



Climate Justice - Sustainability

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WHERE WE LEARN MATTERS

School facilities have a direct impact on:



Student and staff health



Academic achievement



Environmental resources



Property values

\$8 billion spent by U.S. schools on energy

wastes natural resources and taxpayer money and takes away from what should be invested in instruction. The EPA estimates that 25% of energy used in K-12 schools could be cut with basic energy efficiency measures.

Schools throw away a half pound of waste per person,
most of which is paper and organics, like food.
A school district can be one of the largest
sources of landfill waste in a community.

CO₂ & poor ventilation

Students who breathe increased levels of carbon dioxide find it more challenging to learn, perform simple and complex tasks, and make decisions.

Allergens and respiratory irritants

can cause asthma, headaches, nausea, weight gain, general irritation and cognitive impairment.

Poor lighting and noise

have impacts on student health and learning through altered hormonal cycles and impaired cognitive processing.

Warmer classroom temperatures

contribute to stuffiness, headache, fatigue, reduced academic achievement, difficulty breathing and even increased influenza transmission.

By 2038, the U.S. will generate 4.2 M new green jobs,

and the young people coming into the workforce are looking for them. Nearly 80% of college students say they would like to work in a green job, and almost 60% are willing to take a job that pays less to do so.



Conceptual/Theoretical Framework

United States Department of Education Green
Ribbon Schools Award (ED-GRS) Framework,
(2011)

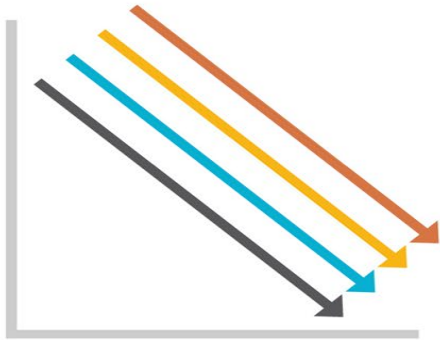
Whole School Sustainability (WSS) Framework
(Barr, Cross & Dunbar, 2014)

Ecological Democracy Whole School
Sustainability (Kensler, 2012)

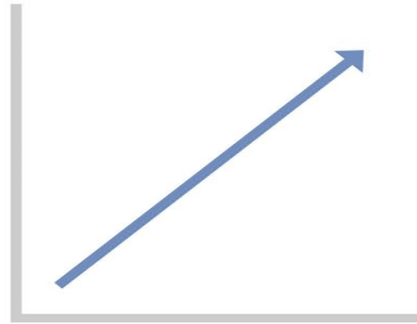




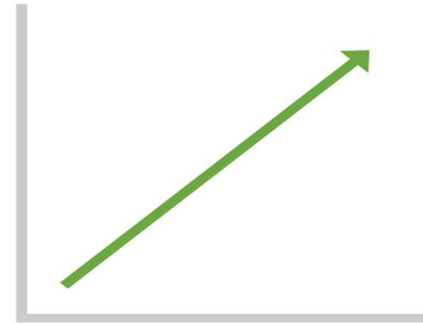
Three Pillars of ED-GRS



Net impact
(waste, water, energy, CO₂)



Health & performance



Environmental literacy



USDOE, Green Ribbon Award (ED-GRS) Framework

- Pillar 1: Reducing environmental impact and costs;
- Pillar 2: Improving health and wellness; and
- Pillar 3: Providing effective environmental and sustainability education.





ED-GRS 2012 - 2020

Year	Schools	District	Post-Sec	Total
2012	78	N/A	N/A	78
2013	64	14	N/A	78
2014	48	9	N/A	57
2015	58	9	14	81
2016	47	15	11	73
2017	45	9	9	63
2018	45	6	6	57
2019	35	14	4	53
2020	39	11	5	55
Totals	459	87	49	595







Whole School Sustainability (WSS)

- ❖ **Organizational Culture**
Vision and Mission Alignment
Interdepartmental Learning
Catalytic Communication
- ❖ **Physical Place**
Engaging & Active3 Design
Progressive Efficiency
Healthy Systems
- ❖ **Educational Program**
Charismatic Leadership
Connection to Place
Student Powered



