

# FOUNDATIONS OF EDUCATION FOR SUSTAINABILITY & ACTION UPDATES



**Presenters: Rosalie Morillo and Jaimie Cloud**



# Webinar Agenda

1. Foundations to Education for Sustainability
2. EfS Lesson plans Exemplars
3. New Changes to EfS Action
4. Q & A
5. Sustainable Jersey Announcements





# The Foundation of Education for Sustainability

*Inspiring young people to think about the world, their relationship to it, and their ability to influence it in an entirely new way.*

THE  
CLOUD  
INSTITUTE FOR  
SUSTAINABILITY  
EDUCATION

Jaimie P. Cloud, President  
[www.cloudinstitute.org](http://www.cloudinstitute.org)

**We wouldn't need  
Education *for Sustainability* if  
there was no such thing as  
*un-sustainable***



# Sustainability

“The possibility that human and other life  
will flourish on the planet forever”

John R. Ehrenfeld



# So What Kind of Future do we Want?

**What do we want to sustain?**

**For whom?**

**For how long?**



# Sustainability

"A sustainable society is one that is far-seeing enough, flexible enough, and wise enough not to undermine either its physical or its social systems of support."

Donella Meadows



# What do teaching and learning have to do with sustainability?





# What *is* education for? (In the service of what?)



# Think About It

Every sector

*food, buildings, business, government,  
higher education, urban and rural planning...*

is making the shift toward sustainability  
and even regeneration.

**Where do they think they are going without all the  
children, young people and their teachers?**



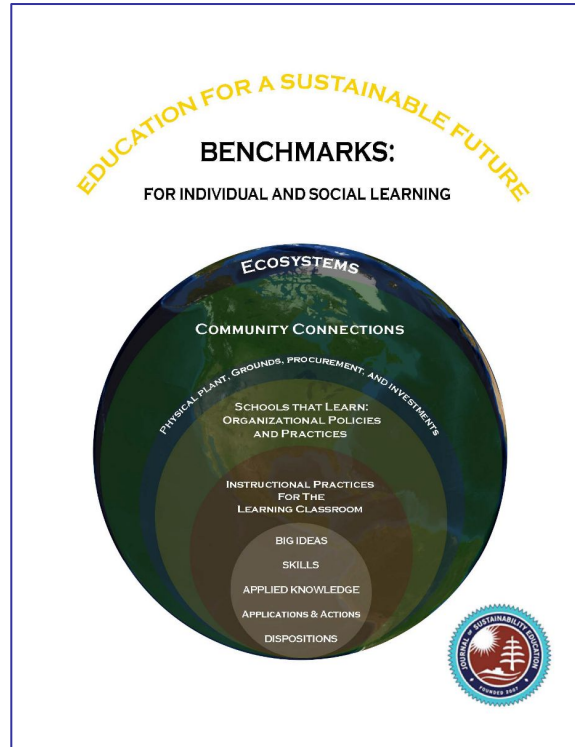
# Why Educate for Sustainability?

We have to *learn* how to live well in our places without undermining their ability to sustain us over time.

The foundations of our knowledge, skills, and habits of mind are cultivated in our schools.



# EfS Benchmarks





## EDUCATION FOR SUSTAINABILITY EfS STANDARDS & PERFORMANCE INDICATORS

WITH ENDURING UNDERSTANDINGS  
*Curated and Edited by Jaimie P. Cloud*

### THE 9 CORE EfS STANDARDS

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

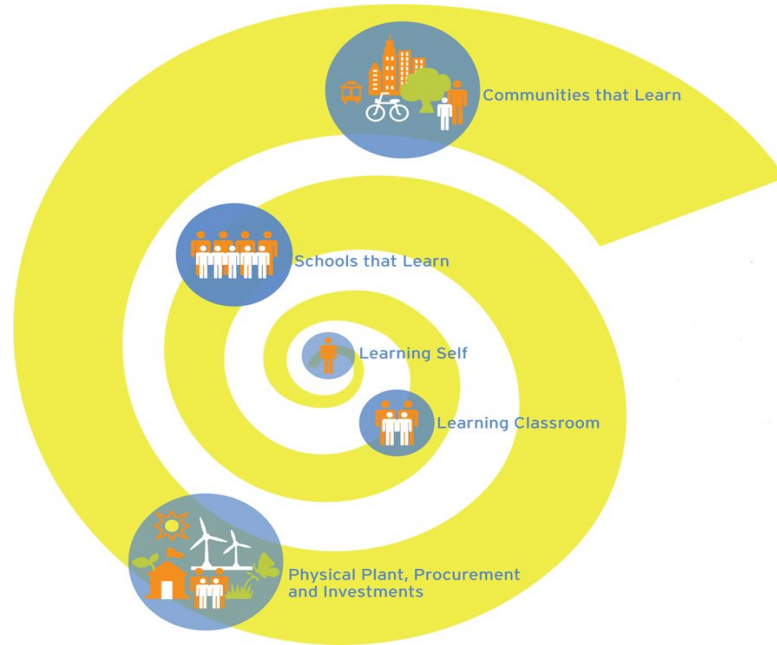


The Cloud Institute for Sustainability Education. EfS Standards and Performance Indicators, Version 2.0



