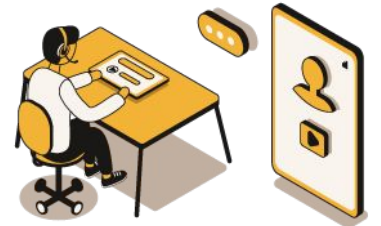


Webinar:

Best of the Best:

Sustainability focused virtual resources

April 15, 2020



Hello!



I am Dave DenHartog.

I am glad to be the host of our GSNN webinar!
You can find me at @davedenhartog

Overview



Cyndy Merse - GSNN



Kristi Hibler-Luton - EcoRise



Jessica Redden - SEI



Andra Yeghoian - San Mateo County

***Please ask questions (via “Chat” window) throughout presentation**

We are helping to lead a movement of schools and districts that empower people to create a more just and sustainable world.



Our Network currently includes 250 schools in 16 states.

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

Green Schools Catalyst Quarterly

The only journal dedicated to green, healthy, and sustainable K-12 schools

[Green Schools Catalyst Quarterly](#) is an online, open access, peer reviewed quarterly journal. The publication provides in-depth content and resources for thought leaders in curriculum, operations, design, and leadership.

GSCQ highlights trends at the local, regional, and national scale that merit replication. Authors from organizations around the nation highlight strategic opportunities for sustainable change in K-12 education. GSCQ provides inspiration for seasoned veterans and beginners to increase implementation of best practices.



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.

Catalyst Quarterly

February 2020



Green Schools
Catalyst Quarterly



Creating the Future

Making a Difference through
Civic Engagement



Solutionary Units of Study:

Preparing the Next Generation to Survive and Thrive

Andra Yeghoian

“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 tremendous stress. It is essential that humans embrace a new sustainable paradigm. Because the education system is the cornerstone of our collective culture, K-12 schools must find pathways to equip students with the knowledge, skills, values, and experiences to survive and thrive in this uncertain world.

Fortunately for students in California’s San Mateo County, educators have heeded this call to action and started to transition the K-12 education system to a more sustainable paradigm. First came the 2017 launch of the San Mateo County Office of Education’s (SMCOE) [Environmental Literacy and Sustainability Initiative](#), which seeks to promote environmental literacy and help prepare leaders to integrate environmental sustainability and a climate-ready mindset 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, problem-based, place-based, and phenomenon-based learning), inquiry-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 systems that perpetuate 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 stake in their future and helps them develop vital skills in areas such as compassion and empathy; effective

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

GREEN SCHOOLS NATIONAL NETWORK

Virtual Learning Resources for Sustainability-Minded Educators

<https://greenschoolsnationalnetwork.org/resources/>

Green Schools National Network remains steadfast in its commitment to provide K-12 schools and districts with the resources and support they need to educate for sustainability during this time of virtual learning. On this page, we have assembled a selection of age-appropriate lessons from our PD Collaborative Partners and others that are well-suited for virtual learning. We vetted these lessons against a set of criteria we developed that looks at aspects such as deeper learning, 21st century skill building, authenticity, and sustained inquiry using a real-world context.

The assembled group of lessons were vetted against a set of GSNN criteria that considered:

- Education for Sustainability
- Deeper Learning
- 21st Century Skill Building
- Authenticity
- Sustained Inquiry

Resources for Grades K – 5



What Can We Do with All This Stuff?

Grades K - 5

In this lesson, students consider the idea of “zero waste” and their part in making this a reality. Students go on a waste hunt to survey and document items that are thrown away. Then, using the...

[READ MORE](#)



Speaking Out

Grades K - 5

In this lesson, students learn about taking civic action for a cause they care about, identify an environmental issue they want to address, and develop a campaign that they can implement to create...

[READ MORE](#)



Project Hero Pollinator Quest

Grades K - 5

In this project-based learning experience, students learn about the vital role that pollinators play in our food chains and ecosystems, identify pollinators that live in their region and the threats...

[READ MORE](#)



How Can We Take Care of Our Commons?

Grades K - 5

In this lesson, students learn what a Commons is, how to take care of a Commons, and the importance of everyone doing their part to keep their Commons healthy and beautiful. They apply this learning...

[READ MORE](#)



Field Research: Land Ecosystems

Grades K - 5

In this field research lesson, students learn what an ecosystem is, collect and record information on local plants and animals in a Land Journal, compare the natural versus built landscape in their...

[READ MORE](#)



Field Research: Food Systems

Grades K - 5

In this field research lesson, students learn about our food system, conduct a survey to determine what types of edible plants grow in their neighborhood, trace food origins and calculate food...

[READ MORE](#)

Resources

What Can We Do with All This Stuff?

Grades K - 5



In this lesson, students consider the idea of “zero waste” and their part in making this a reality. Students go on a waste hunt to survey and document items that are thrown away. Then, using the Habits of a Systems Thinker as a guide, students grapple with finding a use for an item currently discarded as “waste.”

[VIEW LESSON](#)

Grade Level: 3 – 5

Source: The Cloud Institute for Sustainability Education and Terracycle



WHAT CAN WE DO WITH ALL THIS STUFF?

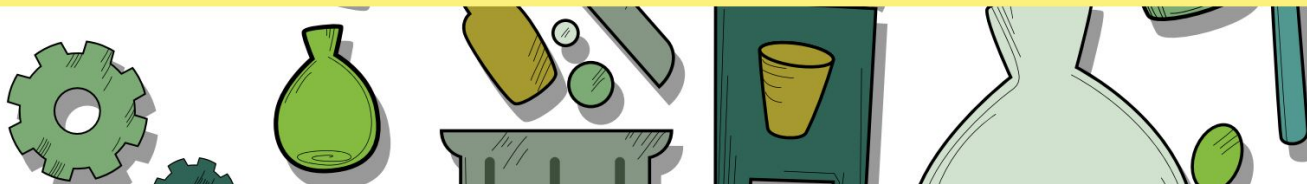
Teacher's Guide

Grade: 3-5

Lesson: What can we do with all this stuff?

Number of Class Periods:

4-5 45-minute periods





Kristi Hibler-Luton, *Program Director*





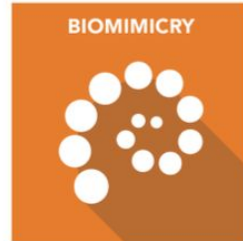
We believe **schools have the potential to be incubators for social innovation...**

and **youth have the power to design a sustainable future for all.**

Education For A Resilient Future

EcoRise is a nonprofit social enterprise whose mission is to mobilize a new generation of leaders to design a sustainable future for all.

