



greenschoolsnationalnetwork.org

Get this slideshow in advance here: https://tinyurl.com/yd3tbg4a



GSNN Webinar

Future Thinking PD Opportunities for Sustainability-Minded Teachers

Get this slideshow in advance here: https://tinyurl.com/yd3tbq4a

Webinar Facilitator



David DenHartog *Director of Innovative Learning* I am glad to be the host of our GSNN webinar! You can find me at @davedenhartog

Agenda

- Welcome / Overview
- PD Collaborative Partners
- Breakout Room #1 (5-6 minutes)
- Professional Learning Opportunities
 - GSNN
 - The Cloud Institute
- Breakout Room #2 (5-6 minutes)
 - Envirolution
 - The Center for Green Schools
- Q & A for the presenters

We support K-12 leaders implementing whole school sustainability best practices, creating a more just, equitable and thriving future for students.

Green Schools National Network GreenPrint



Core Practice 1: Curriculum that Advances Environmental Literacy and Sustainability

Core Practice 2: Stewardship and Service Learning

Core Practice 3: Sustainable Facilities Design and Management

Core Practice 4: Health and Well Being

Core Practice 5: Strong Partnerships and Networks

Professional Development and School Coaching Services

<u>GSNN supports schools</u> who share our commitment to creating high achieving schools that enhance the global competencies needed by young people as they face a dynamic world. GSNN supports these schools and districts to design a placebased approach in their effort to provide sustainable and innovative learning environments for their students. These services, delivered both on-site and virtually, include professional development and coaching.

Catalyst Schools and Schools Districts

In 2017, GSNN launched the <u>Catalyst School and District Network</u> with 10 schools and 7 school districts. These schools and districts are committed to working with GSNN to evaluate and document best green, healthy, sustainable schools practices that are replicable and scalable. By the year 2026, GSNN intends to have at least one Catalyst District on one Catalyst School in each of the 50 <u>states</u>.

School Programs

Affiliates

Schools, school districts, individuals, non-profits, and corporations <u>access our resources for a small</u> <u>subscription fee</u>. These resources include our resource library, publications ,and discounts to the Green Schools Conference and Expo.





GreenNotes

The go-to source for the latest Green Schools News

The GreenNotes shares original content that is evidence-based and best practice driven. Each monthly issue is centered on a theme relevant to the green schools movement, and features case studies, expert interviews, research-based articles, professional development resources, and grants.

https://greenschoolsnationalnetwork.org/greennotes/

Green Schools Catalyst Quarterly

FREE - on-line peer-reviewed journal



https://greenschoolsnationalnetwork.org/gscg

We are leading a movement of schools and districts that nurture people empowered to create a just and sustainable world.



Our Network currently includes 250 schools in 17 states.

We intend to partner with model green, healthy schools and districts in all 50 states.



PD Collaborative Partners

Learn more about the GSNN PD Collaborative Partners HERE















ENVIRONMENTAL LITERACY



BIOMIMICRY

BUCK INSTITUTE FOR EDUCATION







Learn more about the GSNN PD Collaborative Partners HERE



Question

What types of professional learning are you hoping to engage in this summer?

Assign one member of your breakout group to update the word cloud HERE CODE: KBMN



Professional Learning Philosophy

- Model active pedagogy
- Depth over breadth
- Honor the knowledge and perspectives in the "room"





Independent Professional Learning Opportunities



Green Schools Catalyst Quarterly



https://greenschoolsnationalnetwork.org/gscg



Green Schools Catalyst Quarterly



"Humanity cannot wait for students to graduate and get started on doing things that contribute to a better world. We need to give students in every school, at every age, real agency and authentic opportunities to make a difference in this volatile, unpredictable, complex, and ambiguous world."

- David B. Hawley, Chief Academic Officer of International Baccalaureate (Hawley, 2015)

Solutionary Units of Study Imperative

We are facing a decisive moment in history. Earth's systems are at the breaking point and our social and economic systems are under tremodous stress. It is essential that humans embrace a new sustainable paradigm. Because the education system is the correntone of our collective culture, K-12 achools must find pathways to equip students with the knowledge, skills, values, and experiences to survive and thrive in this uncertain vord.

