lunch are provided by Simply Good Jars, based here in Philadelphia.

"Our Mission is to make healthy choices easier + to foster a strong and critical connection between local growers, consumers, communities + those in need. We envision a world where each of us can create lasting impact in our communities, on our planet and each other by simply re-thinking how we eat."

CONNECT | 267-714-4382 | [info@simplygoodjars.com](mailto:info@simplygoodjars.com)



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Coffee is sponsored by West Chester University. During breakfast make sure to visit Holly Haworth and learn more about WCU's sustainability and urban education certificates and the MS in Transformative Education and Social Change – which will now be offered at our Center City Campus

**WEST CHESTER**  
UNIVERSITY



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# PLENARY SESSION

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Keynote Speaker - Jaimie P. Cloud

The Cloud Institute for Sustainability Education

Jaimie P. Cloud is the founder and president of the Cloud Institute for Sustainability Education in New York City. The Cloud Institute is dedicated to the vital role of education in creating awareness, fostering commitment, and guiding actions toward a healthy, secure and sustainable future for ourselves and for future generations. The Cloud Institute monitors the evolving thinking and skills of the most important champions of sustainability, and transforms them into educational materials and pedagogical systems that inspire young people to think about the world, their relationship to it, and their ability to influence it in an entirely new way.

As a pioneer in the field of Education for Sustainability (EfS) Jaimie is an international keynote speaker, thought leader and educational consultant. Jaimie writes and publishes extensively, and is a leadership advisor and curriculum development coach to administrators, teachers and curriculum specialists in schools and school districts around the country and in other parts of the world.

Jaimie is inspired by the potential of schools as learning organizations, children and young people as leaders, and schools and communities learning in partnership for a sustainable future. Through The Cloud Institute Jaimie has developed exemplary curriculum units and full courses of study, and produced the Cloud Institute's EfS Framework and EfS Standards and Performance Indicators that schools are using to design and innovate their own curricula to educate for sustainability.





# 11:45 CONCURRENT SESSIONS

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## **Room 1080 - Global Leaders Program - Manisha Patel & Destinee Anderson, The United Nations Association of Greater Philadelphia**

During the past year, the United Nations Association of Greater Philadelphia has worked on developing the Global Leaders Program, a series of lessons for high school students designed to introduce social justice concepts in a global context. Throughout the lessons, we help students learn about their identity and develop strategies to support issues they are passionate about. Throughout the course, we cover concepts such as societal inequality, power systems and resource mobilization. Given societal problems such as climate change and economic inequality, which disproportionately hurt impoverished communities, we believe making students aware of their power to make change in their community is critical to ensuring the future sustainability of our city and the world at large. In this session we will engage conversation about our program and discuss can be components can be incorporated into traditional curriculums.

### **Related Education for Sustainability standards:**

- Responsible Local & Global Citizenship
- The Dynamics of Systems & Change
- Inventing & Affecting the Future
- Multiple Perspectives
- Strong Sense of Place

## **Room 1072 - Understanding the Urban Watershed - Ellen Schultz, Fairmount Water Works Interpretive Center**

Participants will explore and sample Understanding the Urban Watershed, a cross-disciplinary curriculum, aligned with School District of Philadelphia core content and Education for Sustainability standards. It is locally-based, offers experiential learning and was developed and piloted by School District of Philadelphia teachers. This workshop will “whet your appetite”, as you “dip your toe” into the breadth and depth of all this curriculum has to offer to help make connections to their school, neighborhood, community and city. It is accessible in its entirety online and aligned with the City’s Greenworks Plan, the District’s GreenFutures Plan and the Philadelphia Water Department’s Green City, Clean Waters Program.