In partnership with K-12 schools, EcoRise provides comprehensive curriculum, professional development and student innovation grants that transform classrooms into incubators for social change. Our award-winning programs engage youth of all ages and backgrounds in the fields sustainability, design innovation and social entrepreneurship.



Remote/Virtual Resource

- ❖ Personal-Audits and Lesson/Freemium: ecorise.org/freemium
- ❖ Parent Resources: ecorise.org/parent
- ❖ Sustainability and Remote Learning Webinars:
<https://ecorise.eventbrite.com>
- ❖ PBL At-Home Guide- email kristi@ecorise.org
- ❖ iDialogue and EcoRise Global Waste Challenge:
<https://idialogue.com/challenges>

**Teachers in NYC, DC, Boston, Maryland, New Jersey, Florida, Louisiana, California, Houston, Austin, Dallas/Ft, San Antonio, Rio Grande Valley, and Rural Texas have access to full curriculum and student driven/written classroom grants for green projects. Go to ecorise.org/enroll to get started.

PBL At-Home Guide:

Problem/Project Based Learning

AT-HOME PBL USING PERSONAL ECO-AUDITS



EcoRise's Sustainable Intelligence Curriculum has Personal Eco-Audits that students can do at home. Below is a timeline that can be modified as needed to adapt the lesson for an At-Home PBL. EcoRise Teachers have access to these resources at ecorise.org/teacher. New teachers can enroll at ecorise.org/enroll. Families can access the audits at ecorise.org/parent.

PBL DRIVING QUESTIONS AND ECO-AUDIT GRANT IDEAS

PBL DRIVING QUESTIONS

- How can we reduce water waste in our home? How can we teach others about water waste?
- How can we reduce energy usage in our home? How can we use the sun for our energy needs at home?
- How can we reduce the amount of waste our home produces?
- How can we reduce food waste in our home? How can we reduce household waste and encourage our family to recycle?
- How can we keep the air in our home fresh and clean?
- When school resumes, how can we reduce our fuel emissions when traveling to and from school?

SUGGESTED TIMELINE FOR AT-HOME IMPLEMENTATION OF THE PERSONAL WATER ECO-AUDIT

Day(s)	Activity Summary	Optional Extension
Day 1	Entry Event - Students write down all the ways water is used and estimate the number of gallons used per day and month.	Students reflect and discuss how their water habits have increased or decreased now that they are spending more time at home.
Day 2	Students track their water usage on the audit worksheet for the next twenty-four hours.	Students can encourage other family members to track usage as well.
Day 3	Calculations and Reflections - Students calculate daily, weekly, and monthly water usage.	Students can compare their water usage to their family's water bill.

Student Innovation Projects

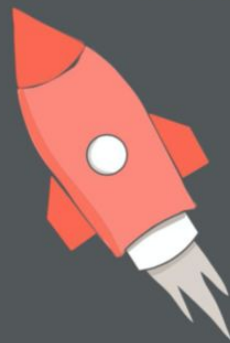
Bird Habitat Blitz!
Green Math Garden
Put Plastic in it's Place
Urban Farming
Water Wizards
Bee Garden
Chicken Coop
Compostable Cutlery
ReusaBottle
Solar Powered Charging
Weather Station
Bringing Berries to Brooke
Idle Power Conservation

Pond Cleanup
Erosion Prevention
Save Energy!
Native Forest Garden
Vertical Aquaponics
Solar Pump Rain Barrels
Thirsty Bees
Reducing Snack Waste
No More Paper Towels!
STEM Irrigation System
Magnificent Mud Makeover
Greenhouse & Tool Storage
Plants for all Classrooms!

In 2018–19, we awarded

\$56,098

in Eco-Audit Grants to



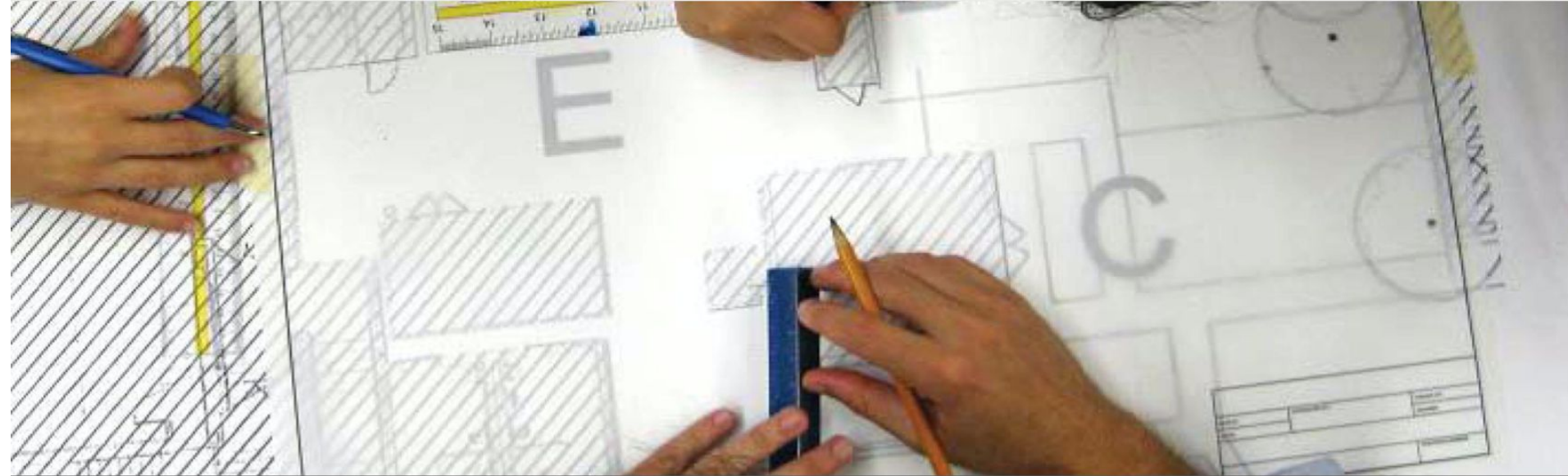
127

student innovations!

*In the next 12 months,
these projects will create*

\$162,600

*in resource savings for
school districts!*



Thank you!