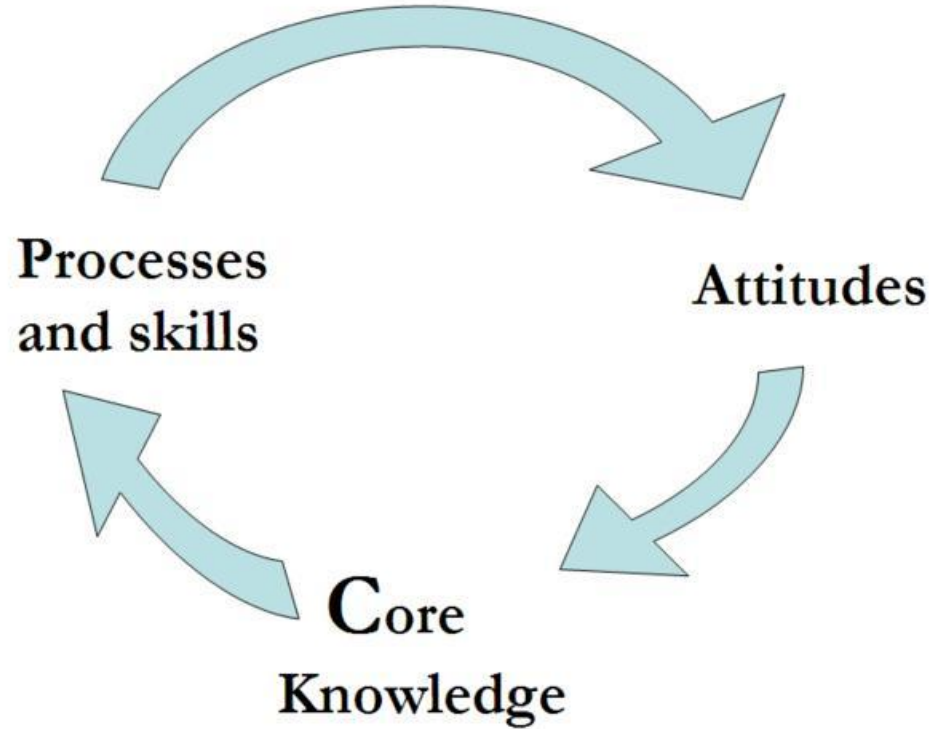
# The Cloud Institute

## Education for Sustainability Framework





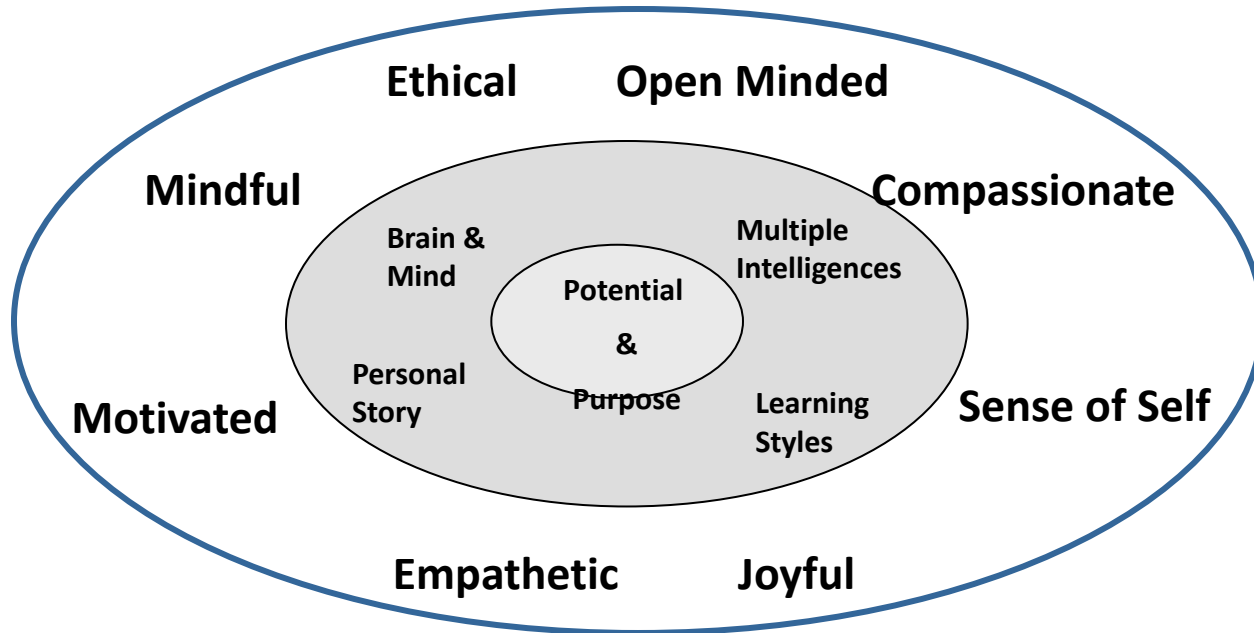
# The Learning Self





# The Learning Self

## Core Attitudes