### **Related Education for Sustainability standards:**

- Cultural Preservation & Transformation
- Responsible Local & Global Citizenship
- The Dynamics of Systems & Change
- Healthy Commons
- Natural Laws & Ecological Principles
- Inventing & Affecting the Future
- Multiple Perspectives
- Strong Sense of Place
- Sustainable Economics



# 11:45 CONCURRENT SESSIONS

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**Room 1069 - Building STEM Skills through Aquaponics; leveraging formal and informal school partnerships to implement environmental education in a middle school. Erin McCool, Director of Strategic Initiatives, Riverbend Environmental Education Center & Dr. Sean Gardiner, Director of Curriculum and Instruction: STEM Education, Upper Merion Area School District**

The world is facing complex environmental challenges. Modern food systems are inextricably linked to energy and water, making solutions to feeding a growing global population complex and rooted in STEM. Through Riverbend's Building STEM Skills through Aquaponics, students and teachers are exposed to real world sustainability challenges and work through authentic solutions while building critical skills in STEM. Through an ongoing partnership, Upper Merion Area Middle school as implemented the Aquaponics program in 7th and 8th grade, creating a curriculum that supports science instruction with underpinnings in sustainability and STEM. Upper Merion educators have used Building STEM Skills through Aquaponics as a platform for a district-wide project based, sustainability entrepreneur program that spans two grade levels. Students are engaged in the real world issues around building a sustainable business through their science classes, growing food and working across sectors to solve problems and build a thriving business model. Students think critically how community and societal goals can be met using sustainable agricultural practices like aquaponics. Through this program, Riverbend and Upper Merion Area School District have created a model partnership program that engages students and teachers in science and sustainability issues.

**Related Education for Sustainability standards:**

- Responsible Local & Global Citizenship
- The Dynamics of Systems & Change
- Sustainable Economics
- Healthy Commons



# 11:45 CONCURRENT SESSIONS

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## **Room 1179 - Community Based Environmental Health in Schools - Marilyn Howarth, MD, FACOEM, Director, Community Engagement Core (CEC), Center of Excellence in Environmental Toxicology, University of Pennsylvania**

Asthma is three times more prevalent in Philadelphia children than in the Commonwealth of PA. Although there are many contributors to asthma, poor air quality adds to other asthma triggers and can cause an asthma exacerbation. In an effort to inform students about the asthma air pollution connection, have them understand that they can take action on their own behalf and reduce air pollution through decreasing the idling of vehicles, we designed a collaborative program with the School District, The EPA and the Delaware Valley Regional Planning Commission which engaged school children to improve their environmental health. The University of Pennsylvania's Academically Based Community Service Courses engage Penn Undergraduates in teaching in Philadelphia Schools. Students in Community Based Environmental Health learned about the asthma air pollution connection and designed a curriculum incorporating anti-idling. This workshop will describe the curriculum and collaboration with the EPA, DVRPC and school to achieve a sustainable Anti-idling program that reaches beyond the school into the community.

### **Related Education for Sustainability standards:**

- Responsible Local & Global Citizenship
- Healthy Commons
- Inventing & Affecting the Future





# 2:05 CONCURRENT SESSIONS

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## **Room 1080: Education for Sustainability - Philly: Developing Education for Sustainability Teacher Leaders - Victor Donnay, Bryn Mawr College; Somireddy Sridevi, Mastbaum CTE High School; Paula Miller, Lincoln High School; Maggie Osman, U School**

During the 2017-18 academic year, 14 School District of Philadelphia teachers participated in a year-long (60 hour) professional development program in Education for Sustainability. The project, led by faculty from Bryn Mawr College, Community College of Philadelphia and West Chester University and funded by a grant from the National Science Foundation, aimed to support the Education for Sustainability component of the District's GreenFutures Sustainability Plan. The project introduced the teachers to the principles of Education for Sustainability and supported them to incorporate these principles into their teaching and into their schools. A key focus was to link classroom learning with broader student engagement in their school and community around sustainability. We will discuss the project outcomes and share the experiences of the teacher participants.