Kristi Hibler-Luton
Program Director
kristi@ecorise.org



Jessica Redden, *Associate Project Coordinator*





sei

climate education, training, career development

Green Schools National Network Distance
Learning Presentation

SEI's Mission



Building leaders
to drive
sustainability
solutions



ENERGIZE
SCHOOLS

A PROGRAM OF SEI

Holistic services to engage, inspire,
and empower K-12 students

Distance Learning Curriculum

- Resources are student facing
- Curriculum follows a reader and assignment model that allows students to complete the resources independently
- Assignments are adaptable with or without Internet access



Energy Consulting 101



Water Conservation Specialist 101



Transportation Analyst 101



Waste Analysis 101



Solar Design 101

Green Careers Webinar Series

- Every Tuesday and Thursday at 11am PST through mid-May
- Live career chats with sustainability professionals via Zoom



Green Careers Webinar Series

Earth Day Campaign Resources

- The annual Earth Day Campaign has gone virtual!
- School community members including staff, peers, family, and friends, can now pledge to support students' campaigns by committing to behavior changes to reach campaign goals.



Energize Schools

Distance Curriculum Preview

This distance learning curriculum preview was developed by [Strategic Energy Innovations \(SEI\)](#) and includes one activity from the Transportation Analyst 101, Solar Design 101, and Energy Consulting 101 curriculum.

The following additional resources are available for request through this [google form](#), our [Energize Schools distance learning website](#), or via an email to energizeschools@seiinc.org:



Access to the full [SEI curriculum library](#)



Waste Analysis



Water Conservation



Transportation Analyst



Solar Design



Energy Consulting



An editable version of this curriculum and/or answer keys



Remote curriculum implementation support from an SEI expert



Access Green Careers Conference webinars and recordings of career chats with sustainability professionals. To register and tune in live, go to our website [here](#) or request the presentation recordings [here](#).



Join the Earth Day Campaign Competition to help students connect to their peers. Students will learn about climate change and sustainability, receive resources to create a campaign, and submit their work for prizes! [Register here](#).

Options to Access SEI Resources

- Request through our [Distance Learning web page](#)
- Email energizeschools@seiinc.org
- Fill out [this](#) resource request google form

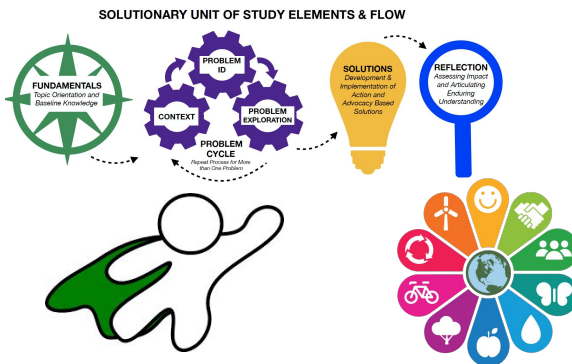
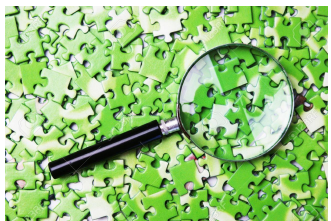


Andra Yeghoian, *Environmental Literacy & Sustainability Coordinator*



San Mateo County Environmental Literacy and Sustainability Initiative

GSNN Best of the Best Distance Learning Resources



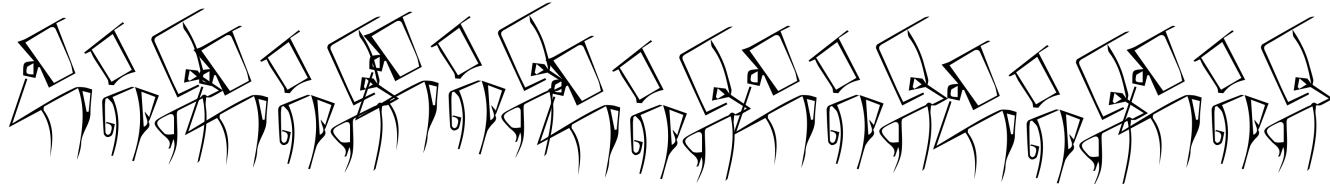
Slide Deck: tinyurl.com/GSNN-BOB-DL-April2020