Fortunately for students in California's San Mateo County, educatos have heeded this calit to action and started to transition the X-12 education system to a more sustainable paradigm. First cares the 2017 Jaunch of the San Mateo County Office of Education's (SMCOB) Environmental Literary and Sustainability Institute, which ealers to promote environmental literary and help prepare leaders to intergrate environmental sustainability and a climateneedy mindest across a school's campus, curriculum, community, and culture. The San Mateo County Office of Education serves over 94,000 students across 23 public school districts that are unique and diverse, ranging from asphalt-covered, urban environments where children have little to no access to green spaces, to schools situated in or near lush nature preserves. In San Mateo County, 40% of students are unduplicated (i.e., pupils who are eligible for free or reduced-price meals, foster youth, and English Learners and are not counted more than once if they qualify for multiple designations), 23% are learning English, and 32% participate in free or reduced-price lunch programs. However, these numbers look different when you drill down to the district level; for example, just 11% of students qualify for free and reduced-price lunch at Menlo Park City School District, while 95% of students qualify at its next door neighbor, Ravenswood City School District.

This initiative set the stage for SMCOE's Curriculum and Instruction team to utilize the Solutionary Unit of Study Framework. This framework provides a roadmap for bringing together existing educational philosophies and unit archetypes, such as the PBL models (project-based, parolia), fugury-based learning, civic education, and systems thinking, with the philosophies of solutionary teaching and learning.

The concept of "solutionaries" comes from the work of Zoe Weil, who wrote the book, The World Becomes What We Teach, and co-founded the Institute for Humane Education (IHE) in 1996. The solutionary concepts are paraphrased from Weil (2016) and IHE (2019) as follows:

Solutionary Educators facilitate the process of students to examine complex, interconnected problems, identify the system state prepatuate them, and develop solutions that do the most good and least harm for all, within the context of their subject areas. Solutionary teaching gives students a state in their future and helps them develop vital skills in areas such as compassion and empassivg effective and the state of the s

Volume VII No. 1 February 2020 75

https://greenschoolsnationalnetwork.org/gscg



Independent Professional Learning Opportunities

Resources



https://greenschoolsnationalnetwork.org/resources/



Independent Professional Learning Opportunities

Webinars



https://greenschoolsnationalnetwork.org/events/



Collaborative Professional Learning Opportunities



Curriculum Building -

MS Educators (June 17-19 -12:00PM - 4:00PM) Topic: Watersheds *Free for Catalyst Network \$50 for non-network participant

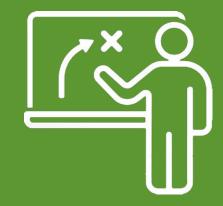
K-5 Educators (June 24-26 -12:00PM - 4:00PM) Topic: Pollinators *Free for Catalyst Network \$50 for non-network participant



Collaborative Professional Learning Opportunities

Regional GSNN Coach Training -- Designed for school leaders within the Catalyst Network interested in supporting / mentoring new partners

June 16 - (12:00 p.m. - 4:00 p.m.)



https://greenschoolsnationalnetwork.org/coaches



Collaborative Professional Learning Opportunities

Best Practices in Whole School Sustainability Showcase

<u>Fall</u>

Centerville Elementary School Prairie Crossing Charter School Oak Park Unified School District Winter

> Encinitas Union School District Environmental Charter Schools

<u>Spring</u>

Virginia Beach City Public School District





Executive Leadership Summit Teams (Schools / Districts) 1.5 days onsite - or virtual

Co-designed in partnership with Dr. Leith Sharp, Director of the Executive Education for Sustainability Leadership, Harvard T.H. Chan School of Public Health.





HARVARD T.H. CHAN SCHOOL OF PUBLIC HEALTH





Leadership Summits lead to... Strategic Action Plan



Bruns Ave. Elementary GSNN 2019 - 2020 Action Plan

Overview: The QSNN work plan represents a core document outlining the agreed upon work to be done, roles and respectivities, expectations, and documentation. The work plan helps QSNN and partners stay focused and clear on work that aligns with school / district mandates and becoming a model green, healthy entity.

Catalyst Network: Each ODNI school / district is part of the Catalyst Network tecoming a model green, healthy school and / or saming as an accelerant, considently schooling green, healthy practices. Depending on the stage of development, school / district design a work (plan tut responds to local goals connected to education for scatariability and the OSNN OreanPhint Core Practices.