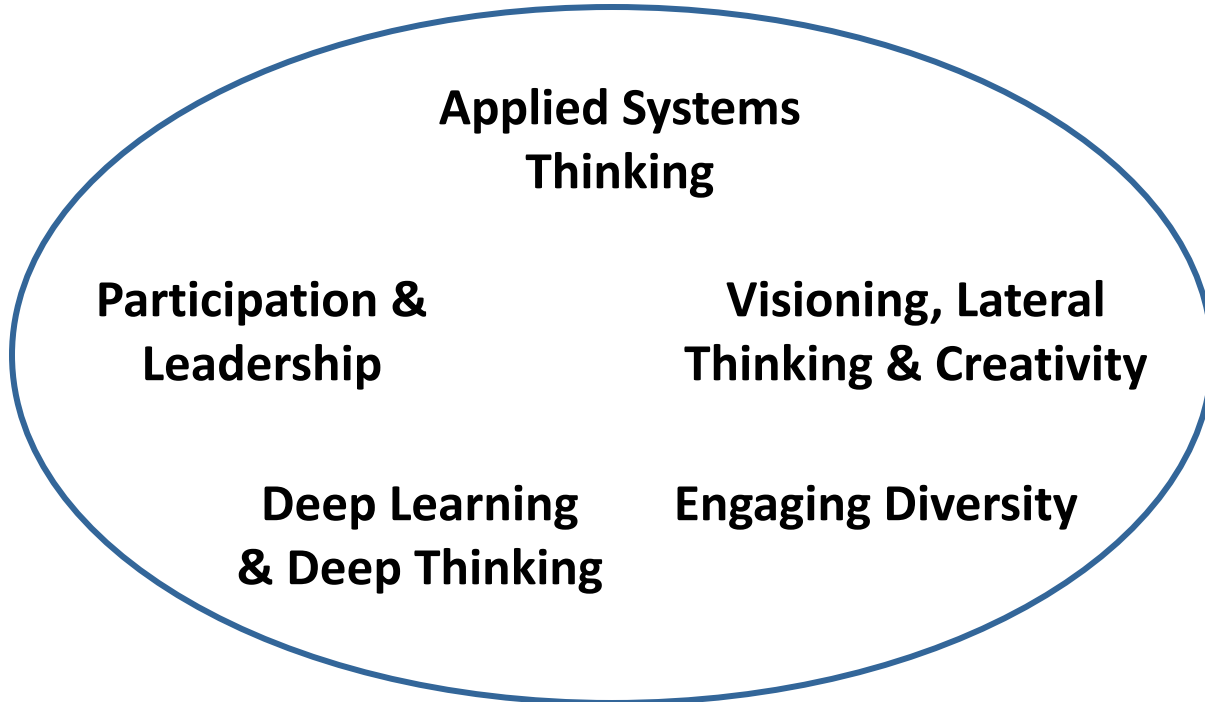






# The Learning Self

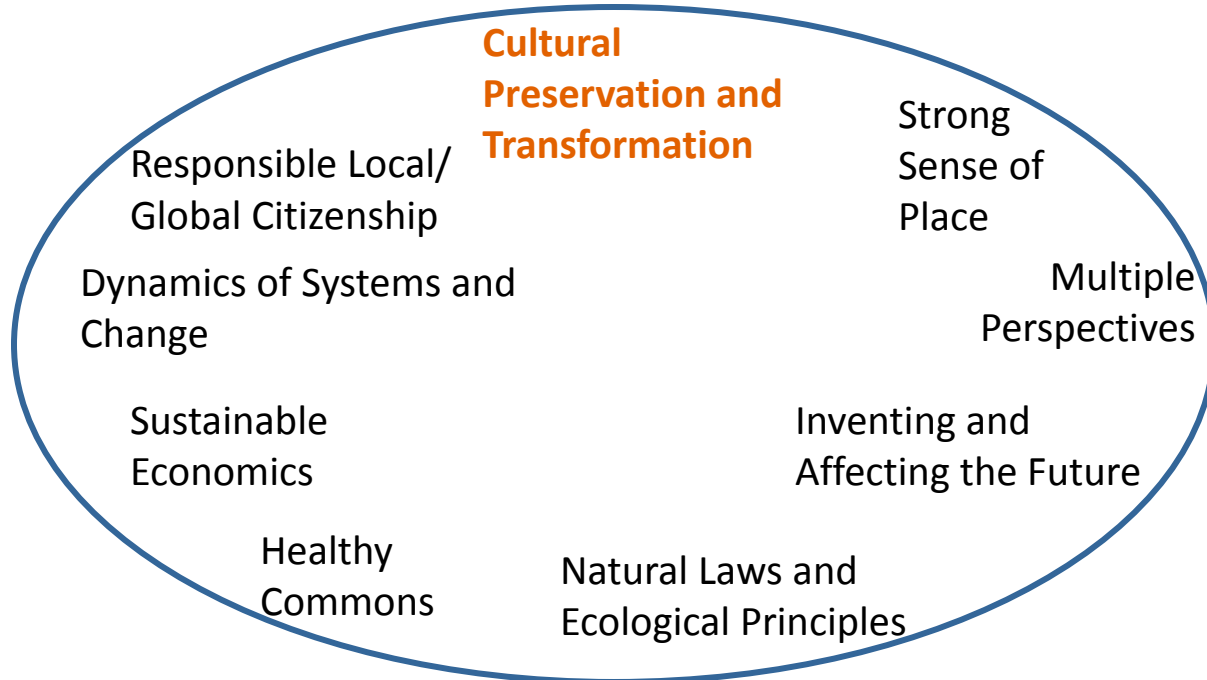
## Core Processes and Skills





# The Learning Self

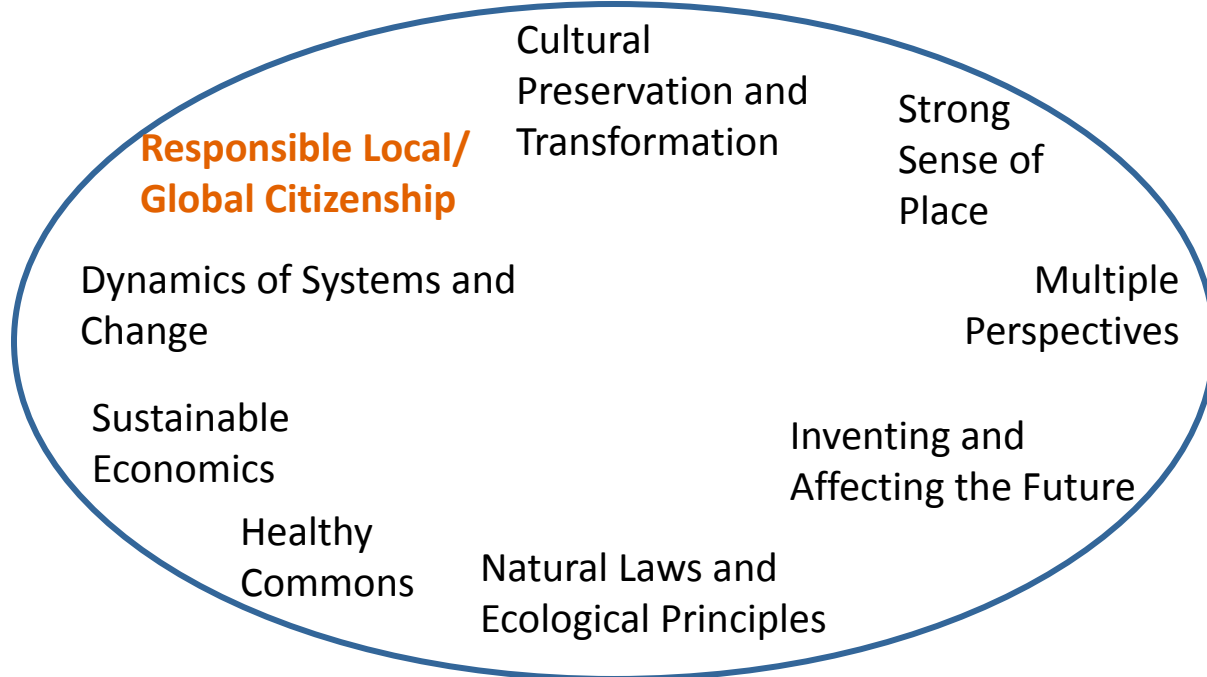