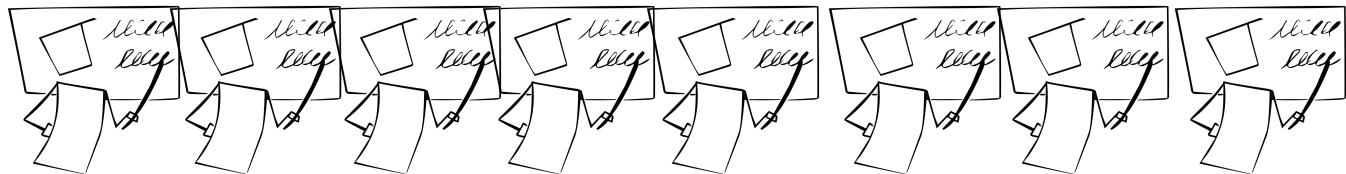
Background and Context

California Context

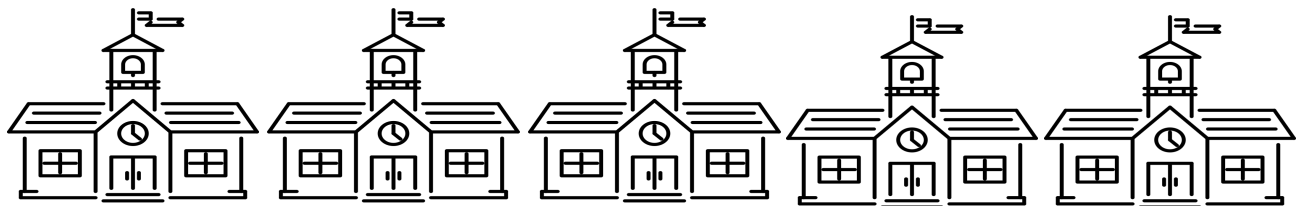
6.2 Million Kids



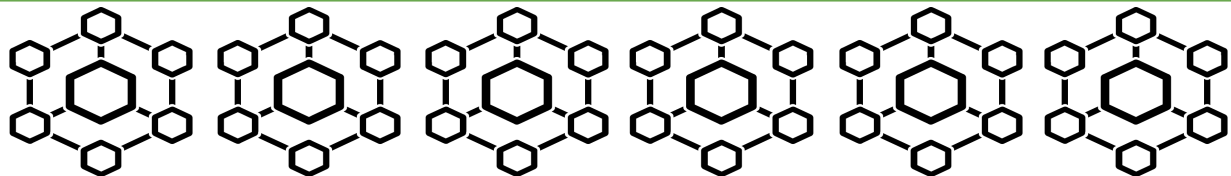
300,000 Teachers



10,500 Schools



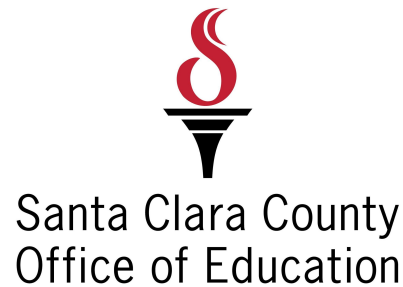
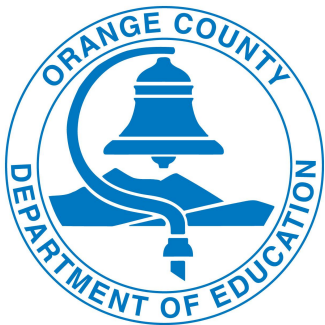
1,000 Districts



58 County Offices of Education (COE)

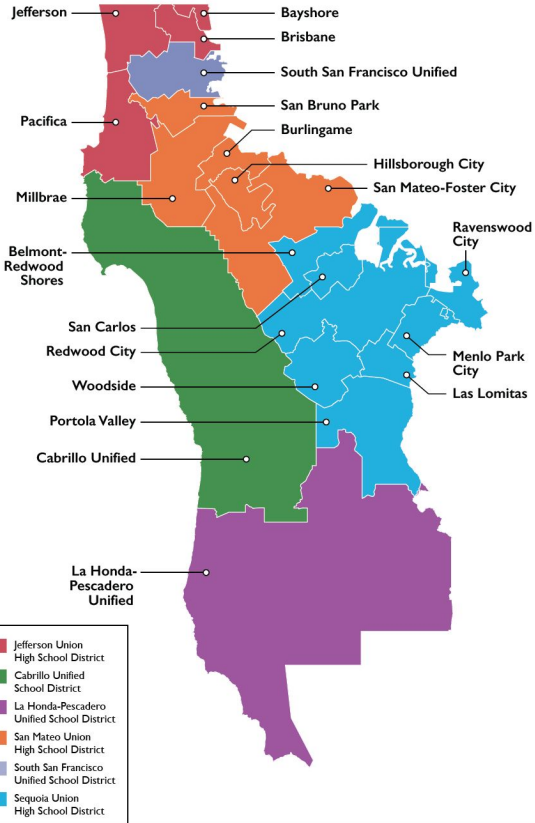


COE Leaders for Environmental Literacy



**San Mateo
County COE
Context**

San Mateo County Context



County Context

Pop: 765,100+
15 Cities, 5 Towns, and
Unincorporated Areas

Schools Context

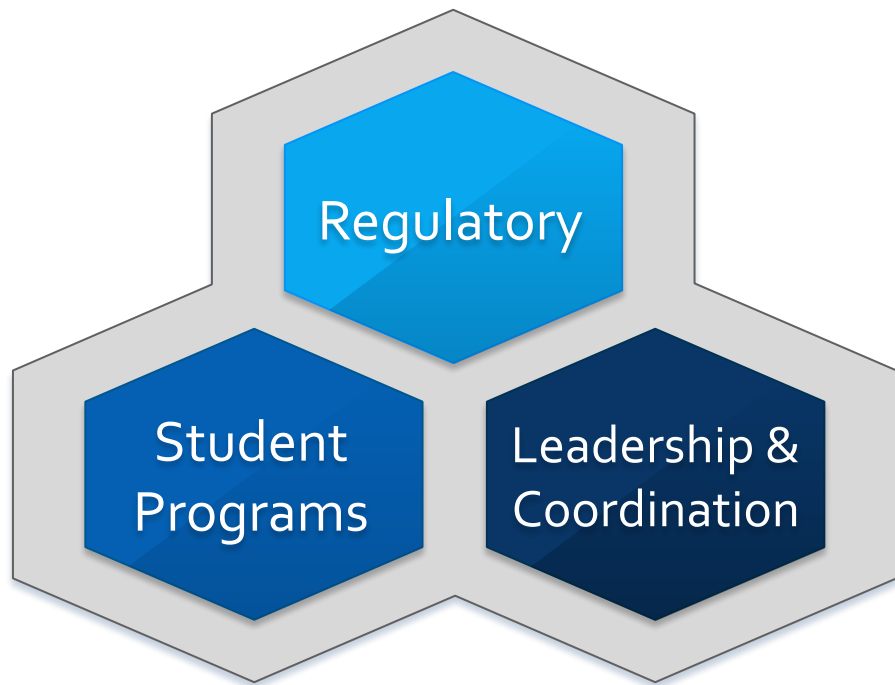
23 School Districts
170 Public and 100 Private Schools

113,000+ students
5,100+ Teachers

40% Unduplicated (38,543)

22% EL & 22% EBD

San Mateo County Office of Ed Context



County Office Functions

SMCOE Environmental Literacy Initiative

VISION

This initiative promotes environmental literacy and helps prepare leaders to integrate environmental sustainability and a climate ready mindset across a school community's campus, curriculum, community and culture.