GreenPrint Core Practices:	2018-19 CP Scores	2019-20 CP Goal Scores
1. Curriculum that Advances Environmental Literacy and Sustainability	1,4	25
2. Stewardship and Service Learning	1,4	2.0
3. Sustainable Facilities Design and Management	1.0	15
 Health and Well-Being (including Social and Emotional health) 	2.4	30
5. Strong Partnenhips and Networks	1.4	25

	ALL teachers develop weatly lesson plans based on aligned units of instruction.	Marc Angeler (Principel)
2	School culture promotes and supports the physical, social, emotional, and behavioral health of all school personnel.	Rebecca Molivoy Unstructional Coachi
κ.	The other base field assessed with the standard base that it is	

 The school regularly communicates with parents/guardians about its expectations of them and the importance of the curiculum of the home (what parents can do at home to support their children's learning).

On-site Support

Sept. 23-24 - Science/PBL - Permana	 Prairie Crossing Site Seminar (Oct. 17-18) -			
Oct. 9-11 - Science/PBL - SEL Development	VA Beach Site Seminar (March 30-31) - "Scheel as a Teaching Teal"			
Jan. 15 - Implementation Review	Catalyst Leaders Gathering (Oct. 19-21) - Conserve Spheric W Webines Sept. 25 (Finus (Leng))			
Feb 4-5 - SEL Development - Masion Design April 7-8 - Science PBL - Masion Design				
	Oct. 28 Pisce: Food Systemal Fels. 10 Ferse: Scheel Culture) Max 11 Pisce: CT2 / Emographical Aug			
Aure & (15 day) - Yearly Review	Orean School National Conference (March: - Portland, OR			
June 10 - Ocal setting and Curriculum development	- Fertand, UM			



THE LOUD INSTITUTE E SUSTAINABILITY EDUCATION



Inspiring young people to think about the world, their relationship to it, and their ability to influence it in an entirely new way. Jaimie P. Cloud, President www.cloudinstitute.org



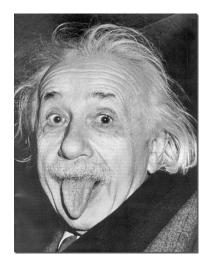


Sustain-ability

"The capability to thrive over time" Jaimie P. Cloud







It all begins with a change in thinking



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The Cloud Institute





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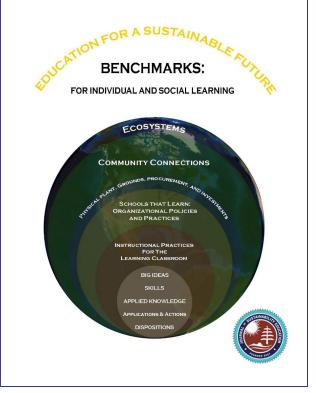
Schools and Communities That Learn

In schools and communities that learn, everyone is encouraged to keep thinking, innovating, collaborating, talking candidly, improving their capabilities, self-correcting, and making personal commitments to a shared future...

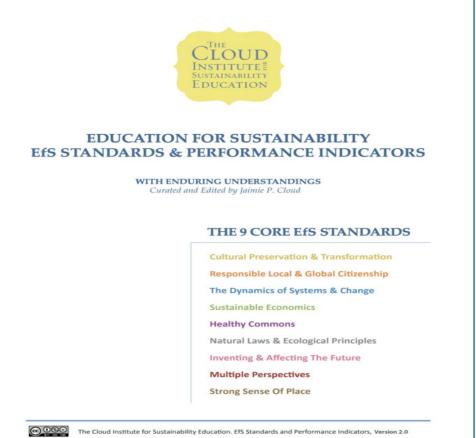




EfS Benchmarks













Curriculum

- Formal
- Operating
- •Taught
- Assessed

•Learned (includes hidden curriculum)





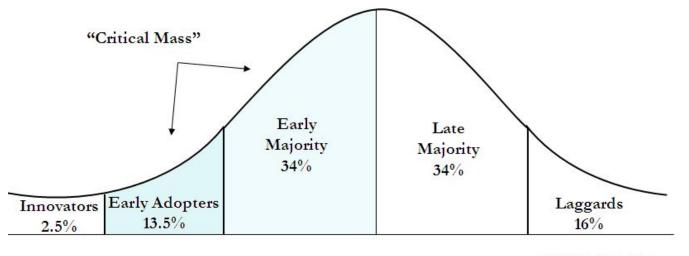
Learning Outcomes (Desired Future)