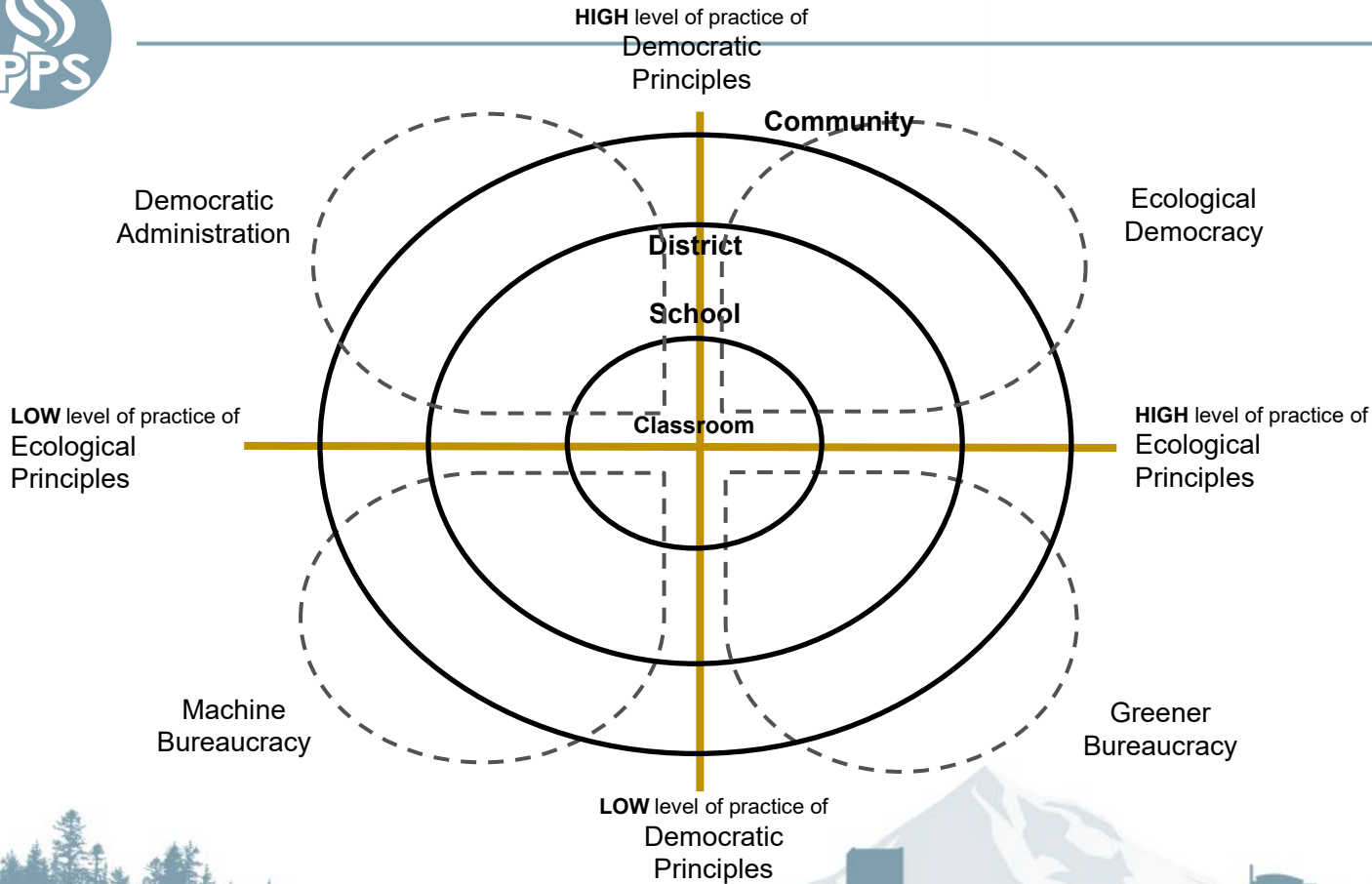


Figure 2. Theoretical framework integrating ecology and democracy. The dotted lines emphasize the indistinct nature of the four categories of schools: Machine Bureaucracy, Democratic Administration, Green Bureaucracy, and Ecological Democracy.