4Cs of Whole-School Sustainability Integration

**Adapted from Sustainable Schools Project & Plymouth University: Andra Yeghoian (ayeghoian@smcoe.org) - 2013*

CAMPUS

*Facilities & Operations
that serve as a laboratory
for learning and model a
sustainable future*

1) Ecological

Footprint in Balance

2) Climate Resilient

3) Inclusive

CURRICULUM

Environmental and
Sustainability Education (ESE)

Knowledge - Values - Skills

Problems → Solutions

Action & Advocacy

College & Career Pathways

COMMUNITY

INTERNAL

*Walking the talk and
establishing relevant
community engagement*

EXTERNAL

*Strategic partnerships
and advocacy for a
sustainable region*

INSTITUTIONAL CULTURE

STAKEHOLDERS



Students



Teachers



Administrators



Community
Partners

ELSI Programs and Services

Capacity Building Programs	Developing knowledge, skills, and values for environmental literacy and sustainability
Stakeholder Networks	Scale-up change by fostering collaboration, sharing best practices, and strengthening communication channels
Customized Technical Assistance	<ul style="list-style-type: none"> - Green Facilities and Operations - Environmental and Climate Literacy Curriculum - Climate Ready Adaptations
Annual Summit and Recognitions	Catalyzing innovation with leading edge exemplars, measuring impact, and providing entry points for engagement
Vetted Resources	Website: tinyurl.com/SMCOE-ELSI



Students



Teachers



Administrators



**Community
Partners**

Distance Learning Resources

Spectrum of Integration for Curriculum

Enhance

Environmental Literacy Integration Pathways

Empower

Supplement

Connect Topics and Issues through

Articles

Homework

Additional Lesson



Focus

Central Focus of One Unit

Learn About an Environmental Problem or Issue In-Depth



Integrate

Build Routines for Integrative Awareness

Sustainability as an Analysis Lens (TBL)

Ongoing Inquiry and Research



Transform

Ongoing Immersive Opportunities to be the change

Knowledge to Action in Solutionary PBL

Integrating Environmental Literacy Requires Attention to:

Classroom Culture

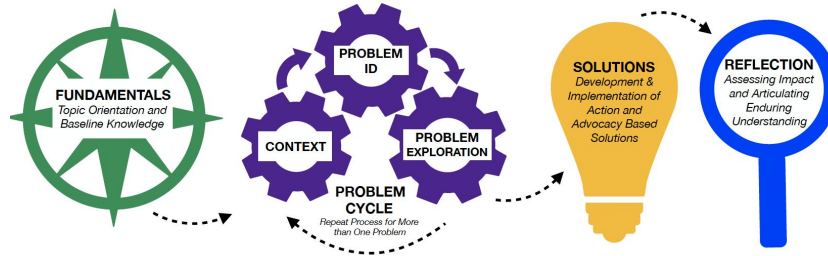
Trauma Informed Practices

Local Context

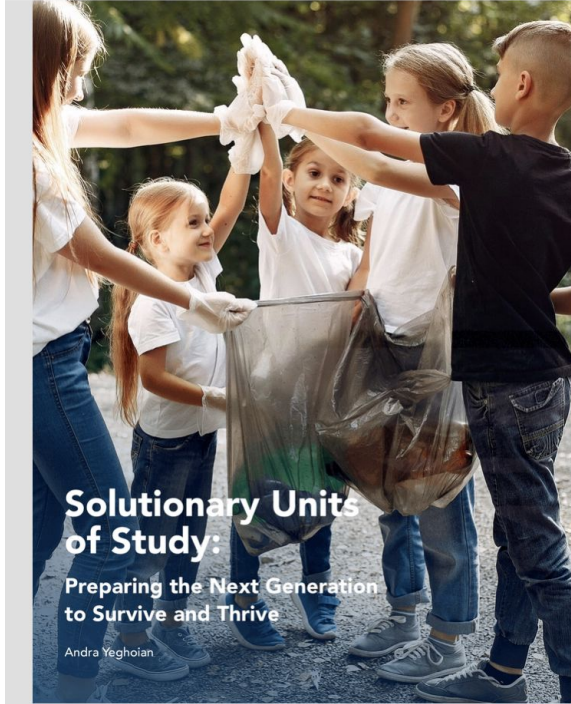
Solutionary PBL



SOLUTIONARY UNIT OF STUDY ELEMENTS & FLOW



What is Solutionary PBL?



Solutionary Units of Study:

Preparing the Next Generation
to Survive and Thrive

Andra Yeghonian

“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.”

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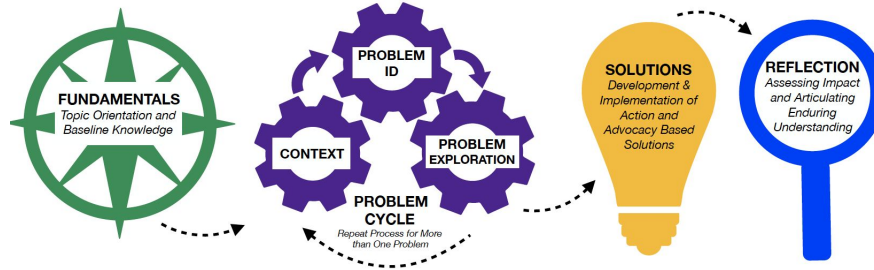
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Featured in February 2020 Catalyst Quarterly

What is Solutionary PBL?

SOLUTIONARY UNIT OF STUDY ELEMENTS & FLOW



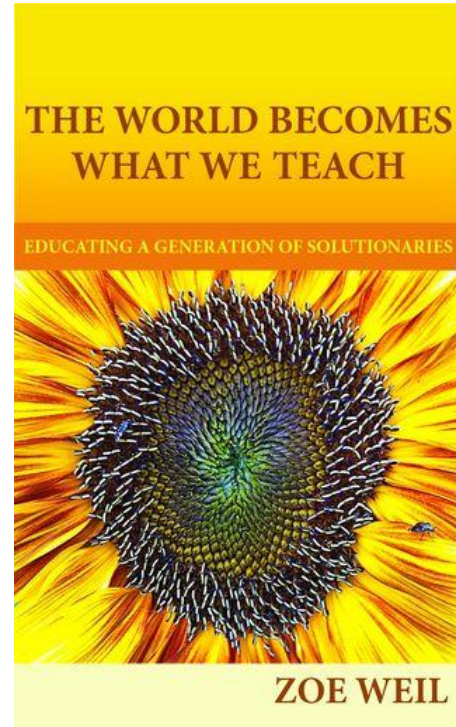
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David B. Hawley, Chief Academic Officer of International Baccalaureate (IB) - [Edutopia](https://www.edutopia.org/), 2015

What is a Solutionary & Why Do We Need to Educate Solutionaries Right Now?

A ***Solutionary*** is someone who is able to identify inhumane and unsustainable systems, then develop solutions that that do the most good and least harm for all, and are healthy for people, animals, and the environment.

- *Institute for Humane Education*
(co. founded by Zoe Weil)



How Do You Do Solutionary PBL?