Curriculum	C R Rationale, Transfer Goals, Stage1		
Continuity/Accountability	EStandards, Enduring Understandings,AEssential Questions, Content and Skills		
What/Why	т Stage 2		
Evidence	 I Assessments and Performance Criteria ✓ 		
Instruction	Learning Experiences, Activities, Stage 3		
Creativity/Autonomy	N Lessons		
How	Prior©Knowledge		
(Current Reality)			





Innovation Adoption Curve



©2006 The Natural Step



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The U Theory of Learning and Change Tap Prior Read the Feedback, Knowledge **Revise &** Continuously Improve Learn Something New **Immediately Apply New Learning to Re-Appraise**/ Re-Frankeflect and Gain Insightske it "Stick"

The Cloud Institute at Work

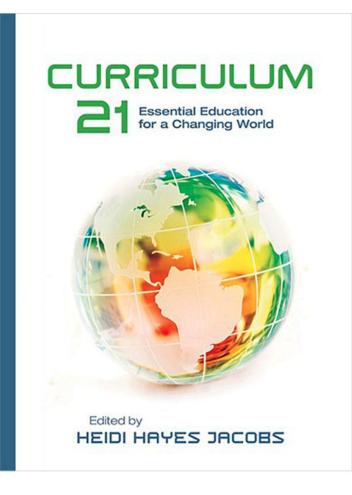
Awareness Skill Development Design Leadership

- **Consulting and Coaching Services** \bullet
 - Curriculum Design & Mapping
 - Gap/Strength Assessment & Analysis
 - Organizational Learning & Change
 - Leadership Development
- **Curriculum Materials**
 - Units of Study
 - Full Courses of Study
 - Assessment Tools

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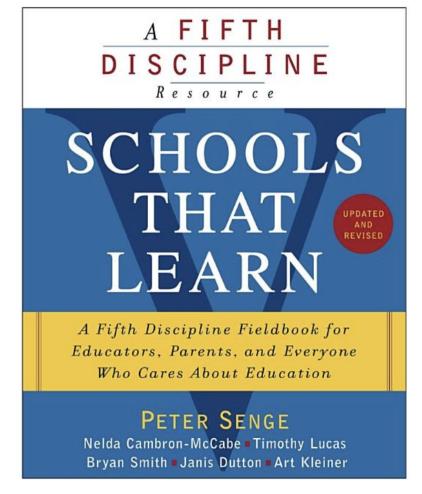
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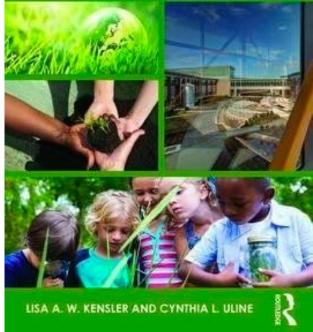




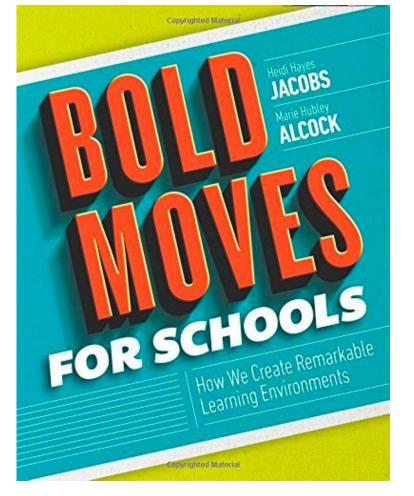


LEADERSHIP FOR **GREEN SCHOOLS**

Sustainability for Our Children, **Our Communities, and Our Planet**









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Contact Information

www.cloudinstitute.org/contact-us

www.EfSCollective.org



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Question

What are the most important things to teach students?

Assign one member of your breakout group to update the word cloud HERE CODE: KBMN









Future Thinking PD Opportunities for Sustainability-Minded Teachers May 12th, 2020

envirolution

"Inspire and empower the next generation of leaders and workers who will drive the growth of a sustainable economy"









Live in a world wherein the social, environmental and economic spheres of our lives are prosperous and in balance







Live in a world where 100% of our energy comes from clean, renewable sources



Sustainable workforce = healthy community and environment







Our Vision for Future Generations

An engaging educational system that employs a practical, hands-on approach that inspires both teachers and students and prepares our youth for this rapidly developing sustainable economy

Student Testimonial









Our Vision for our Teachers



- Easy to use curriculum that provides **<u>flexibility</u>** to fit the **<u>students needs</u>**.
- Provide **continuing education** that gives teachers more tools for their tool belt, not extra work.
- Connect teachers with quality **<u>STEM professionals</u>** and field trips that can provide age-appropriate insight into potential career fields.
- Develop **professional skills** through our **master teacher** program.









