Green Portable Advocacy
Our campaign for healthier learning environments
“Meeting the needs of the current generation without compromising the ability of future generations to meet their own needs.”
AGENDA

About our Work

The Portable Problem

The Case for Green Portables

Advocating in our schools

Collective Impact
GOALS

1. Articulate the moral, technical and financial case for Green Portables.

1. Explore policy and advocacy strategies related to green portables and green school construction.

1. Stay up to date on new developments in the field of school portables and learn about best practices.

1. Understand the national movement towards educating for sustainability.

1. Think creatively to more effectively and directly engage youth, educators, and curriculum directors in learning about the buildings they inhabit.
Empower youth to catalyze community sustainability

40 Ambassadors
8 School Districts
Private School Network
Sustainable Systems College

180 hours of professional training
Policy Analysis
Performance Assessment
Project Management
Public Speaking
Internship Program
Equity Advocacy Internship Program

Engage youth of color from low income communities

Implement existing equity and social justice initiatives

Empower youth to lead community-up projects

Establish green jobs pathways for youth
Empower teachers to integrate rigor with relevance for community impact

Project Design Lab
Teacher Fellows

3-Days/Summer
12-Months
Real world learning in the classroom results in...

Real world improvements in the community therefore...

GPA = Sustainable Community
What's the problem with portables?
2 Goals...

1. Advocate for green portables

1. Educate for Sustainability
4 Actions...

1. Build the Case
1. Benchmark
1. Broadcast
1. Embed into Curriculum
The Case for Green Portables

Moral Obligation

Technical Know How

Financial Payback
350,000 portables currently in place at schools across the US

150,000 more are forecasted to be installed in the next 2 years...
“standard” portable

just SPACE.
Most common problems:

- Minimal ventilation from Poorly functioning HVAC
- Poor acoustics from loud ventilation systems
- Chemical off-gassing from high-emission materials
- Water entry and mold growth
- Site pollution from nearby areas (parking lots)
Impacts on student health and performance

Lower light levels can impact student alertness. (Figueiro & Rea, 2010)

Low ventilation rates can decrease test scores and contribute to sick building syndrome. Lawrence Berkeley National Laboratories

Technical Case
Human Body Systems

- Circulatory System
- Nervous System
- Respiratory System
- Digestive System
- Skeletal System
- Muscular System
Portable Improvements

Specify no or low emitting building materials

Install proper drainage and measures to prevent mold

Install programmable thermostats in existing and new

Place portables to maximize daylighting

Practicing proper maintenance
25-30 students

Last 30-40 years,

Use 45% less energy

Take 1/3 less time to build
25-30 students

Last 30-40 years,

Use 45% less energy

Take 1/3 less time to build
HVAC systems reduce energy and generate 3x the fresh air

Aluminum Windows

Non-VOC Paint

Bio-based Flooring
HVAC systems reduce energy and generate 3x the fresh air.

Up to 4x more window area

Aluminum Windows

Non-VOC Paint

Bio-based Flooring
What if… Every Portable was LIVING?
SEED Classroom
Sustainable Education Every Day
Living Building Challenge

PETALS

PLACE

WATER

ENERGY

HEALTH & HAPPINESS

MATERIALS

EQUITY

BEAUTY
SEEDclassroom

A. Tubular Skylights
B. Solar PV Array
C. Energy Recovery Ventilator
D. Food Producing Green Wall with Integral Drip Tray Fed by Greywater Tank
E. Energy and Water Data Monitors
F. Hand Pump Sink Fed by Interior Cistern
G. Composting Toilet
H. Primary Interior Cistern
Can buildings make us healthier?

Many buildings contain materials that make you sick. This classroom contains zero toxic chemicals, so it’s keeping you healthy. We have CO2 monitors to make sure that the air quality is always at its best.

Can you think of ways to make both the inside and outside of buildings healthy for people that use them?

How can I learn more about my classroom?

This classroom includes a handbook in which you can find out more about every piece of this place, and learn how it applies to other parts of your world!

What do you want to know about buildings? Look at your classroom, then go find out how other buildings are made. Design your own living building!
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Composting Toilet
Rainwater to usable water
Rainwater to usable water

Living Wall
Filters
Greywater
Financial Case
“standard” portable

“green” portable

SEEDclassroom

$165K

just SPACE.

$300K

‘greener’ SPACE.

$260K

HEALTHY space that TEACHES.
At just 7 years, SEEDclassroom is lowest-cost option.
Are any of the existing or new portables green portables?

How many new portables this year?

How many portables?

Benchmark
Broadcast
Embed into Curriculum
Understanding of Concepts Before and After

- Efficiency: 1.4 Before, 3.1 After
- Green Energy: 3.6 Before, 4.1 After
- Toilet Waste: 3.2 Before, 4.1 After
- Red List: 1.6 Before, 3.4 After
- Environment: 3.3 Before, 4.3 After
- Confidence About Green Building: 3.3 Before, 4.7 After
Green Building Teacher Fellows Program
Green Building Teacher Fellows

RESPONSIBILITIES

Design Learning Pathways
Establish School-to-Work Opportunities
Facilitate District-Wide Adoption
Inform Stakeholders
Publish Community Curriculum Case Studies
$5,000 Fellow

$3,000 recruit, coach, curate, publish, follow

$2,000 stipend

12 month commitment
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REACH

125 students / day
5 faculty / department
20 faculty / district
88 districts in Puget Sound
$50,000 | Ten Fellows

Founding Program Partner

Co-Founding Program Partner

Fellows Sponsor
National Action Plan for Educating for Sustainability Timeline

2014
- Establish communication platform for the Efs movement that will support growth of network and can serve to track key performance indicators
- Organize working groups to study and implement key recommendations; prioritize formation of a funding campaign
- Share and distribute models (district and state policies; standards; best practices in content, materials)
  - By June 2014
    - Establish the United States Teacher Education for Sustainability Network (The US-TEN) in order to develop and maintain a national network of educators, educators, and sustainability leaders

2015
- Include Efs-related content in the next revision of the ISLLC 2008 Standards for educational leadership
- Agree on shared terminology and key messaging about Efs; distribute widely
- Meet target audiences (education stakeholders, policy makers and the general public) where they are with education and awareness about Efs via professional associations, in schools and through mainstream media outlets
- Hold year 1 of 3-year “research to practice” summit series to develop robust Efs research agenda. (Cultivating the Globally Sustainable Self: Summit Series on Transformative Teaching, Training, and Learning in Research and Practice, held at James Madison University in Harrisonburg, VA)

2017-2018
- Complete the alignment of Efs content with national standards for all core academic disciplines
- Publish Efs-aligned teacher evaluation guidelines;

2018
- By June 2018
  - Complete development and publication of national standards for education for sustainability

2020
- Make available to all school districts professional learning coaches fluent in Efs
- Ensure school district-level sustainability professionals are common members of district leadership teams throughout the country

2024
- Guarantee Efs is embedded into the process of learning to be a teacher

2025-2040
- By 2025
  - 35 states have adopted comprehensive green schools policy, which includes an Efs graduation requirement
- By 2030
  - All 50 state boards of education have adopted teacher evaluation standards grounded in Efs
- By 2040
  - All students graduate educated for sustainability.
THINK TANK

1. How can we solve the problem with portables?

1. How can we improve our campaign to solve this problem?

1. What can we do together to move towards green portables and reduce the need for portables?

1. How can we more effectively educate building inhabitants?
COLLECTIVE IMPACT

Common Agenda
Shared Measurement
Mutually Reinforcing Actions
Continuous Communication
Backbone
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Shared Measurement
Mutually Reinforcing Actions
Continuous Communication
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