Style 1

6-12th Grade

Independent

Solutionary PBL

Teacher as Coach

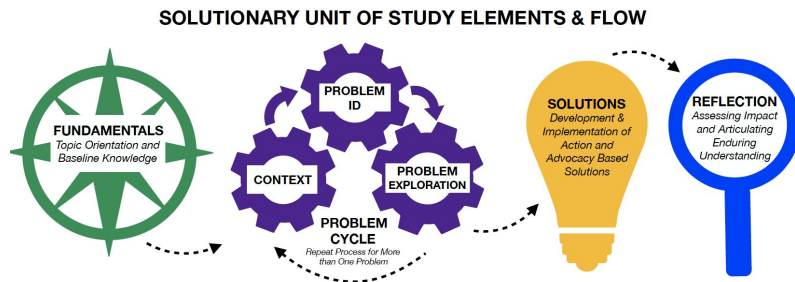


Style 2

K-12th Grade

Solutionary PBL

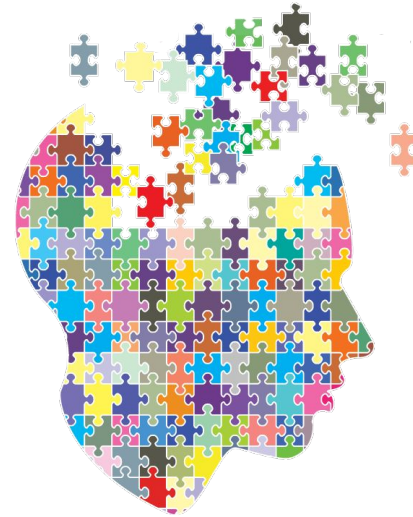
*Teacher Led yet
student driven*



6-12 Independent Solutionary PBL

Project Steps

- Topic Selection
- Section A: Problem Statement
- Section B: Story Over Time
- Section C: Making the System Visible
- Section D: Uncovering Mental Models
- Section E: Leverage Points
- Section F: Solutionary Design
- Section G: Implementation
- Final Reflection



Students work “independently” individually or in groups - meaning instructor supports as a facilitator or coach

6-12 Independent Solutionary PBL

SUGGESTED STRUCTURE FOR TEACHERS TO GUIDE INDEPENDENT SOLUTIONARY PBL

Phase 1: Getting Started

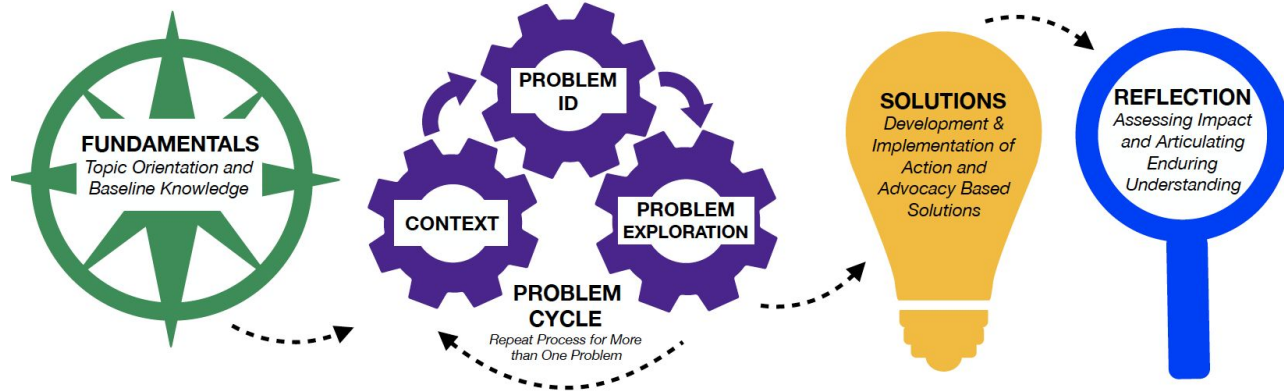
Focus Area	Time	Description	Teacher Does (Instructor/Facilitator Activities)	Student Does (Activities & Tasks)	Outcome & Guidelines
Introduction to Project	30-60 minutes	An introduction to systems thinking, and solutionary thinking and action, with examples of solutionary projects.	Instructor provides an overview of what a solutionary is, and the style of project students will be completing. <ul style="list-style-type: none"> - Institute for Human Education Solutionaries Video - Sample Solutionary Projects. 	Students complete a KWL chart or discussion board about solutionaries and solutionary projects.	KWL Chart or Discussion Board Post
Topic Selection	30-60 minutes	When designing this project, instructors must consider the following: Can students choose any topic or are they narrowed to a specific theme (i.e. social problems or environmental problems).	1) Instructor provides students with parameters for topic selection, and examples of topics. 2) Instructor facilitates topic selection utilizing brainstorming and narrowing strategies.*	Students select a focus topic for their project.	Students post (if digital) or share their topic with the rest of the class
Group Formation	45-90	Instructor must determine whether or not students will be working in groups for this project. It is highly recommended that students do this project in groups of 2-4 (larger groups are not ideal).	1) Instructor provides an overview of Public and Operations Agreements (POA). 2) Instructor supports groups to create a Public and Operations Agreement.	1) Students pre-think about their individual preferences for working on a team using the Individual POA questions. 2) Students work with team to develop a Team	POA Presentation Guideline: POA