Ecological Democracy for Whole School Sustainability (ED-WSS) (Kensler, 2012)

- Six Ecological Principles
 - Development
 - Network, Partnerships and Diversity
 - Dynamic Balance
 - Nested Systems
 - Cycles
 - Solar Energy and Flows





ED-WSS

10 Democratic Principles

- Fairness and Dignity
- Purpose and Vision
- Integrity
- Reflection and Evaluation
- Accountability
- Individual and Collective
- Dialogue and Listening
- Decentralization
- Transparency
- Choice





National Examples of Sustainability Policies

Baltimore Public Schools, MD

Howard County Public Schools, MD

Seattle Public Schools, WA

Austin Independent School, TX

San Francisco Unified School District, CA

San Diego Unified School District, CA

(All are uploaded in the Google Folder)





Baltimore Public Schools – Sustainability Plan

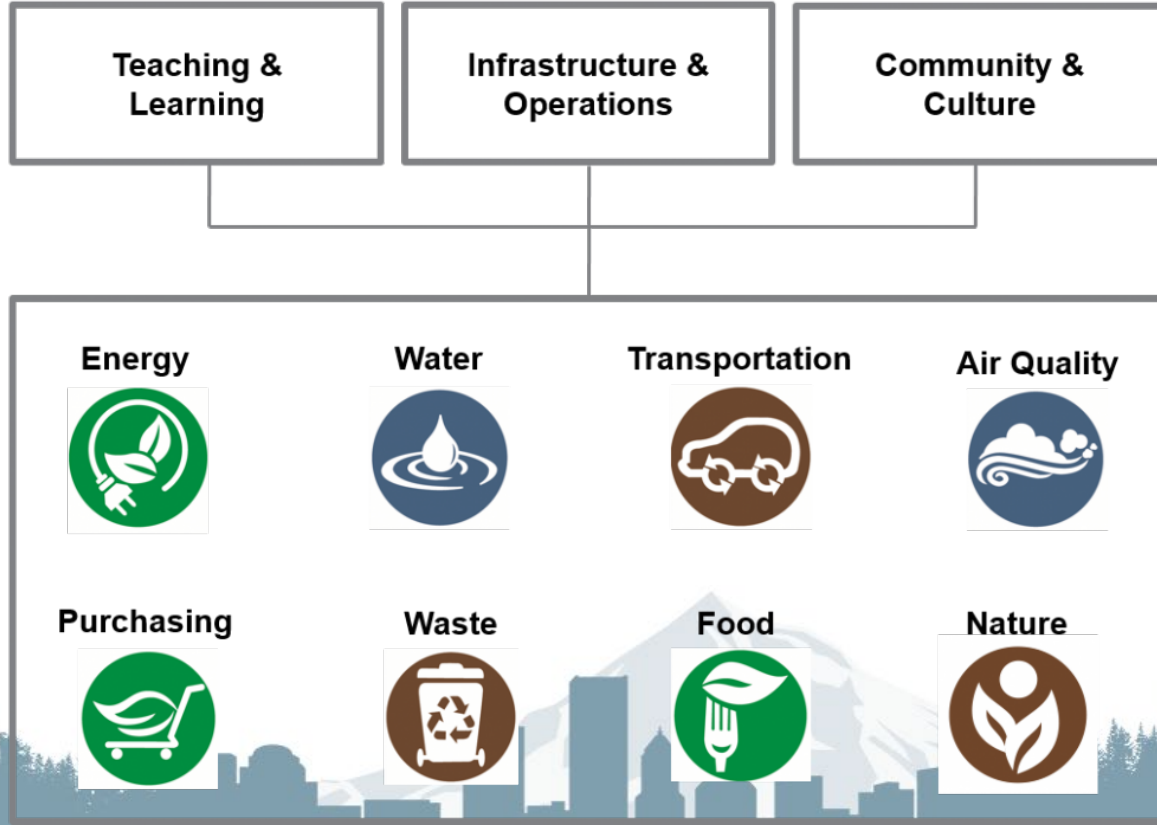


- **Develop environmental literate students**
- **Create healthy school environments**
- **Reduce and conserve natural resources**
- **Improve school green spaces**
- **Engage school communities**
- **Build student leadership**





AUSTIN ISD SUSTAINABILITY FRAMEWORK





SFUSD Sustainability Pillars

Carbon Neutrality

Water Resilience

Zero Waste

Sustainable Transportation

Connection to Nature





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Questions