### **Related Education for Sustainability standards:**

- Cultural Preservation & Transformation
- Responsible Local & Global Citizenship
- The Dynamics of Systems & Change
- Healthy Commons
- Natural Laws & Ecological Principles
- Inventing & Affecting the Future
- Multiple Perspectives
- Strong Sense of Place

## **Room 1069: Community Leadership - Fiesta Schoolyards - Healthy Commons and Strong Sense of Place - Elaine Lindy, Lindy Family Foundation**

Fiesta Schoolyards is a program bringing a healthier commons and strong sense of place to Philadelphia public elementary schools. Fiesta Schoolyards is an initiative of the Lindy Foundation, a nonprofit organization, using a light-touch, high-impact, low cost approach. By streamlining the process and standardizing the play item, a new Fiesta Schoolyard can be provided from start to finish in six months. This session discuss how a new Fiesta Schoolyard has brought a sense of togetherness to the school community and to the wider community as well, particularly through a design intended to appeal to a wider range of childhood preferences. A Fiesta Schoolyard chooses to offer a large number of lower-level or surface-level playing choices (such as painted maps & games), instead of the traditional high climbing structure where dozens of children compete for limited play space. After a description of the design process, community engagement and workflow, participants will engage in a reflective discussion about the initiative, methods for improvement and replication.

### **Related Education for Sustainability standards:**

- Sustainable Economics
- Healthy Commons
- Natural Laws & Ecological Principles
- Inventing & Affecting the Future
- Multiple Perspectives
- Strong Sense of Place



# 2:05 CONCURRENT SESSIONS

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## Room 1072: Youth Leadership in Sustainability Panel Discussion

**Amani Reid** studies Political Science and Environmental Studies at Temple University, and works for Audubon Pennsylvania at The Discovery Center. She has a demonstrated passion for environmental justice issues.

**Beau Greisiger** is a student at Friends Central High School. He has worked with several organizations to create a stewardship program to ignite community engagement to maintain the many Philadelphia Public School Rain Gardens. The program provides all of the steps to maintain the rain gardens and preserve them from wear and tear of weather, usage etc. while balancing that with opportunities to use the schoolyard rain gardens as a classroom, field, and laboratory for students and the community.

**Richard Ling** is a rising senior at the University of Pennsylvania studying Systems Engineering and Environmental Science. He is one of the two Coordinators for Penn's Eco-Rep program, which is an environmental leadership program wherein students advance sustainability through campus-based projects. He also founded Collective Cause, which is a 501c3 nonprofit that strives to localize solutions to the UN Sustainable Development Goals (SDGs) in Philadelphia. As an initial step towards this goal, Richard and his peers at Penn organized a competition, called Sustainable Solutions, that invited Philadelphia high school and college students to tackle the UN SDGs. If you would like to collaborate with Richard or learn more about his initiatives, please do not hesitate to contact him anytime at richling@sas.upenn.edu or (951) 567-6665.

**Sarah Kuchan** is a Temple University student majoring in environmental science and political science double-major. She is a fourth 4th year student graduating in 2019. She won a sustainability award on campus for a bike powered compost service.

**Allisa M. Lopez** is a current AmeriCorps member with PowerCorpsPHL and will be attending a second semester at Community College of Philadelphia in the fall to continue her education in Allied Health.

**Moderated by Jerome Shabazz, Executive Director of the Overbrook Environmental Education Center.** In 1998, Jerome and Gloria Shabazz established JASTECH (Juveniles Active in Science and Technology) Development Services, INC. to ensure a more livable, sustainable, and equitable community in the City of Philadelphia. In 2002, JASTECH established the Overbrook Environmental Education Center (OEEC) as a community based center dedicated to the preservation of our built and natural environments; improved public health; and for the promotion of sustainable and livable communities.

### Related Education for Sustainability standards:

- Inventing & Affecting the Future
- Multiple Perspectives



# K-16 PARTNERSHIPS NETWORK

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Operating under the overall PHENND network, the K-16 Partnerships Network brings together higher ed faculty and staff who manage partnerships with public schools. The focus is two-fold: learn from each other about best practices and models for K-16 partnerships in general and as appropriate, work with the School District of Philadelphia to help improve and expand K-16 partnerships in Philadelphia.

The University Partners meetings are designed to bring together School District officials with college and university partners to learn more about each other's work, explore new opportunities for collaboration, and highlight model programs and practices.

## Acknowledgements

This event was made possible by generous support from Dr. Philip B. Lindy and family.

### Join the conversation!

@K16Partnerships

#K16Institute

#phled



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