## Core Knowledge





# The Learning Self

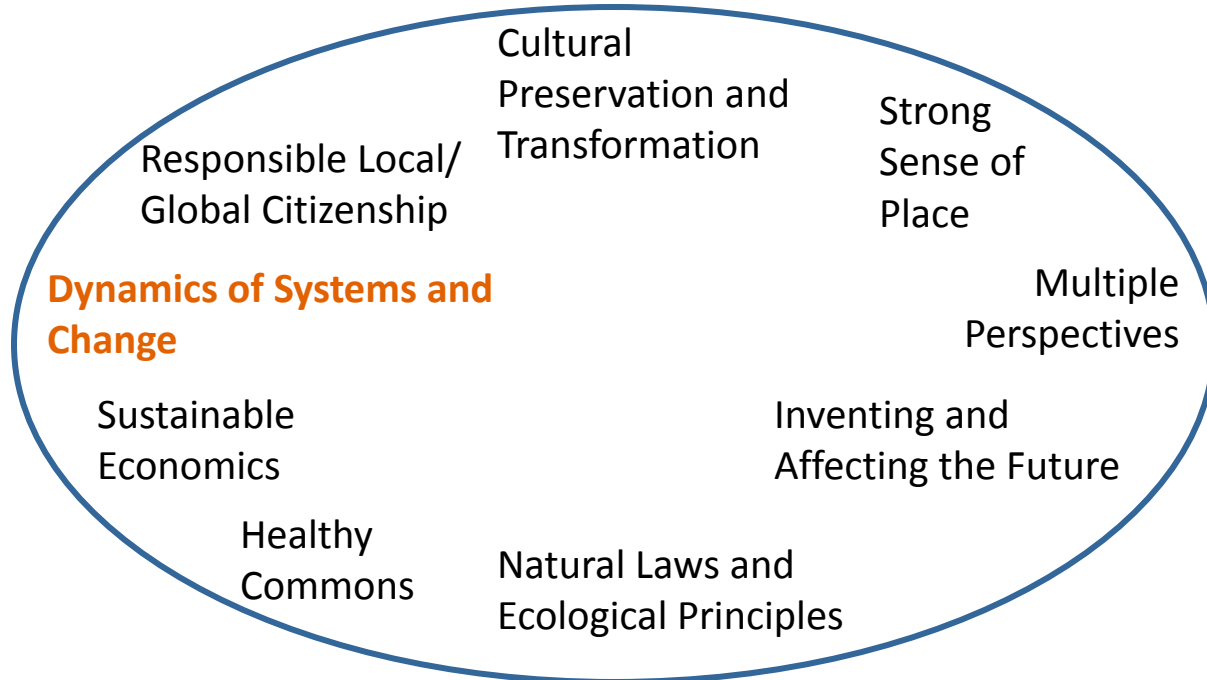
## Core Knowledge





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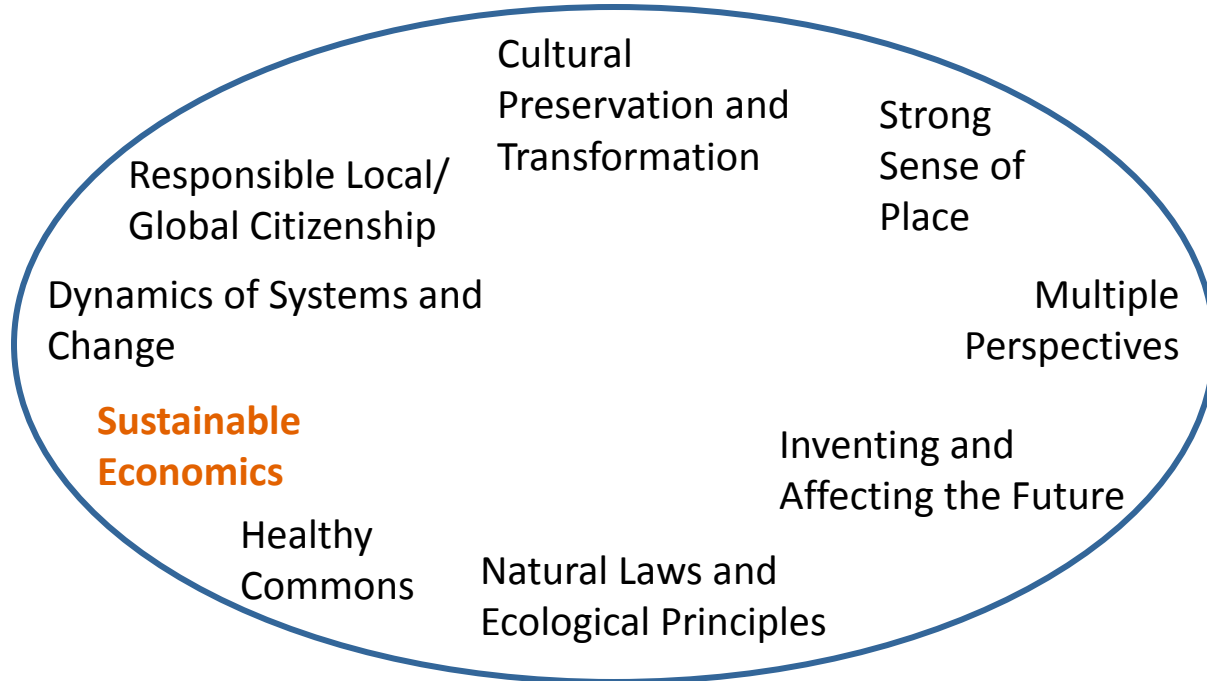
## Core Knowledge