Take-And-Teach Framework

Find @ → tinyurl.com/ELSI-DistanceLearning-2020

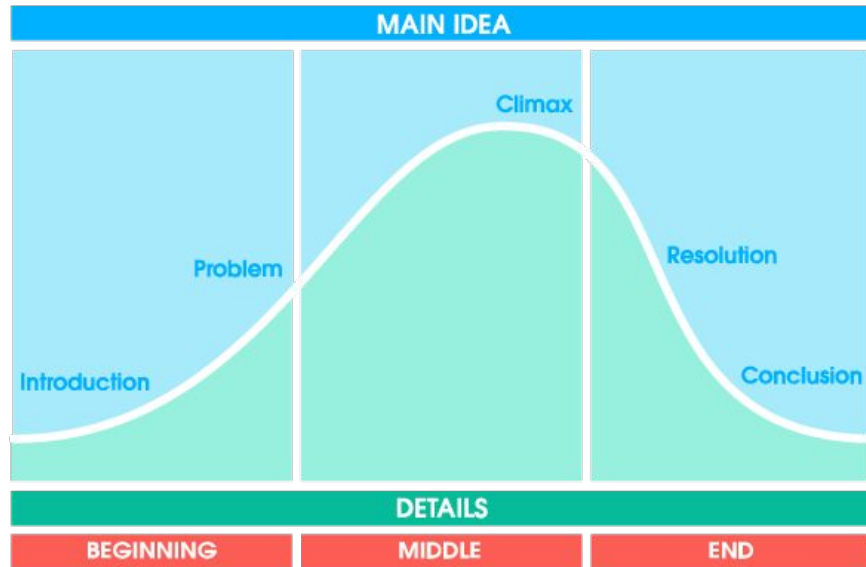
K-12 Teacher-Led Solutionary PBL

SOLUTIONARY UNIT OF STUDY ELEMENTS & FLOW



Teachers guide students through the different phases of Solutionary PBL

Solutionary PBL Follows a Story Arch



© 2018 Clever Prototypes, LLC

Solutionary PBL follows a storyline that places students as the main characters

Explore the Energy Exemplar

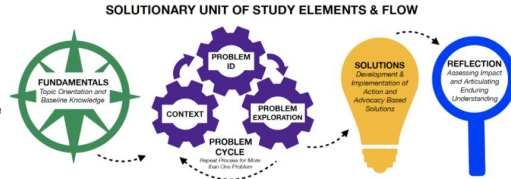


Energy Solutionary PBL Unit of Study Exemplar

Resources Developed by San Mateo County Of Education's (SMCOE) Environmental Literacy and Sustainability Initiative (ELSI)
Designed in 2019 - Last Updated March 2020



Overview to Solutionary PBL: A Solutionary Unit of Study is a student-centered (but teacher-led) learning experience that provides the opportunity for students to analyze real-world environmental and social justice issues, and develop solutions that seek to mitigate these problems. A Solutionary Unit of Study is built around four phases that take students from understanding basic contextual knowledge about a topic, to diving deep into the associated problems and issues, then culminating with designing and implementing solutionary action and advocacy. At the conclusion of the unit, students will evaluate their impact, reflect on their enduring understandings from the unit, and celebrate personal and academic growth. The framework couches this learning process in a larger story-arch, one about a problem that must be solved by the main characters, the students themselves. *To learn more about the teacher-led Solutionary Unit of Study Framework visit: tinyurl.com/PBL-SolutionaryUOS.*



Overview to Energy Unit: This sample Energy Unit of Study provides teachers with a standards aligned framework and storyline that includes example activities that teachers can “take-and-teach.” However, teachers should think of this exemplar as only being 70-80% complete. This provides teachers the flexibility to customize the remaining 20-30% to their local context (i.e. local problems and issues, adopted instructional materials, other supplemental resources, field trips, guest speakers, etc.).

In general, teachers should plan for their Solutionary Unit of Study to take a K-12 teacher 3-6 weeks to teach. *It should also be noted*

Take-And-Teach Unit of Study Exemplar
Find @ → tinyurl.com/ELSI-DistanceLearning-2020

Unit Blueprint (Storyboard)

Section A: Energy Solutionary Unit - Example Blueprint

Essential Question: What are the environmental, social, and economic problems related to the current energy system, and how might we be solutionaries for a sustainable energy future?				
Fundamentals	Problem Cycle (read across)		Solutions	Reflection
What is Energy?	What are the primary and secondary problems associated with the energy system? How have these problems developed, and what are the impacts?		How can we solve the energy crisis?	What did we learn in this unit?
Energy definition and overview (including how energy takes different forms)	Problem 1: Non-renewable energy sources are finite resources and cannot meet the demands of a growing human population.	→ Ancient humans relied on "current sunlight" and modern humans rely on "ancient sunlight". → Modern humans have become reliant on a finite resource for energy, which is unsustainable.	Solutionaries develop solutions that are healthy for people, animals, and the environment.	Ex: The behaviors and actions of individuals matter.
Energy can be converted from one form to another (Law of Conservation of Energy)	Problem 2: The extraction, production, and use of non-renewable energy sources emits pollutants, and or causes habitat destruction, which negatively impacts human health and the global ecosystem.	→ Extraction and production of non-renewable energy sources is harmful to the planet and to people. → The burning of fossil fuels causes air pollution, which has negative impacts on human health. → The burning of fossil fuels contributes to an imbalance in the global carbon cycle and contributes to climate change.		
The Sun's energy is stored in organic matter that can be converted into other forms of energy	Problem 3: Electrical grids and fossil fuel pipelines are inefficient, inequitable, and dangerous.	→ Spinning magnets are involved in creating electricity and powering motors. → Energy gets distributed from the electrical power plant to commercial and residential buildings. Oil and gas pipelines carry fossil fuels to power generators. → Electrical grids and fossil fuel pipelines are inefficient, inequitable, and can be dangerous.		Ex: Because of this unit, I know what I want to study in college. Ex: Learning is fun!
Enduring Understanding: By understanding how energy is sourced and consumed, humans can make changes to the system and protect the environment.				

Take-And-Teach Unit of Study Exemplar

Find @ → tinyurl.com/ELSI-DistanceLearning-2020

Full Grade Band Level Unit Plans

K-2

3-5

6-12

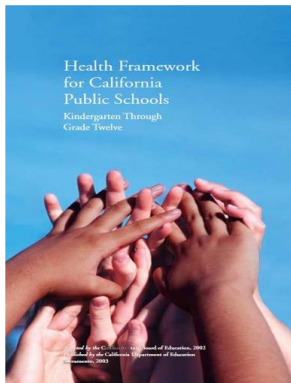
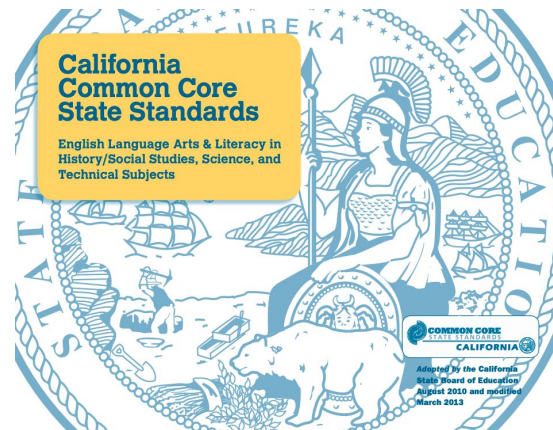
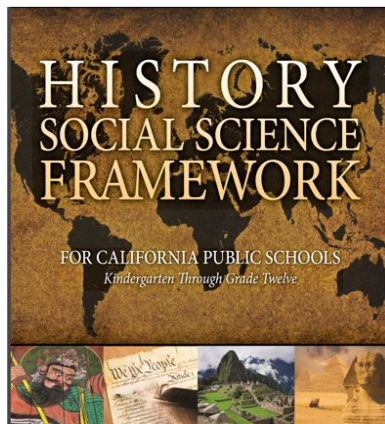
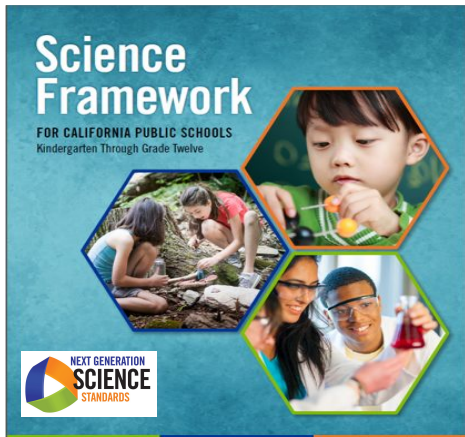
PHASE 2: PROBLEM 1 LEARNING SEGMENT