Dynamic Programs





Students become Energy Detectives & solve real world problems





Week long tour to explore STEM careers and sustainability topics in our community



Dynamic Programs





enviro**lution**

Connecting businesses with their future workforce- never too early to tour their sustainable future!





National event that shows girls how engineering is a great career choice and a great way to change the world!















- **40** schools within **9** districts across Northern Nevada and California
 - Public, private, charter and tribal schools from small to large districts.
- **117** middle and high school teachers
 - Science, math, STEM, physical science, environmental science, Career and Technical Ed.
- 23,000+ students
 - Representing economically and ethnically diverse backgrounds and learning needs
- **6,000+** hours of professional development
- Over **\$200k** in classroom resources

No cost to teachers or districts









9 student driven proposals (with 5 more underway)

- Saving over \$436,000 to date in energy costs
- Cutting annual energy use by over 3,410 Megawatt hours (472 homes)
- Reducing annual CO2 emissions by over 1,400 metric tons (63 cars)













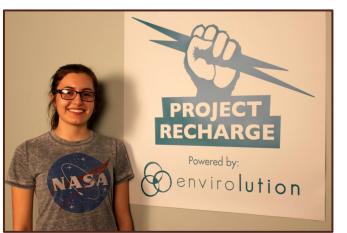




Student Impacts



41% increase in content knowledge



Increased interest toward STEM careers

"Without Project ReCharge, I would not have had the confidence to pursue a degree in civil engineering at UNR" -Jackie Medina Project ReCharge Student Alumni 2015-2018- Wooster HS



Project ReCharge Professional Development

- Foundation is the interactive supplemental STEAM Curriculum
 - Developed, tested and refined over 10 years
- 45 hours of hands-on training and application
 - 3 day intensive
 - 1 full day Saturday training
 - (3-5) Two hour follow ups throughout the year
- Taught by Project ReCharge Master Teachers
 - Receive real feedback on classroom application of the lessons



Dustin Coli- Master Teacher Wooster HS Energy Tech CTE 2019 Summer Training-Reno, NV



• STEAM Guest speakers

- Connecting community professionals with classroom learning
- Provides teachers with new and additional background knowledge on content covered
- Stipend or equivalent PD hours for recertification
- 2020 Summer Trainings
 - July 13th-15th in Las Vegas Nevada
 - July 27th-29th in Reno Nevada
 - Will be piloting virtual presentations



<u>3-day Summer</u> <u>Intensive</u>

In depth coverage of Units 1-3 Sustainability & Energy Basics

Thermal Systems Electrical Systems



Simple and parallel circuits





Passive Cooling

Pumping water with solar panels





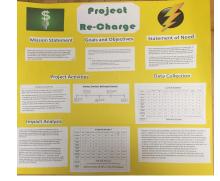
Exploring phantom load on appliances

Follow-up 1 day session Unit 4 Energy Detectives

Unit 5 Student Sustainability Proposals

Data collection strategies





Proposals mimic real grant

Analyze real energy data





Present ideas using multiple formats



- Teachers will walk away with:
 - Project ReCharge Curriculum Binder and access to online portal
 - All the **materials needed to teach** the hands-on lessons- **Over \$2,000 worth!**
 - STEAM Guest speaker list
 - Access to a growing network of STEAM educators and professionals
 - Training and confidence to implement lessons right away
 - Pride in knowing YOU will be preparing your students for their future careers

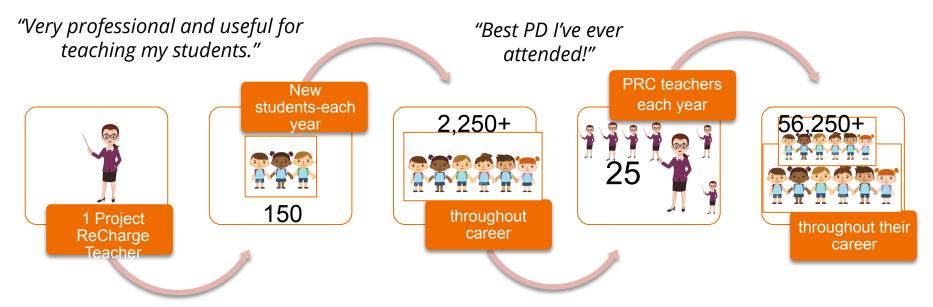












"Excellent! Very useful and filled with great lessons" "The hands on stuff was great. Nice to have a real feel for activities."