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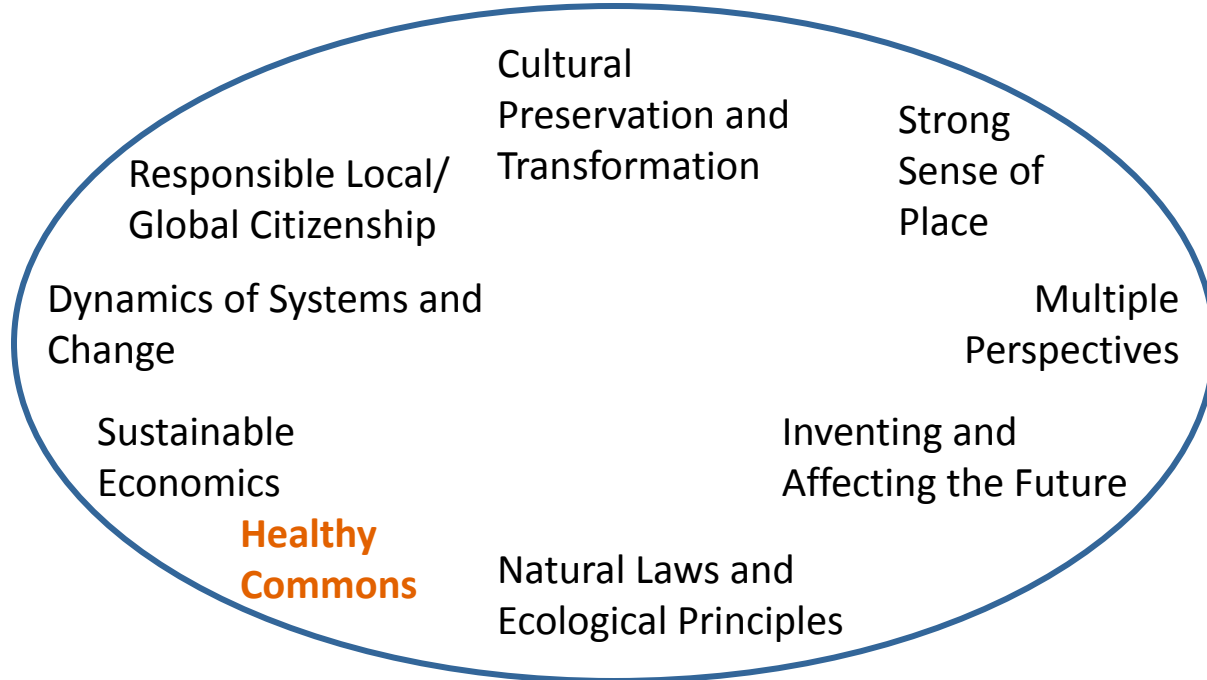
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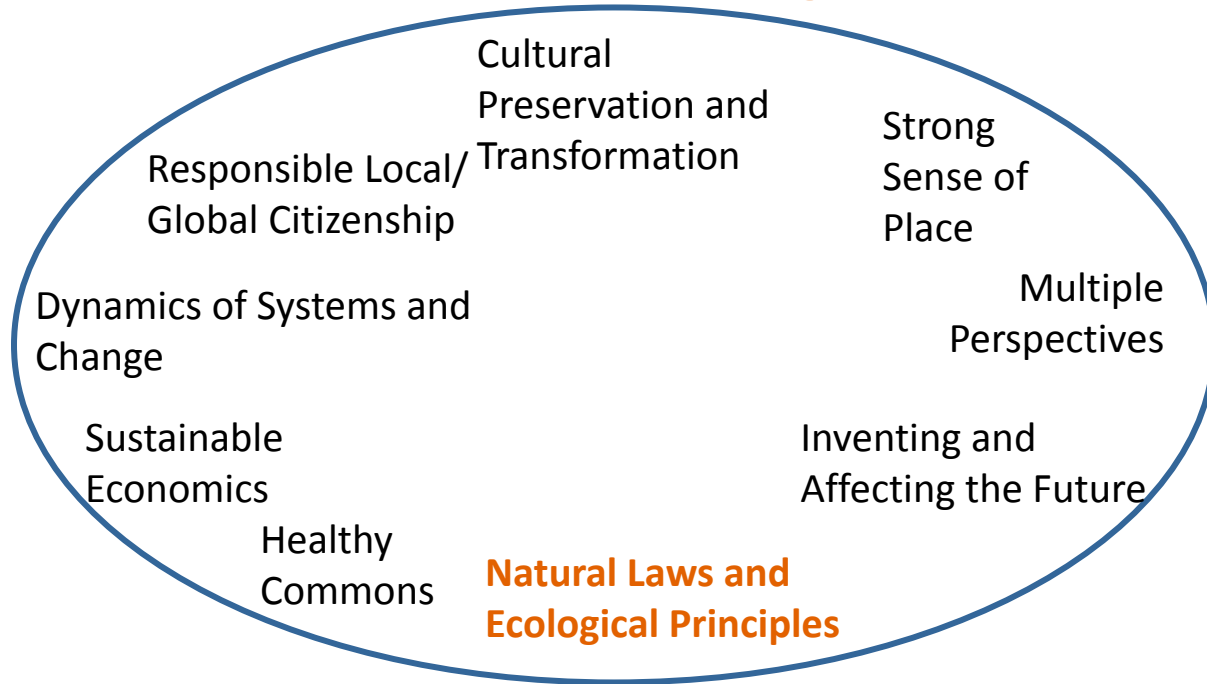