Non-renewable energy sources are finite resources and cannot meet the demands of a growing human population.					
Concept	Standards	Teaching Strategy	Time	Activity Descriptions and Resources	Teacher Adaptations for Local Context - Add Your Ideas Here!
Ancient humans relied on "current sunlight" and modern humans rely on "ancient sunlight".	<ul style="list-style-type: none">NGSS: ESS3.C, ESS3.DHSS: Patterns of Population; Worlds of Exchange; Haves and Have Nots; Science Technology and the EnvironmentCC Math (HS): Functions and ModelingCA CC Literacy	Engage	20-30 min	<p>Overview and Resources: People long ago got the energy they needed to live (i.e. for cooking, heat) from other living things that were living at the same time as them. <i>Resources for these lessons are the same for in-classroom and distance learning:</i></p> <ul style="list-style-type: none">Video: Long Ago and Now <p>Activities Description:</p> <ul style="list-style-type: none">Students brainstorm the different ways that people from the past lived their lives differently than people today.Students then watch the video and discuss their observations about how people lived long ago compared to how people live now. Students should pay close attention to the types of energy that were used. This segment should highlight the differences in energy, namely how people used wood for fire; therefore, their energy source was only available if trees were available. Also, wood was their only source of energy.	
Modern humans have become reliant on fossil fuels, and demand use of	<ul style="list-style-type: none">NGSS: ESS3.C, ESS3.DHSS: Patterns of Population;	Explore and Explain <ul style="list-style-type: none">Read & Discuss	45 min	<p>Overview and Resources: The heart of this problem is understanding the concept that fossil fuels are a limited (finite) resource. Modern humans have become reliant upon these fossil fuels for survival and to drive the global economy due to political, social, and economic influences.</p>	

Take-And-Teach Unit of Study Exemplar

Find @ → tinyurl.com/ELSI-DistanceLearning-2020

Spotlight on State Standards



Complementary and Stand Alone Resources



Field Research Guides

Field Research is the collection of data and observations. In this type of field research, the purpose is to help students investigate what is going on with an environmental topic in their local context

ool, or community).



Energy



Waste



Water



Transportation



Food



Land Ecosystems



Find K-2, 3-5, 6-12 Field Research Guides @
tinyurl.com/ELSI-DistanceLearning-2020

Pre-Curated WebQuests

WebQuests are a self-directed learning tool that helps learners construct their own learning by determining which sources are most useful, and at what pace they want to explore different aspects of the topic in focus.



Energy



Waste



Water



Transportation



Food



Land Ecosystems



Find Topical WebQuests @
tinyurl.com/ELSI-DistanceLearning-2020

Field Trips, Activities, and Storytime

K-5 Virtual Field Trips, Hands-on Activities, and Storytime Resources



Designed by Local Community Based Partners who usually provide field trips and classroom programs!

The following resources support teachers to implement the CA Environmental Principles and Concepts (EP&Cs) into their distance learning curriculum. Each document includes high quality standards aligned supplemental activities that have been custom *designed by local Community Based Partners (CBPs) who usually offer field trips and in-classroom programs*. Resources are catalogued according to themes from the One Planet Living, and provide suggested children's books.

- Kindergarten
- First Grade

Find Resources @
tinyurl.com/ELSI-DistanceLearning-2020

- Fifth Grade



Getting Started

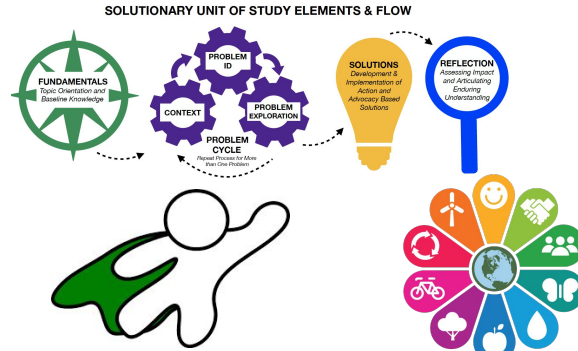
Questions???

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General Website: tinyurl.com/SMCOE-ELSI

tinyurl.com/ELSI-DistanceLearning-2020



Slide Deck: tinyurl.com/GSNN-BOB-DL-April2020



Leading for Green Schools

Co-developed by GSNN & Auburn University

Continuing Education

Introducing a new distance learning course from Green Schools National Network and Auburn University



Leading for whole school sustainability is not about adding items to one's to-do list – it's about doing work differently and leading from a sustainability mindset.

Leading for Green Schools is an online course for preK-12 education leaders who are interested in learning more about whole school sustainability and how they can implement this “living systems” approach in their schools and school districts. Co-developed by Green Schools National Network and Auburn University, this ten module course explores how to integrate sustainability into all facets of a school's design, operations, curriculum, and culture.

[VIEW THE COURSE DETAILS](#)

Thanks!



Cyndy Merse - GSNN



Kristi Hibler-Luton - EcoRise



Jessica Redden - SEI



Andra Yeghoian - San Mateo County

Next GSNN Webinar: May 11th -- **Preparing Students for Green Careers**
May 12th – **Sustainability Education for Teachers**

Webinar:

Best of the Best:

Sustainability focused virtual resources

April 15, 2020