People Sustainability Planet Profit











How to learn more and get involved

- Sign up for our <u>newsletter</u>- Latest details on program expansion
- Fill out <u>preliminary Project ReCharge</u> <u>application</u>- Latest details on trainings and program development.
- Email Program Manager <u>laura.scarselli@envirolution.org</u> - Any specific questions or special requests
- Invite to attend our Virtual Year End Student and Teacher Recognition Event- May 28th 3:30-5:00 (PST). RSVP <u>HERE</u>.









Vanessa Robertson-Co-Executive Director

vanessa@envirolution.org

www.envirolution.org

Check us out on Facebook, Twitter and Instagram



greenschoolsnationalnetwork.org



Carolyn Yi, Project Manager, cyi@usgbc.org

We believe that all students deserve to attend sustainable schools that improve their health and prepare them for 21st century careers.





Programs

Through our educational resources, professional learning networks, and industry-recognized tools, we equip supporters to educate students about global sustainability and deepen learning by acting in their communities.







networks





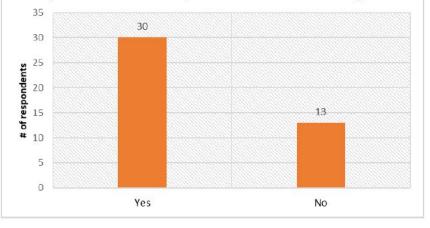
https://learninglab.usgbc.org/programs/distance-and-home-learning-lessons-and-resources

2020 SURVEY RESULTS: How Districts Are Responding to COVID-19 & the Impact on Sustainability Programming

Expectations of Sustainability and Teaching Staff



Are teachers and staff expected to complete professional development in a remote setting?



2020 SURVEY RESULTS: How Districts Are Responding to COVID-19 & the Impact on Sustainability Programming

What are the expectations for your teachers to provide remote learning for students?

- 2 & 3 A mix of content, very little prescribed, struggling to address all student needs in an equitable way
 - 1 & 3 Mostly the same content, struggling to address all student needs in an equitable way
- 1 & 2 Mostly the same content, very little prescribed by the school/district
 - 4 There are no current expectations set
- 3 The school/district is struggling to address all student needs in an equitable way
- 2 A mix of content, very little prescribed by the school/district
- 1 Mostly the same content and lessons they were expected to teach in the classroom

			5			
		4				
	2					
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						11
			6			
						11
	2	4	6	8	10	1

2020 SURVEY RESULTS: How Districts Are Responding to COVID-19 & the Impact on Sustainability Programming

Respondents Perceived Opportunities & New Possibilities	Respondent's Perceived Challenges with Opening Schools Back Up		
Energy and water utility savings	Energy and water saving projects put on hold; forfeited grant funds		
Waste hauling savings	Restarting recycling and composting programming, especially in the cafeteria		
Future remote work options now that new capabilities are in place	Keeping momentum on reuse programming (ex: using reusable bags, cups, etc)		
Green cleaning might get more attention	Promoting COVID-19 cleaning that is effective, safe as well as non-toxic/green		
Custodial staffing increases to deal with additional cleaning	Budget cuts and lost staff positions (custodial, sustainability)		
Leveraging this case study in resilience to demonstrate the risk and vulnerability we face with respect to climate change	Sustainability will not be a priority for districts		
Raising awareness about plug loads	Having to re-teaching sustainability behaviors		
Addressing program re-design while participation is paused	Sustainability engagement programs will not exist b/c lack of priority and lost momentum		
Delivering Earth Day programming that connects more broadly with parents and families	Less extra-curricular time will mean decreased participation in eco-clubs		
Reminding students that we can make a positive impact on the environment when we dramatically curb our emissions.	Lost momentum and back tracking on the sustainability culture we have worked so hard to build		





Equips users with knowledge and skills to:

- Identify features that support or impede environmentally healthy and sustainable learning spaces
- Recognize, adopt, and implement practices that promote health among school occupants

Green Classroom Professional Certificate



GBCI: 0920016853

Learn to recognize, adopt, and implement practices that keep teachers and students focused, alert and ready to learn.