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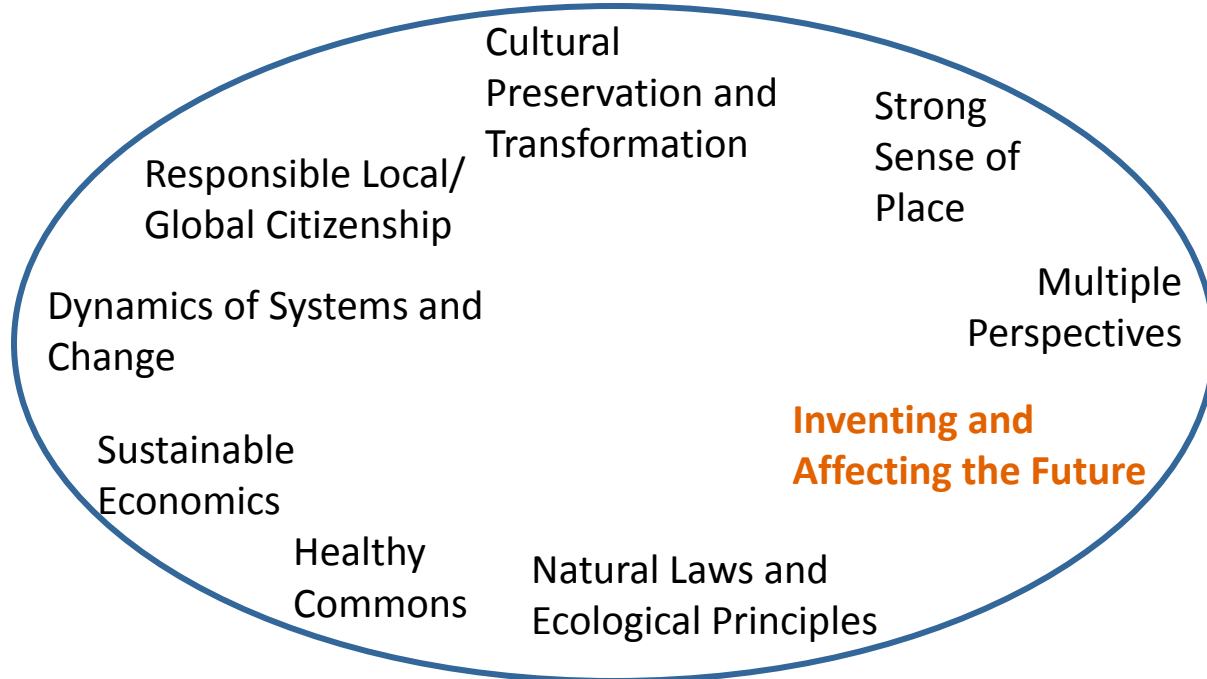
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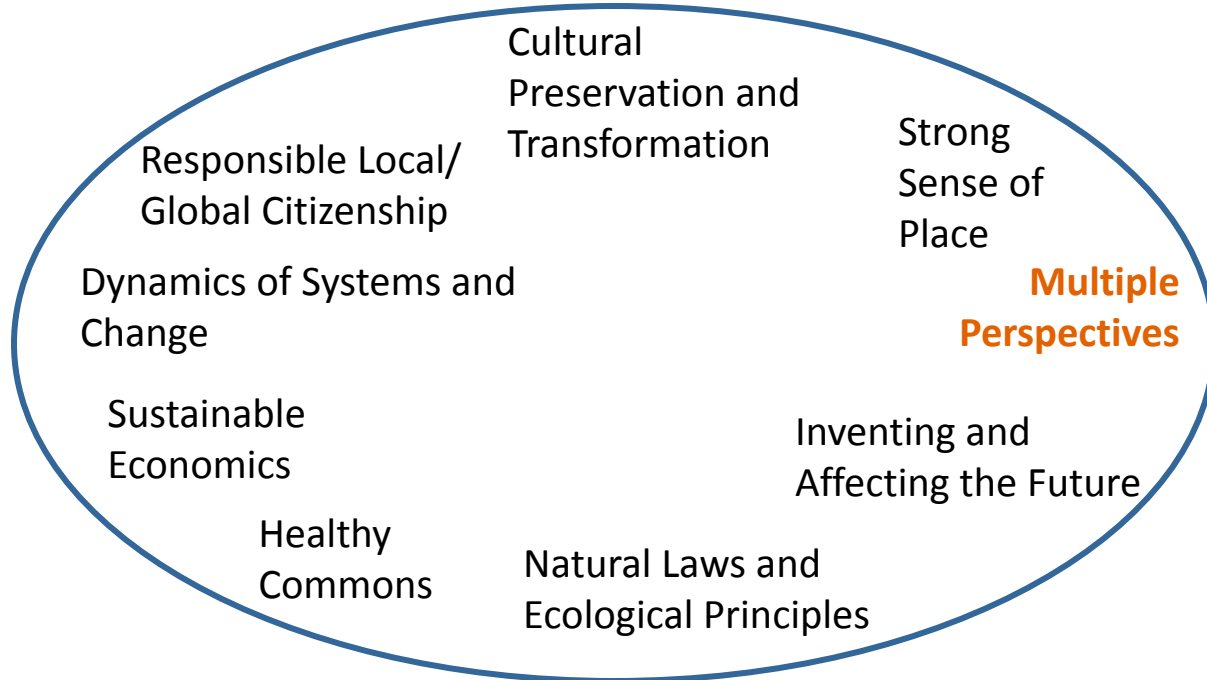






# The Learning Self

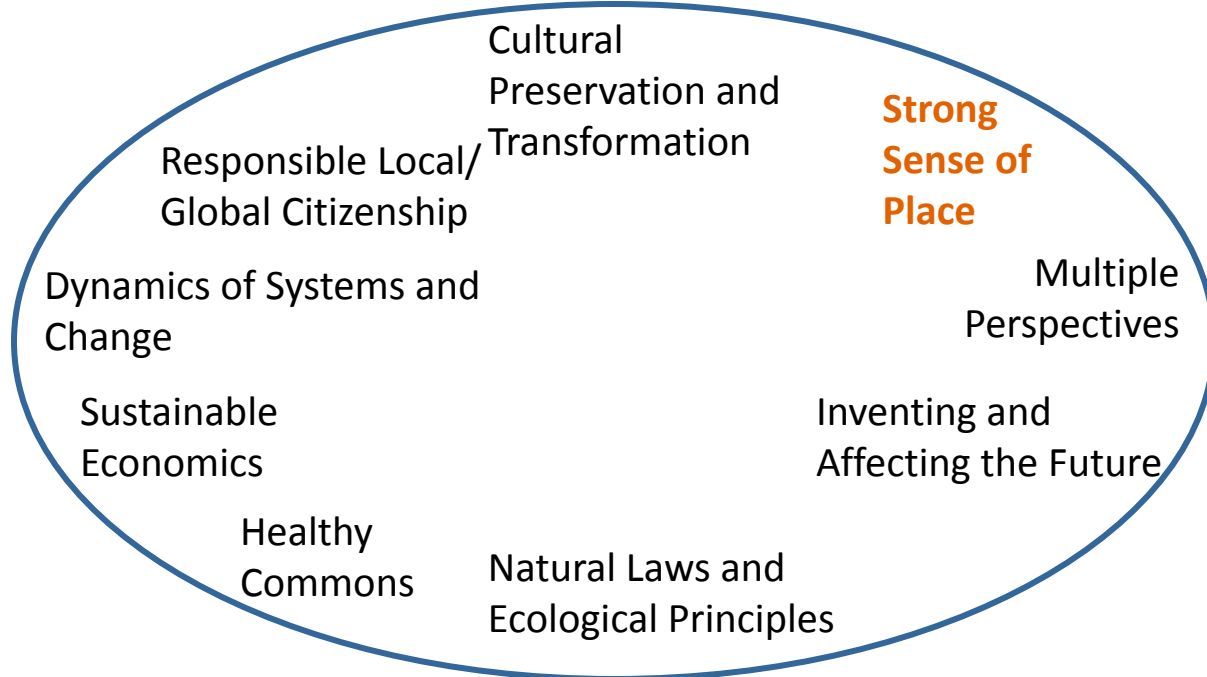
## Core Knowledge





# The Learning Self

## Core Knowledge



# Stocks and Flows:

**Stocks** are entities that can accumulate or can be depleted, such as water in a bathtub.

**Flows** make stocks increase or decrease,  
like a faucet or drain affects  
the level of water in a bathtub.

# Stocks and Flows:

Goal: Resilience/Regeneration

Example of a STOCK: \$\$ in a savings account

OUT FLOW: Withdrawal Rate

IN FLOW: Interest/Deposit Rate

If we withdraw more \$\$ faster,  
than the interest or deposit rate,

We will run out of \$\$ +...

**We call that unsustainable.**

# Stocks and Flows:

Goal: Resilience/Regeneration

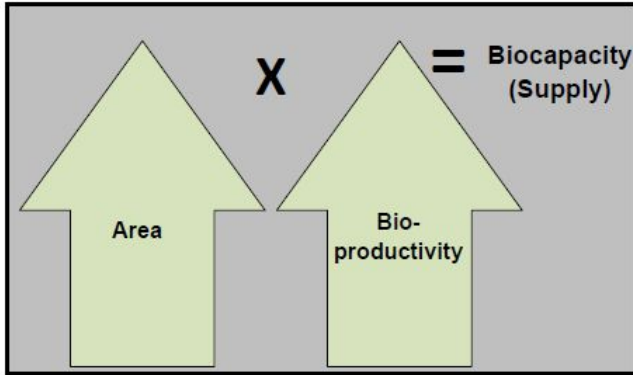
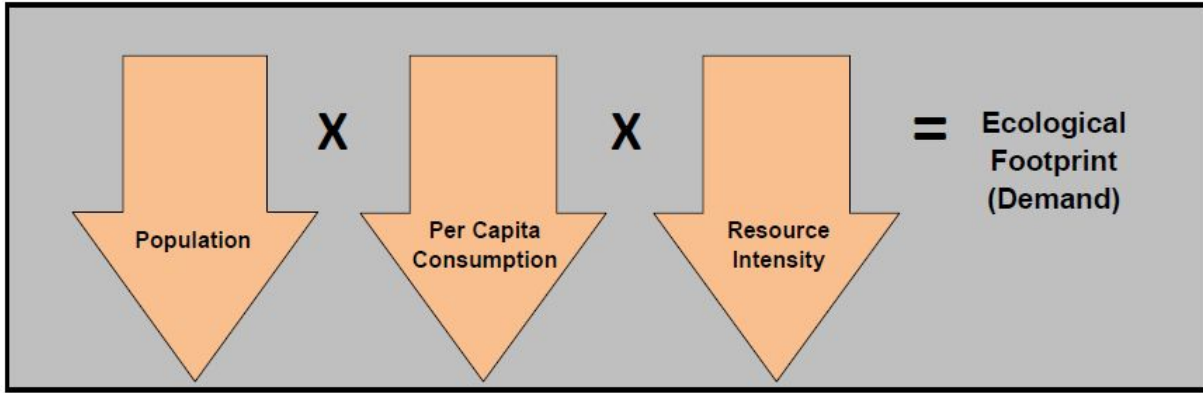
Example of a **STOCK**: FISH

**OUT FLOW**: Death/Catch Rate

**IN FLOW**: Replenishment Rate

If more fish are removed from the ocean faster,  
than the ocean is able to replenish them,  
There will be no more fish... +...

**We call that unsustainable.**



**Gap Between  
Biological Demand  
and Supply**



# Stocks and Flows:

Goal: Dynamic Stability

Example of a **STOCK**: CO<sub>2</sub>/Greenhouse Gases

**OUT FLOW**: Plants, trees, oceans/sequestration

**IN FLOW**: Emissions

If we emit more CO<sub>2</sub> etc. into our atmosphere faster, than the planet can absorb them, the accumulation will disrupt Earth's chemical balance and cause changes to our climate.