TAKE QUIZ

https://www.usgbc.org/education/sessions/green-classroom-professional-certificate-11781677

AUDIENCE

- Teachers
- Administrators
- Operations staff (facilities, foodservice, custodial, wellness)
- School building designers
- School board members
- Parents



Teachers at Lake Mills Elementary, Wisconsin



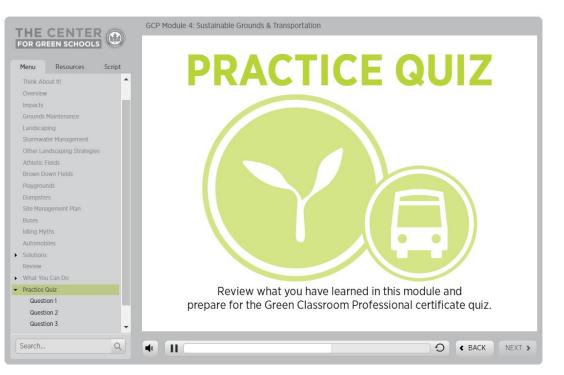
Comprised of animated scenarios with interactive activities and exploratory learning



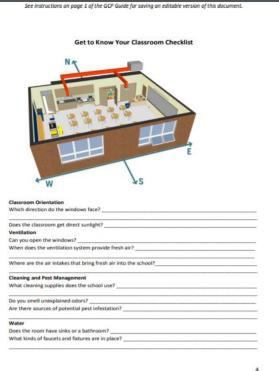
Comprised of animated scenarios with interactive activities and exploratory learning

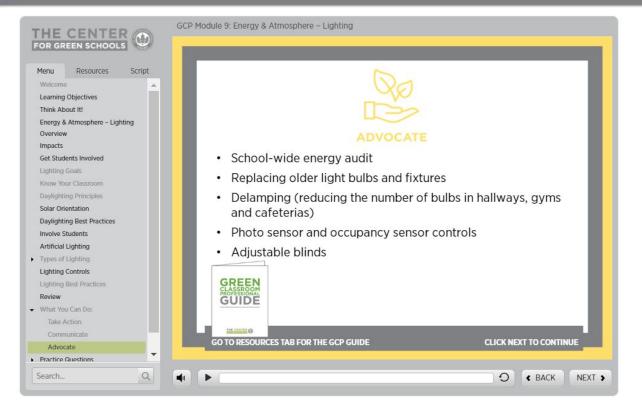


Practice quizzes at the end of each module that test knowledge and help you prepare for the course quiz.



A 50-page GCP Guide is available as a PDF, and as a Google Doc, for notetaking.





Steps to the Green Classroom Professional Certificate

- 2 hour online training course
- hour online virtual assessment

3 hours total

After completing the 12 modules, take the quiz. You have unlimited attempts within 365 days of your purchase date.

- 30 multiple-choice questions
- To pass, answer at least 24 of 30 questions correctly
- Results of the quiz are available immediately
- Upon successful completion of the quiz, a GBCI course completion certificate will be available for download on the course page while logged into your USGBC account.



Green Classroom Professional course

\$45 individual

\$25 bulk (5 or more purchased at one time)

To request bulk pricing, complete this form: <u>https://usgbc.wufoo.com/forms/z1p625v90upvitf/</u>

K-12 schools get 1 year of USGBC Organizational membership free, which includes 3 GCP access points

To claim offer, complete this form:

https://www.centerforgreenschools.org/free-first-year-usgbc-membership-k-12-schools-and-k-12-districts

Part of the Education @USGBC subscription

OPPORTUNITIES

In-person GCP workshops



GREEN CLASSROOM PROFESSIONAL CERTIFICATE CLASS AGENDA

Monday, October 29, 2018 4:30-7:30 p.m. Presented by: Jeanne Jabara and Jessica Weimer



Prince William County Public Schools workshop



QatarGBC and PalestineGBC workshop

I think that it's very important for every classroom teacher to take this training. Children cannot learn well in an unsafe, unhealthy environment. Teachers do not function as well either. We can lower costs by being more environmentally friendly. And we can inspire students to become sustainable thinkers through experience.

– GCP certificate holder





greenschoolsnationalnetwork.org

What types of professional learning are you hoping to engage in this summer?



View the Participation Report HERE

What are the most important things to teach students?

65



View the Participation Report HERE