**We call that unsustainable.**



CO<sub>2</sub> in the Atmosphere

## CLIMATE ED: Think Like a Bathtub

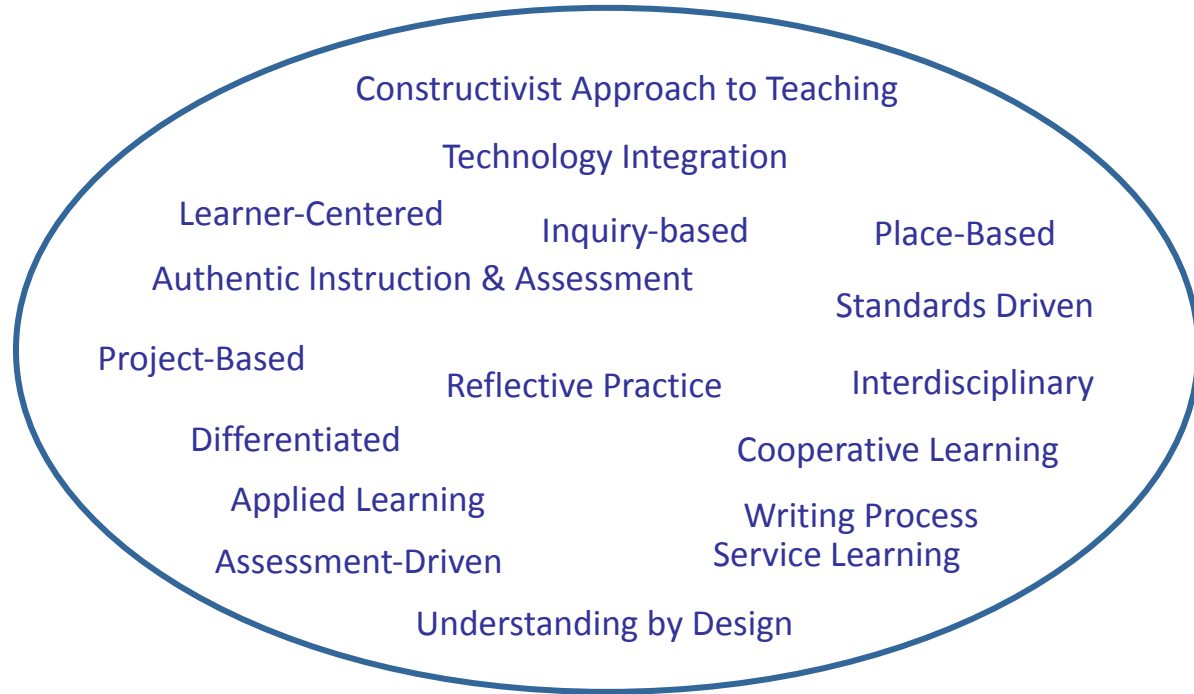
with Dr. Linda Booth Sweeney





# The Learning Classroom

## Class as a Learning Community



# Let's look at an example of an EfS lesson

## **Lesson Overview:** Math Lesson Carbon Footprint

- **Enduring Understandings:**
  - We are all in this together.
  - Recognize and Protect the Commons
- **Objective:**
  - Students will identify their carbon footprint, analyze their activities, and how they can make a change for the better.
- **Activities:**
  - Building background on what is a carbon footprint
  - Record and compare numerical data using Nearpod and Jamboard
  - Graph and analyze as a class and find the average carbon footprint as a class
  - Determine at least one change that can be made to lower the class carbon footprint
  - Create a slide presentation highlighting ways to reduce their carbon footprint
- **Assessment:**
  - Share and compare with the class their carbon footprint reduction solution
- **Closing activity:**
  - Why is it important? How can you start to make this small change?



# New Changes to EfS Action!

Lesson Plan  
Template

Assessment

~~Digital School  
Requirement~~

Q & A



# STUDENT CLIMATE CHALLENGE

## FREE OPPORTUNITY AVAILABLE TO NEW JERSEY PUBLIC SCHOOL STUDENTS IN GRADES 6 TO 12

### TEACHER REGISTRATION OPENS

**OCTOBER 10**

Teacher registers student team who will complete a school or community project that addresses a cause or impact of climate change



### STUDENT ENTRIES DUE

**APRIL 10**

Teams create a digital story video about the project and submits it by April 10, 2024

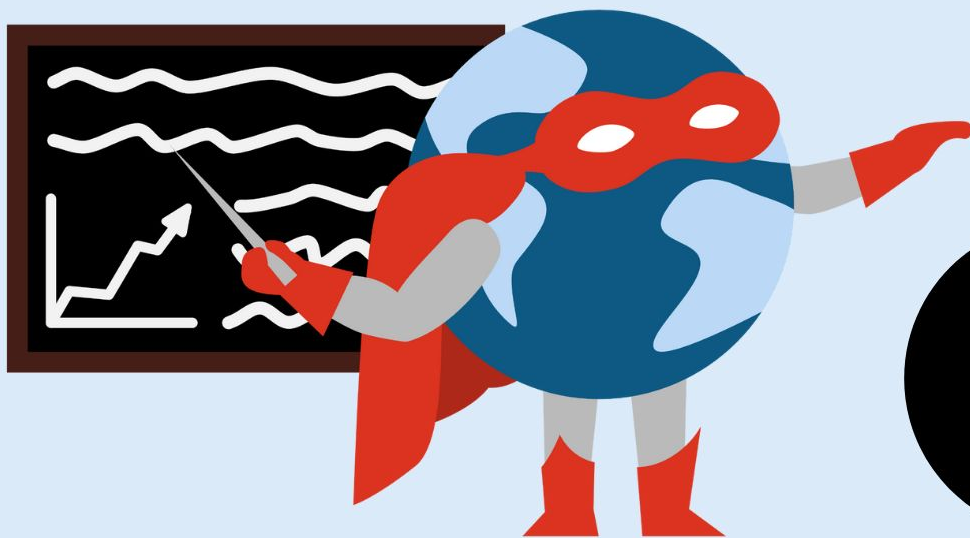


### AWARDS CEREMONY

**EARLY JUNE**

Winners are recognized at an Awards Ceremony hosted by First Lady Tammy Murphy and receive grants to advance their climate education initiatives ranging from \$3,500 to \$500

[bit.ly/NJStudentClimateChallenge](https://bit.ly/NJStudentClimateChallenge)



**Become a Lead Educator  
for Climate Education!**

**JOIN THE NJ TEACHER TASK FORCE TO DEVELOP EXEMPLAR LESSONS  
FOR THE NJ CLIMATE EDUCATION HUB**

The Hub launched in 2022 through a collaborative effort with SubjectToClimate, Sustainable Jersey, The TCNJ School of Education and NJ Audubon.

<https://bit.ly/STCTeacherTaskForceApp>

Schools within the service territories of [PSE&G](#), [NJNG](#), [SJG](#) or [ETG](#) are eligible



**empowered  
SCHOOLS**

students generating change

AN ALLIANCE TO SAVE ENERGY PROGRAM 



The Empowered Schools program - formerly known as PowerSave Schools - provides free support and resources to educate students about energy efficiency and save money on your school's energy costs.

Learn More  
[Here](#)



# APPLYING FOR CERTIFICATION IN 2024?

## Submission Deadline:

#1

January 12

#2

March 22

#3

June 13

[bit.ly/SchoolsCertCycle](https://bit.ly/SchoolsCertCycle)



# SUSTAINABLE JERSEY GRANTS PROGRAM



*Cycle Funded By:*



**Sections 1-3 of the  
Application are Due:  
Monday, October 30**

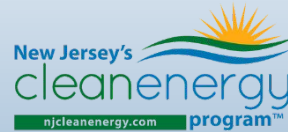
## Informational Webinar

An informational webinar was held on September 19 that provided an overview of the grants cycle, tips on crafting a successful proposal, and a walk-through of the online application. You can register to watch the webinar recording [here](#) and download the presentation slides [here](#).

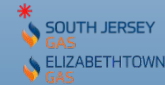


# Sustainable Jersey for Schools Underwriters and Sponsors

## Program Underwriters



## Corporate Sponsors



\*Digital Schools Underwriters and Sponsors